DRAFT ENVIRONMENTAL IMPACT REPORT
FOR THE
LOS ANGELES AERIAL RAPID TRANSIT PROJECT
LOS ANGELES, CALIFORNIA

State Clearinghouse No. 2020100007

Prepared for:

Los Angeles County Metropolitan Transportation Authority

Prepared by:

AECOM
300 South Grand Avenue, 8th Floor
Los Angeles, California 90071

October 2022

TABLE OF CONTENTS

Section **Page**

TABLE OF CONTENTS
(Continued)

LIST OF FIGURES

LIST OF FIGURES
(Continued)

LIST OF FIGURES
(Continued)

Figure Page

LIST OF FIGURES
(Continued)

LIST OF FIGURES
(Continued)

LIST OF TABLES

LIST OF TABLES
(Continued)

LIST OF TABLES
(Continued)

LIST OF TABLES
(Continued)

LIST OF APPENDICES

APPENDICES

ES: EXECUTIVE SUMMARY

ES 1. INTRODUCTION

LA Aerial Rapid Transit Technologies LLC (the Project Sponsor) is proposing the Los Angeles Aerial Rapid Transit Project (proposed Project), which would connect Los Angeles Union Station (LAUS) to the Dodger Stadium property via an aerial gondola system. This Draft Environmental Impact Report (Draft EIR) has been prepared to evaluate the potential environmental effects that would result from development of the proposed Project. The Los Angeles County Metropolitan Transportation Authority (Metro) is the "lead agency" in the preparation of a Draft Environmental Impact Report (EIR) for the proposed Project in accordance with the California Environmental Quality Act (CEQA) statutes and guidelines, as amended (Public Resources Code, Section 21000-21178 and California Code of Regulations Title 14, Chapter 3 Section 15000–15387). The Lead Agency is "the public agency with the greatest responsibility for supervising or approving the project as a whole." Metro, as the lead agency, has the authority to approve the project and implement appropriate mitigation measures to reduce significant impacts.

ES 2. PROJECT PURPOSE

The proposed Project would improve mobility and accessibility for the region by providing a daily, high capacity aerial rapid transit (ART) service connecting the regional transit system at LAUS, Dodger Stadium, the Los Angeles State Historic Park, Elysian Park, and surrounding communities via three new transit stations. The proposed Project would include a mobility hub at the Chinatown/State Park Station and a potential mobility hub at the Dodger Stadium Station to enhance connectivity to Elysian Park and the surrounding communities. The proposed Project is needed to alleviate existing congestion and associated air pollution while providing safe, zero emission, environmentally friendly, and high-capacity transit connectivity in the Project area that would reduce GHG emissions as a result of reduced vehicular congestion in and around Dodger Stadium and on neighborhood streets, arterial roadways, and freeways.

To achieve this purpose, the proposed Project would provide the ART service for visitors to Dodger Stadium, while also providing access between the Dodger Stadium property, the surrounding communities, including Chinatown, Mission Junction, Elysian Park, and Solano Canyon, and the Los Angeles State Historic Park, to the regional transit system accessible at LAUS. The aerial gondola system would be approximately 1.2 miles long and consist of cables, three passenger stations, a non-passenger junction, towers, and gondola cabins. When complete, the proposed Project would have a maximum capacity of approximately 5,000 people per hour per direction, and the travel time from LAUS to Dodger Stadium would be approximately seven minutes. The proposed Project would provide pedestrian improvements, including hardscape and landscape improvements, as well as amenities at the Los Angeles State Historic Park. The ART system has the ability to overcome grade and elevation issues between LAUS and Dodger Stadium. The proposed Project would operate daily to serve existing residents, workers, park users, and visitors to Los Angeles.

A detailed description of the proposed Project is provided in Chapter 2.

ES 3. PURPOSE OF THIS DRAFT ENVIRONMENTAL IMPACT REPORT

The Draft EIR has been prepared for the following purposes:

- Satisfy the requirements of CEQA (Public Resources Code [PRC] Section 21000 et. seq., as amended) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Chapter 3, Section 15000 et. seq.).
- Inform public agency decision makers and the public of the environmental effects of the proposed Project, including any significant environmental effects, as well as possible ways to minimize those significant effects, and reasonable alternatives to the proposed Project.
- Enable Metro to consider environmental consequences when deciding whether to approve the proposed Project.
- Enable other responsible public agencies that must approve activities undertaken with respect to the proposed Project, including permits and other approvals, to consider the environmental effects of the proposed Project.

The principal use of this EIR is to evaluate and disclose potential environmental impacts associated with the implementation of the proposed Project. An EIR is an informational document and is not intended to determine the merits or recommend approval or disapproval of a project. Ultimately, the Metro Board of Directors and decision makers must weigh the environmental effects of a project among other considerations, including planning, economic, and social concerns.

The standards of adequacy of an EIR, defined by Section 15151 of the CEQA Guidelines, are as follows:

> An EIR should be prepared with sufficient level of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effect of the proposed project need not be exhaustive, but sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have not looked for perfection but for adequacy, completeness, and good faith effort at full disclosure.

Metro, as the Lead Agency, has a duty pursuant to CEQA Guidelines to neither approve nor carry out a project as proposed unless the significant effects have been reduced to an acceptable level, where possible (CEQA Guidelines §15091 and §15092). An acceptable level is defined as eliminating, avoiding, or substantially lessening the significant effects (impacts) resulting from the project. If such a reduction is not possible, a lead agency must adopt Findings of Fact and prepare a Statement of Overriding Considerations. As defined in CEQA Guidelines §15093, a Statement of Overriding Considerations balances the benefits of a project against its unavoidable environmental consequences.

ES 4. PUBLIC REVIEW PROCESS

As further described in Chapter 1.0, Introduction, Metro circulated a Notice of Preparation (NOP) to state, regional, and local agencies, interested organizations, and members of the public for a 45-day public comment period, commencing October 1, 2020, and ending November 16, 2020 (for a total of 46 days). The purpose of the NOP was to formally convey that Metro was preparing a Draft EIR for the proposed Project and to solicit input regarding the scope and content of the Draft EIR. The NOP is provided in Appendix A of this Draft EIR. In addition, a public scoping meeting was held on October 22, 2020. Scoping meeting materials, letters and comments received during the comment period, and comments received during the public scoping meeting are included in Appendix A of this Draft EIR.

This Draft EIR is being circulated for a 60-day public comment period starting on October 17, 2022, and ending on December 16, 2022. Following the public comment period, a Final EIR will be prepared that includes responses to comments received on the Draft EIR.

The Draft EIR for the proposed Project is also being prepared under the California Senate Bill 44 judicial streamlining legislation (California Environmental Quality Act: Environmental Leadership Transit Projects) that added provisions to CEQA as Public Resources Code Section 21168.6.9 for environmental leadership transit projects.

ES 5. PROJECT OVERVIEW

The proposed Los Angeles Aerial Rapid Transit Project (proposed Project) would connect Los Angeles Union Station (LAUS) to the Dodger Stadium property via an aerial gondola system. The proposed Project would include an intermediate station at the southernmost entrance of the Los Angeles State Historic Park. The proposed Project would provide an aerial rapid transit (ART) option for visitors to Dodger Stadium, while also providing access between the Dodger Stadium property, the surrounding communities, including Chinatown, Mission Junction, the Los Angeles State Historic Park, Elysian Park, and Solano Canyon, to the regional transit system accessible at LAUS. The aerial gondola system would be approximately 1.2 miles and consist of cables, three passenger stations, a non-passenger junction, towers, and gondola cabins. When complete, the proposed Project would have a maximum capacity of approximately 5,000 people per hour per direction, and the travel time from LAUS to Dodger Stadium would be approximately seven minutes. The proposed Project would provide amenities at the Los Angeles State Historic Park and would provide pedestrian improvements, including hardscape and landscape improvements. The ART system has the ability to overcome grade and elevation issues between LAUS and Dodger Stadium and provide safe, zero emission, environmentally friendly, and high-capacity transit connectivity in the Project area that would reduce greenhouse gas (GHG) emissions as a result of reduced vehicular congestion in and around Dodger Stadium and on neighborhood streets, arterial roadways, and freeways. The proposed Project would operate daily to serve existing residents, workers, park users, and visitors to Los Angeles.

Established aerial gondola transit systems worldwide, such as in La Paz, Bolivia, and Mexico City, Mexico, are being used as rapid transit for the urban population that they serve. The proposed Project would employ a Tricable Detachable Gondola system (also known as “3S”).[1] 3S Gondola system cabins carry approximately 30 to 40 passengers. Similar systems are used in Koblenz, Germany, Phu Quoc, Vietnam, and Toulouse, France.

1 The naming convention for this system is derived from the German word “seil”, which translates in English to “rope”. Hence, Tricable Detachable Gondola systems are known as a “3S” systems due to the use of three ropes, or cables.

ES 6. PROJECT LOCATION

The proposed Project is located in the City of Los Angeles, situated northeast of downtown Los Angeles. Figure ES-1 shows the regional location of the proposed Project. The proposed Project would commence adjacent to LAUS and El Pueblo de Los Angeles (El Pueblo) and terminate at Dodger Stadium, with an intermediate station at the southernmost entrance of the Los Angeles State Historic Park. The proposed Project would include three stations, a non-passenger junction, and three cable-supporting towers at various locations along the alignment. As shown in Figure ES-2, the proposed Project location would generally be located within public right-of-way (ROW), or on publicly owned property, following Alameda Street and then continuing along Spring Street in a northeast direction through the community of Chinatown to the southernmost corner of the Los Angeles State Historic Park. The alignment would then continue northeast over the western edge of the Los Angeles State Historic Park and the Los Angeles County Metropolitan Transportation Authority (Metro) L Line (Gold) to the intersection of North Broadway and Bishops Road. At this intersection, the proposed Project alignment would turn and continue northwest following Bishops Road toward its terminus at Dodger Stadium, located in the Elysian Park community. Figure ES-2 provides an overview of the proposed Project location, and Figure ES-3 provides an overview of the proposed Project alignment.

ES 7. PROPOSED PROJECT ALIGNMENT AND COMPONENTS

The proposed Project “alignment” includes the suspended above-grade cables and cabins following the position of the Project components along the ART route from Alameda Station to Dodger Stadium Station.

The proposed Project alignment would extend approximately 1.2 miles beginning near El Pueblo and LAUS on Alameda Street. The proposed Alameda Station would be constructed over Alameda Street between Los Angeles Street and Cesar Chavez Avenue, adjacent to the Placita de Dolores and planned LAUS Forecourt.

From the Alameda Station, the proposed Project alignment would remain primarily above the public ROW with portions above private property, and travel north along Alameda Street to the proposed Alameda Tower, which would be constructed on the Alameda Triangle, a portion of City ROW between Alameda Street, North Main Street, and Alhambra Street.

From the Alameda Tower, the proposed Project alignment would continue north along Alameda Street and cross Alpine Street. The proposed Alpine Tower would be constructed at the corner of Alameda Street and Alpine Street on city-owned property.

From the Alpine Tower, the proposed Project alignment would follow the public ROW and continue over the elevated Metro L Line (Gold). North of College Street, Alameda Street becomes Spring Street, and the proposed alignment would generally follow Spring Street in a northeast trajectory until it reaches the southernmost point of Los Angeles State Historic Park, where the proposed Chinatown/State Park Station would be constructed partially on City ROW and partially within the boundaries of the Los Angeles State Historic Park.

The alignment then crosses over the western edge of the Los Angeles State Historic Park and the Metro L Line (Gold) tracks.

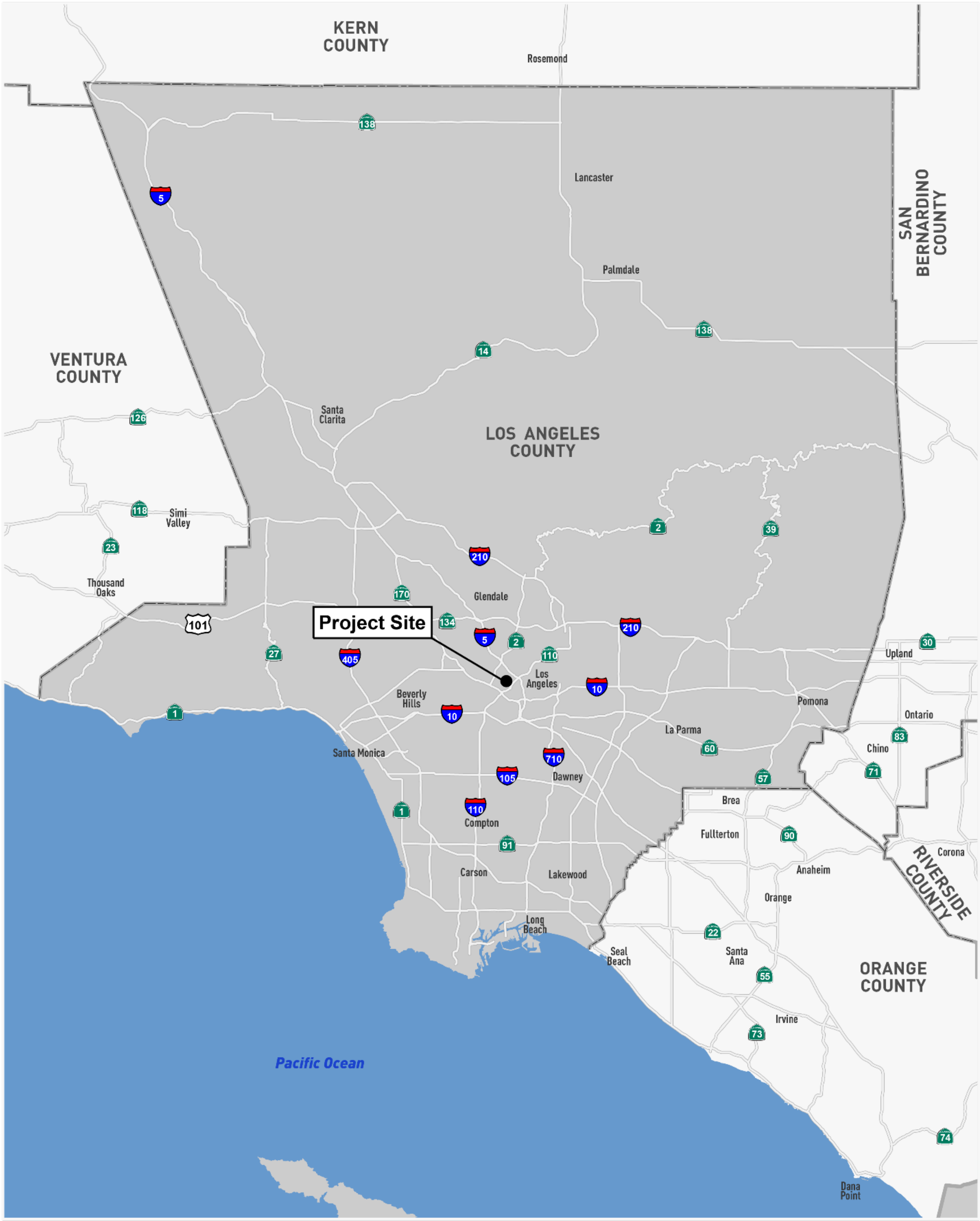


Figure ES-1: Regional Location Map

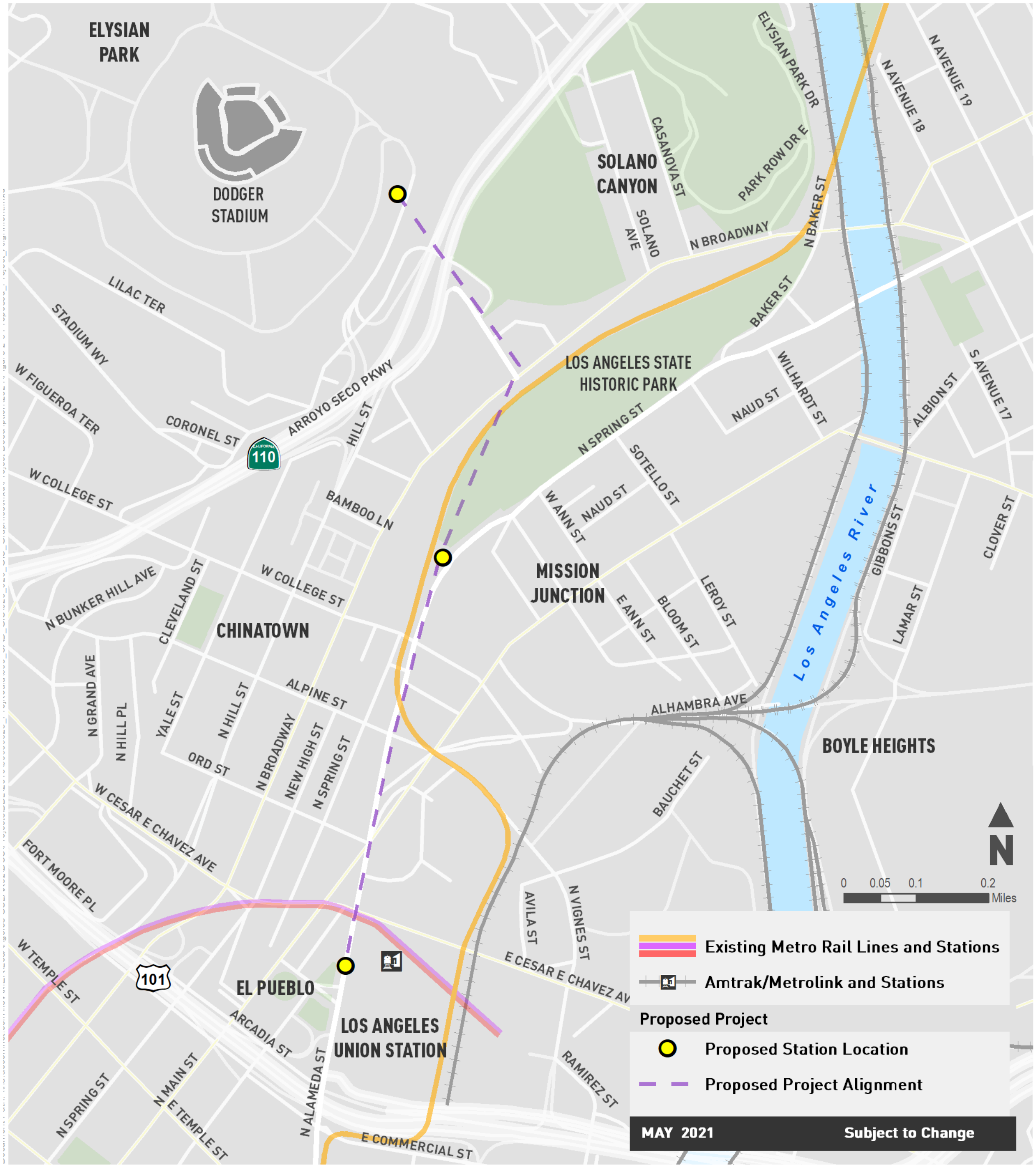


Figure ES-2: Proposed Project Location

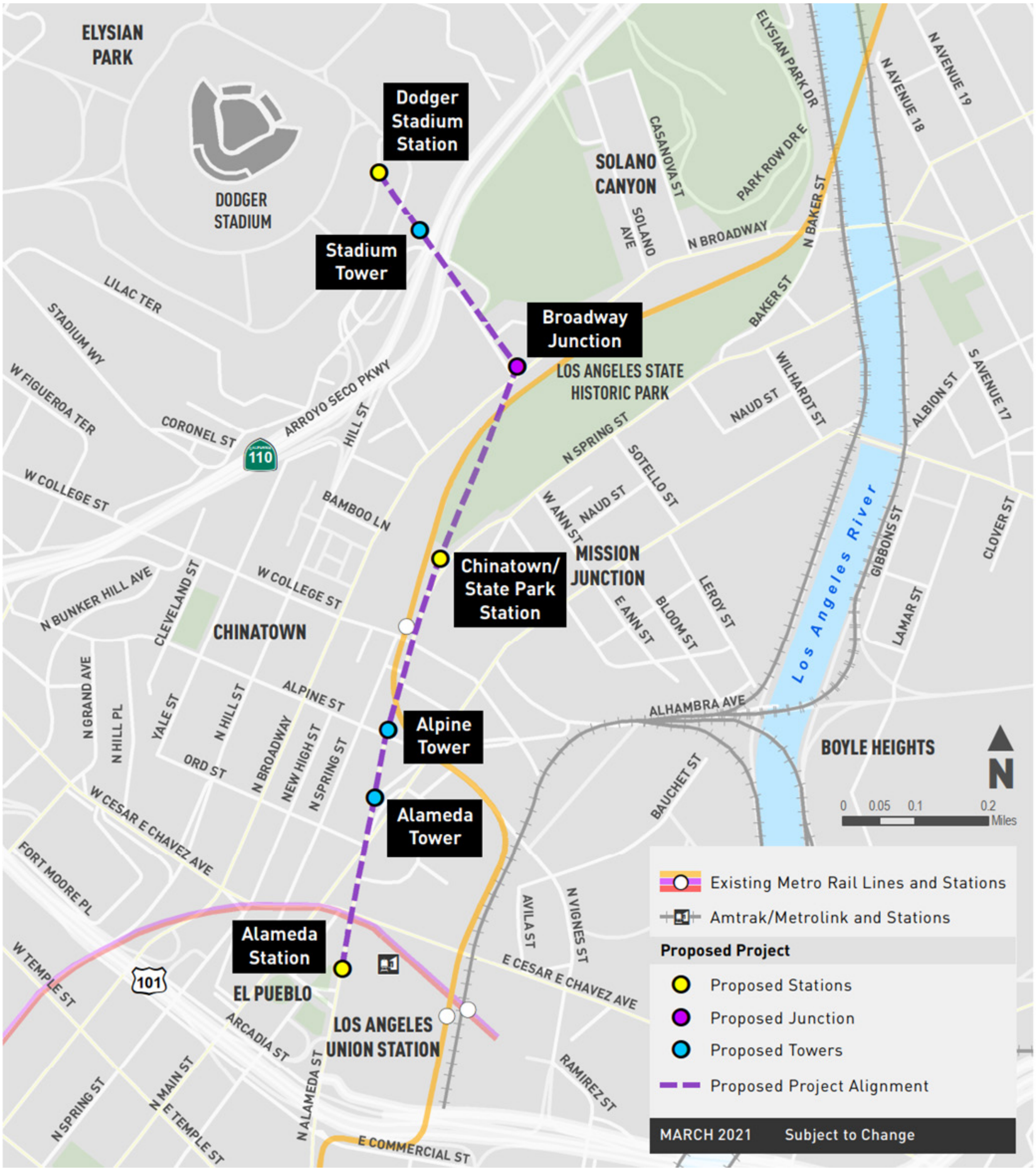


Figure ES-3: Proposed Project Alignment

The proposed Project alignment would continue traveling north towards the intersection of North Broadway and Bishops Road. The Broadway Junction would be located at the northern corner of the intersection of North Broadway and Bishops Road (1201 North Broadway). From the Broadway Junction, the proposed Project alignment would travel northwest primarily along Bishops Road, with portions above private property, crossing over SR-110 towards Dodger Stadium. The proposed Stadium Tower would be located on hillside private property north of Stadium Way between the Downtown Gate entrance road to Dodger Stadium and SR-110. The northern terminus of the system would be located in a parking lot at the Dodger Stadium property, where the proposed Dodger Stadium Station would be constructed.

ALAMEDA STATION

The Alameda Station would be located on Alameda Street adjacent to the planned LAUS Forecourt and Placita de Dolores between Los Angeles Street and Cesar Chavez Avenue. The station would be approximately 173 feet long, 109 feet wide, and 78 feet high at its tallest point, with the passenger loading platform approximately 31 feet above Alameda Street. Vertical circulation elements (i.e. elevators, escalators, stairs) for pedestrian access, which would also serve as queuing areas to the station, would be introduced at-grade north of the Placita de Dolores in a proposed new pedestrian plaza at El Pueblo on the west in an area currently used as a parking and loading area for El Pueblo. On the east, vertical circulation elements would be introduced at-grade from the planned LAUS Forecourt. Installation of the vertical circulation elements may include removal and replacement of trees, removal of parking and loading for El Pueblo, and installation of landscaping and hardscape.

ALAMEDA TOWER

The Alameda Tower would be located on the Alameda Triangle, a City ROW between Alameda Street, North Main Street, and Alhambra Avenue consisting of a small green space flanked on all sides by roadways. The Alameda Tower would be 195 feet tall with the cable suspended 175 feet above-ground. Implementation of the Alameda Tower would include reuse and integration of the existing pavers located at the Alameda Triangle, as well as landscape and hardscape updates to the Alameda Triangle.

ALPINE TOWER

The Alpine Tower would be located on a City-owned parcel, currently being used as non-public parking storage for City vehicles, at the northeast corner of Alameda Street and Alpine Street, adjacent to the Metro L Line (Gold). The Alpine Tower would be 195 feet tall at its tallest point, with the cable suspended 175 feet above ground. The Alpine Tower would also include the installation of landscaping and hardscaping near the base of the tower.

CHINATOWN/STATE PARK STATION

The Chinatown/State Park Station would be located adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park. The southern portion of the station would be located on city ROW, while the northern portion of the station would be integrated into the southern boundary of the Los Angeles State Historic Park. The station would be approximately 200 feet long, 80 feet wide, and 98 feet tall at its tallest point, with the passenger boarding platform approximately 50 feet above-grade. Access to the boarding platform would be from the mezzanine via elevators and stairs. Comprised of three levels, elevators and stairs from the ground level would lead up to a mezzanine, 27 feet above-grade, and ramps for the queuing area would lead up to the boarding platform, which is 50 feet above-ground.

The Chinatown/State Park Station would also include passenger amenities, including approximately 740 square feet of concessions, 770 square feet of restrooms, and a 220 square foot covered breezeway connecting the concessions and restrooms. Additionally, the Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. The Chinatown/State Park Station would require the removal of trees and vegetation, however, it would include the installation of landscaping and hardscaping, including integration of the granite pavers. The Chinatown/State Park Station would provide passenger access to Chinatown, the Los Angeles State Historic Park, and to nearby neighborhoods and land uses, including the Mission Junction neighborhood, which includes the William Mead Homes public housing complex.

BROADWAY JUNCTION

The Broadway Junction is a non-passenger junction that would be located at the intersection of North Broadway and Bishops Road. The junction would primarily be located on privately-owned property with a portion of the junction and overhead cable infrastructure cantilevered and elevated above the public ROW. The existing commercial building located at 1201 N. Broadway would be demolished. The Broadway Junction would be approximately 227 feet long, 60 feet wide, and 98 feet high at its tallest point, with the platform approximately 50 feet above the ground. Vertical circulation elements (i.e. elevators and stairs) would be installed on the northwest side of the junction for staff and maintenance access to the platform.

STADIUM TOWER

The Stadium Tower would be located on hillside private property north of Stadium Way between the Downtown Gate and SR-110 and would stand 179 feet tall with the cable suspended 159 feet above-ground. The Stadium Tower would also include the installation of landscaping near the base of the tower.

DODGER STADIUM STATION

The Dodger Stadium Station would be located in the southeast portion of the Dodger Stadium property near the Downtown Gate. This station would be approximately 194 feet long, 80 feet wide, and 74 feet high at its tallest point. Cabins at this station would arrive and depart from an at-grade boarding platform, with the passenger queuing area also at-grade. The Dodger Stadium Station would include a subterranean area below the platform for storage and maintenance of cabins, as well as staff break rooms, lockers, and parts storage areas. The cabins would be transferred between the station platform and the subterranean area by way of a cabin elevator. Automated parking and controls would manage the process of storing cabins or returning them to service. Cabins would be returned to and stored at the Dodger Stadium Station when the system is not in use.

Restrooms for passenger use would be located at the station. The Dodger Stadium Station would also include a pedestrian connection to Dodger Stadium, including hardscape and landscape improvements and potential seating.

The Dodger Stadium Station is located adjacent to Dodger Stadium, which is operated as an MLB Stadium. The Project Sponsor will request consideration by the Los Angeles Dodgers of the potential for the Dodger Stadium Station to include a mobility hub where outside of game day periods, passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program and individual bike lockers, to access Elysian Park and other nearby neighborhoods, including Solano Canyon. Issues to be addressed in connection with such consideration as to the mobility hub include maintaining security for Dodger Stadium and the surrounding surface parking areas

Implementation of the Dodger Stadium Station would require the removal of parking spaces, as well as removal and replacement of landscaping.

ES 8. SYSTEM OPERATIONS

TYPICAL OPERATING LOGISTICS

During operations, the cabins would travel on a continuous loop between the Alameda Station and the Dodger Stadium Station. Cabins would pass through passenger stations at roughly one foot per second (less than one mile per hour) to allow for unloading and loading. If needed, a cabin could be stopped to accommodate passenger boarding. After the cabins pass through the unload/load zones, the doors would close and the cabins would accelerate to match the line speed of the haul rope before reattaching to the haul rope.

At Alameda Station, arriving cabins (southbound) would decelerate, doors would open, and passengers would unload. The cabins would execute a U-turn in the station before passing through the load zone (for northbound passengers), load passengers (if any), close doors, then accelerate to be reattached to the haul rope.

At the Chinatown/State Park Station, cabins would detach from the rope and decelerate to the station speed. Since passenger access would be provided at this station, the cabins would decelerate to about one foot per second (less than one mile per hour) and the doors would open. After traveling through the unload and load zones, the cabin doors would close, and the cabins would accelerate to line speed and then reattach to the haul rope.

At the Broadway Junction, where passenger unloading or loading is not proposed, the cabins would detach from the haul rope, decelerate to a speed of approximately 6 mph, execute a slight turn to follow the alignment, and then re-accelerate and reattach to the haul rope. As described in Section 2.5.2, the Alameda Station to Broadway Junction and Broadway Junction to Dodger Stadium Station systems come together at the Broadway Junction. When the cabins detach from the haul rope in the Junction, their move from one haul rope to the other haul rope would not be perceptible by passengers.

At the Dodger Stadium Station, the cabins would decelerate, doors would open, and passengers would unload. Since the Dodger Stadium Station would be an end station, the cabins would execute a U-turn in the station before passing through the load zone (for southbound passengers), load passengers (if any), close doors, then accelerate and reattach to the haul rope. As described above, gondola cabins would enter, traverse, and depart stations under fully automated control.

Operation of the proposed Project would require approximately 20 personnel. Station attendants would be located within each station to assure safe boarding or to execute stops, if necessary. Attendants would also provide customer interaction and observation; if a passenger needs special assistance, an attendant may either further slow or stop a cabin. A separate operator may sit in a booth adjacent to the boarding area and monitor screens, which would show activities in each cabin and station, as well as the system controls.

QUEUEING AND TICKETING/FARE CHECKING

Queueing areas would be built into and as necessary, adjacent to, each of the stations to provide a gathering place for passengers waiting to enter the stations, thereby preventing crowding of sidewalks and walkways by passengers around stations. Queueing for the Alameda Station would occur in the planned LAUS Forecourt area on the east side of Alameda Street, and north of the Placita de Dolores in a proposed new pedestrian plaza at El Pueblo on the west side of Alameda Street. At the Chinatown/State Park Station, queueing would occur on the mezzanine and boarding platform levels. At the Dodger Stadium Station, the queueing area would be located on the north side of the station in a designated queueing area adjacent to the station.

Ticketing for the proposed Project would use either a chip-based card system or electronic ticketing that could be purchased and saved on a personal mobile device. Using these types of technologies would allow for contactless fare checking at the stations. Riders would pre-purchase their ticket prior to entering the boarding platform and fares would be checked using a card reader/scanner.

SIGNAGE

Similar to other transit projects that incorporate signage, the proposed Project would include signage to support wayfinding for transit patrons including information about transit connections and other important information to facilitate transit usage. Private funding for the proposed Project is anticipated to be supported by naming rights and sponsorship revenues, and such sponsors would be recognized in Project signage, which would be designed consistent with applicable Metro, city, and state approval requirements. Such signage may include identification and other static signs, electronic digital displays and/or changeable message light-emitting diode (LED) boards that include both transit information and other content, which may include off-site advertising that generates proceeds to support transit system costs and operations. Signage would be architecturally integrated into the design of the ART system including its stations, the junction, towers, and cabins. In addition, directional and pedestrian signage would be placed adjacent to and throughout the proposed Project as necessary to facilitate access and safety, including along the pedestrian improvements between Metro's L Line (Gold) Station and the pedestrian connection between the Dodger Stadium Station and Dodger Stadium. Project signage would be illuminated by means of low-level external lighting, internal lighting, or ambient light. Exterior lights would be directed onto signs to minimize off-site glare. Signage would be in conformance with all applicable requirements of the Los Angeles Municipal Code (LAMC), and in accordance with LAMC, lighting intensity will be minimized in order to avoid negative impacts to adjacent residential properties.

LIGHTING

Project lighting would include low-level lighting for security and wayfinding purposes adjacent to and within the stations, junction, and towers, within cabins, at the vertical circulation, and areas for ticketing, fare checking, and queueing. In addition, low-level lighting to accent signage, architectural features, landscaping, adjacent pedestrian plazas, Chinatown/State Park Station mobility hub, and potential Dodger Stadium Station mobility hub would be installed at the stations, junction, and towers. Lighting would also be provided underneath the elevated stations and junction. Lighting for the pedestrian access enhancements, including the pedestrian improvements between Metro's L Line (Gold) Station and the pedestrian connection between the Dodger Stadium Station and Dodger Stadium would include new pole lights for security and wayfinding purposes, as well as low-level lighting to accent signage and landscaping.

Lighting would be low-level and primarily integrated within the architectural features. Exterior lighting would be shielded or directed toward the areas to be lit to limit spillover onto adjacent properties and off-site uses, and would meet all applicable LAMC lighting standards.

MAINTENANCE

The proposed Project would require routine maintenance that would be performed by the system operator. The overall system would be observed on a daily basis as part of the startup routine.

Routine maintenance activities would generally take place during overnight periods or other scheduled down time. Cabins and their associated grips and hangers would be maintained in the shop at the Dodger Stadium Station. A work carrier cabin would be provided to facilitate work at tower equipment. Annual maintenance activities may require crane access at tower locations, including the potential to require the temporary closing of traffic lanes.

Rope maintenance schedules would be determined through a combination of system design and periodic monitoring. The haul rope would need replacement approximately every 5 to 10 years. This would require pulling a new haul rope, which would take up to two weeks to complete.

On a periodic basis, the system would undergo formal testing as prescribed by Cal/OSHA and appropriate ropeway standards. This formal testing is required by standards to occur at least every 7 years. It is anticipated that the system would be closed to riders for up to two days during the formal testing events.

Backup power would be provided by battery storage located at each station and tower and the non-passenger junction. The battery storage system would be tested on a regular basis, and would provide backup power to allow unloading of the system in the event of a power grid failure.

POWER REQUIREMENTS

Operational power requirements can be separated into two categories: normal operations and emergency operations. Power requirements for the proposed Project would be provided by the City of Los Angeles Department of Water and Power's (LADWP) Green Power Program, through a connection to their power grid, and would include the power to operate the gondola system and the non-gondola system components (i.e. lights, ventilation, escalators, elevators). When operating at capacity, normal operations are estimated to require a total of approximately 2.5 megawatts of power.

Power requirements for emergency operations consist of the energy needed for operations in the event of a power grid failure. The proposed Project would include the installation of backup battery storage at each station, tower, and junction to provide backup power to allow unloading of the system in the event of a power grid failure. The total backup power required to allow unloading of the system is 1.4 megawatts.

SUSTAINABILITY FEATURES

The proposed Project would provide a sustainable, high-capacity zero emission ART option for visitors to Dodger Stadium, while also providing access between Dodger Stadium, the surrounding communities, and the regional transit system accessible at LAUS. ART technology is quiet, and the proposed Project would reduce vehicle miles traveled (VMT) and congestion, leading to reduced GHG emissions and improved air quality.

The proposed Project's stations, junction, towers, and gondola cabins would incorporate energy efficient, sustainable, water and waste efficient, and resilient features, as feasible. The proposed stations and junction are designed to be open-air buildings, allowing for passive ventilation strategies and providing direct access to outdoor air and natural daylight, while also providing adequate shade protection from heat. The cabins would be ventilated to enhance air quality for passengers.

The design intent and structural strategy for the stations and towers also provides an efficiency of materials. The steel plate tower forms have been designed as "Monocoque" structures, where structure, form, and finish are unified. Materials for the stations, junction, and towers would be locally sourced where possible, and would include recycled content where possible. Light-toned finish materials will also serve to minimize heat island concerns.

The proposed Project would be designed to comply with all applicable state and local codes, including the City of Los Angeles Green Building and Low-Impact Development (LID) Ordinances.

CONSTRUCTION

Construction of the proposed Project is anticipated to begin as early as 2024 and take approximately 25 months, including construction, cable installation, and system testing. The detailed construction procedures informing the environmental impact analyses are included in Appendix B to this EIR. A summary of the construction activities is provided below. Construction of the Project components may partially overlap in schedule, especially since construction would occur at several physically separated sites.

Utility relocations would occur prior to construction of the proposed Project components and would be coordinated directly with the utility providers. Following utility relocations, construction would commence. Detailed information on utilities relocations is included in Appendix B to this EIR.

During construction, some parking spaces at Dodger Stadium would be temporarily closed for construction of the Dodger Stadium Station and for overall Project construction, trailers, laydown and staging areas, and construction worker parking.

Construction of more than one Project component would occur at the same time, with consideration of available materials, work crew availability, and coordination of roadway closures. Table ES-1 includes the estimated duration to complete construction of each of the proposed Project components, the maximum depths of drilled piles, the maximum depth of excavation, the amount of excavation, and the amount of materials (soils and demolition debris) to be exported for each component of the proposed Project.

Table ES-1: Proposed Project Construction Details

Component	Construction Duration	Maximum Depth of Drilled Piles	Maximum Depth of Excavation	Amount of Excavation	Amount of Materials Exported
Alameda Station	17 months	125 feet	10 feet	2,728 cubic yards	2,295 cubic yards
Alameda Tower	12 months	120 feet	10 feet	2,850 cubic yards	2,292 cubic yards
Alpine Tower	11 months	120 feet	10 feet	3,606 cubic yards	2,887 cubic yards
Chinatown/State Park Station	19 months	80 feet	10 feet	6,267 cubic yards	4,567 cubic yards
Broadway Junction	19 months	120 feet	7 feet	6,407 cubic yards	5,379 cubic yards
Stadium Tower	12 months	120 feet	7 feet	1,286 cubic yards	1,202 cubic yards
Dodger Stadium Station	20 months	55 feet	42 feet	44,313 cubic yards	44,001 cubic yards

Following completion of construction, the gondola cables would be installed, followed by system testing and inspections.

Working hours would vary to meet special circumstances and restrictions, but are anticipated to be consistent with the City's allowable construction hours of Monday through Friday between 7:00 a.m. to 9:00 p.m. and Saturdays and National Holidays between 8:00 a.m. to 6:00 p.m. While not anticipated, approval would be required from the City of Los Angeles Board of Police Commissioners for any extended construction hours and possible construction on Sundays.

Anticipated closures would include lane closures in which lanes would be closed 24-hours a day during certain phases of construction, or alternating closures during certain phases of construction, in which closures would occur during construction hours for approximately 10 hours a day, and roads would reopen during non-construction hours for approximately 14 hours a day. For alternating closures, during non-construction hours, steel plates would be placed over construction sites to the extent feasible in order to allow for vehicular and pedestrian circulation. The closures and hours would vary between location and phase of construction. The proposed Project would implement a Construction Traffic Management Plan that would include detours and ensure that emergency access is maintained throughout all construction activities.

ES 9. SUMMARY OF ENVIRONMENTAL CONCERNS IN RESPONSE TO THE NOP

The following summarizes the environmental concerns raised in response to the NOP, including comments received at the public scoping meeting held during the NOP circulation period. Public comments can be found in Appendix A of this Draft EIR.

SUMMARY OF AGENCY AND SPECIAL DISTRICT COMMENTS

The following is a summarized list of comment issues received from agencies and special districts, written, separated by topic. Agency and special district comments primarily focus on interagency coordination, accessing the Project's real traffic impacts, mitigate potential safety issues, comply with protocols of environmental law (with respect to air), and general concern for cultural resources.

- State of California Department of Transportation, District 7 (Caltrans)
- El Pueblo de Los Angeles Historical Monument (El Pueblo)
- Native American Heritage Commission (NAHC)
- Metropolitan Water District of Southern California (MWDSC)
- California Department of Fish and Wildlife (CDFW)
- South Coast Air Quality Management District (SCAQMD)
- California State Parks (CSP)
- California State Transportation Agency (CalSTA)

AIR QUALITY

- SCAQMD – Lead Agency should use CEQA Air Quality Handbook as guidance when preparing its air quality analysis. Recommended quantifying criteria pollutant emissions and compare the results to the recommended regional significance thresholds and calculating localized air quality impacts and comparing the results to localized significance thresholds.
- SCAQMD – Recommended that the Lead Agency use the new CalEEMod2 land use emissions software to estimate pollutant emissions, rather than the outdated URBEMIS.
- SCAQMD – Requested that the Lead Agency quantify criteria pollutant emissions and compare results with regional pollutant significant thresholds to determine the level of air quality impacts.
- SCAQMD – Recommended calculating localized air quality impacts and comparing results to localized significance thresholds (LSTs).
- SCAQMD – Recommended that the Lead Agency should identify any potential adverse air quality impacts that could occur from construction and operations during all phases of the Project.
- SCAQMD – Reminded that in the event that the proposed Project results in significant adverse air quality impacts, CEQA requires that all feasible mitigation measures go beyond what is required by law to minimize impacts.

BIOLOGICAL RESOURCES

- CDFW – Recommended that measures be taken to avoid impacts to nesting birds and bat species, including a thorough discussion of potential impacts of the Project, feasible avoidance and mitigation measures to minimize impacts, and an analysis of increased activity due to aerial gondola operation.
- CDFW – Recommended a complete assessment and impact analysis of flora and fauna within and nearby the Project area.
- CDFW – Recommended a complete discussion of the proposed Project and a feasible range of Alternatives.

- CDFW – Noted that CDFW considers adverse impacts to a species protected by CESA to be significant without mitigation. Reminded that early consultation is encouraged and biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the CESA ITP.
- CDFW – Lead Agency should provide a thorough discussion of direct, indirect, and cumulative impacts.
- CDFW – Noted that the DEIR should include mitigation measures for adverse Project-related impacts, including compensatory mitigation, as necessary.
- CDFW – Defined translocation and transplantation and reminded that CDFW generally does not support the use of translocation or transplantation as the primary mitigation strategy.
- CFDW – Recommended that a qualified biological monitor approved by CDFW be on site prior to and during ground activities to move out of harm's way any special status species or other wildlife.

CULTURAL RESOURCES

- El Pueblo – Requested that the Lead Agency provide continued updates and presentations from Project representatives as the Project proceeds through the EIR process.

RECREATION

- CSP – Noted that it will be important to evaluate Project elements in detail to determine what may negatively impact LASHP. Project team should work collaboratively to identify appropriate mitigation measures if negative impacts to LASHP may occur.

TRANSPORTATION

- Caltrans – Noted that the Project can help California meet the goals of the Caltrans' Strategic Management Plan, California Transportation Plan 2040, Draft California Transportation Plan 2050, and the Southern California Association of Governments (SCAG) Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy).
- Caltrans – Noted that the direct aerial crossing of SR-110 for both the Spring Street and Broadway alternatives will require extensive collaboration with Caltrans staff.
- Caltrans – Requested confirmation from the Lead Agency that the Project will result in a net reduction in per capita Vehicle Miles Traveled (VMT).
- CalSTA – Noted the benefits of the Project and Metro's leadership in advancing innovative ideas.

TRIBAL CULTURAL RESOURCES

- NAHC – Recommended that lead agencies consult with all California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed Project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.

- NAHC – Recommended contacting the appropriate regional California Historical Research Information System (CHRIS) center for an archeological records search.
- NAHC – Reminded that a professional report detailing findings and recommendations of the records search and field survey would be required in the event that an archeological inventory survey is required.
- NAHC – Commented that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. Warned that a search of the list is not a substitute for tribe consultation. Noted to contact the NAHC for a Sacred Lands File search or a Native American Tribal Consultation List.
- NAHC – Noted that lack of surface evidence of archeological resources does not preclude their subsurface existence.

SUMMARY OF PUBLIC COMMENTS

From the release of the NOP on October 1, 2020, to the close of the scoping period on November 16, 2020, public comments were collected from agencies, organizations, and individuals, including comments made during the scoping meeting, which was held on October 22, 2020. As part of the scoping process, Project information was also made available to the public online through a “Virtual Open House.” All interested parties were able to provide comments via email, mail, at the scoping meeting, and on the Virtual Open House website.

Many community members expressed conditional support for the proposed Project with a strong interest in future Project developments. Public comments can be found in Appendix A.

ES 10. SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

Based on the analysis contained in Chapter 3.0, Environmental Impact Analysis, the proposed Project would result in significant and unavoidable impacts with regard to:

Noise and Vibration:

i) Construction Noise – Project-level and cumulative noise impacts to noise sensitive receptors from on-site construction activities.

ii) Construction Vibration – Project-level and cumulative human annoyance vibration impacts to adjacent sensitive receptors.

The proposed Project would not result in any significant and unavoidable operational impacts. Detailed analysis is provided in Chapter 3.0, Environmental Impact Analysis.

ES 11. ALTERNATIVES TO REDUCE SIGNIFICANT IMPACTS

CEQA Guidelines Section 15126.6(a) requires an EIR to “describe the range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but will avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.” The CEQA Guidelines emphasize that the selection of project alternatives should be based primarily on the ability to reduce significant impacts relative to the proposed project, “even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." The CEQA Guidelines further direct that the range of alternatives be guided by a "rule of reason," such that only those alternatives necessary to permit a reasoned choice are analyzed. Based on an analysis of these alternatives, an environmentally superior alternative is identified.

NO PROJECT ALTERNATIVE

In accordance with the CEQA Guidelines, the No Project Alternative assumes that no new development would occur within the Project site. CEQA Guidelines Section 15126.6(e)(3)(B) states that, "in certain instances, the No Project/No Build Alternative means 'no build' wherein the existing environmental setting is maintained." Accordingly, for purposes of this analysis, the No Project Alternative assumes that no new development would occur within the Project site. This would result in no ART connections between the neighborhoods noted above. Additionally, VMT and vehicle congestion would not be reduced, and the associated reduction in GHG emissions and air quality improvements would not take place. The existing uses on the Project site would continue as under existing conditions.

SPRING STREET ALIGNMENT ALTERNATIVE

Similar to the Project, the Spring Street Alignment Alternative would provide an ART option for visitors to Dodger Stadium, while also providing access between Dodger Stadium, the surrounding communities, and the regional transit system accessible at LAUS. The Spring Street Alignment Alternative would include three stations, a non-passenger junction, and four cable-supporting towers at various locations along the alignment. The Spring Street Alignment Alternative would include the following components in common with the proposed Project: Alameda Station, Alameda Tower, Alpine Tower, Stadium Tower, and Dodger Stadium Station. In addition to these components, the Spring Street Alignment Alternative would also include the following components that would be unique to this alternative: Spring Street Junction, State Historic Park Station, and Bishops Tower.

The Spring Street Alignment Alternative would commence adjacent to LAUS and El Pueblo de Los Angeles (El Pueblo) and extend approximately 1.3 miles to its termination at Dodger Stadium. The Spring Street Alignment Alternative would begin near El Pueblo and LAUS on Alameda Street at the proposed Alameda Station, which would remain the same as the proposed Project. From the Alameda Station, the Spring Street Alignment Alternative would follow the same alignment as the proposed Project, remaining primarily above the public right-of-way (ROW). The Spring Street Alignment Alternative would continue north along Alameda Street and cross Alpine Street, where the proposed Alpine Tower would be constructed, and would follow the public ROW and continue over the elevated Metro L Line (Gold). The alignment would continue beyond College Street to the southernmost point of Los Angeles State Historic Park, where the proposed Spring Street Junction would be constructed. From the Spring Street Junction, the proposed alignment would continue to the proposed State Historic Park Station within the Los Angeles State Historic Park. At this location, the Spring Street Alignment Alternative would turn northwest over the Los Angeles State Historic Park and the Metro L Line (Gold) to Bishops Tower. From Bishops Tower, the Spring Street Alignment Alternative would cross over SR-110 to the proposed Stadium Tower. The northern terminus of the system would be the same as the proposed Project, being located in a parking lot at the Dodger Stadium property, where the proposed Dodger Stadium Station would be constructed.

TRANSPORTATION SYSTEMS MANAGEMENT ALTERNATIVE

The Transportation Systems Management (TSM) Alternative would enhance the existing Union Station Dodger Stadium Express (DSE) service to determine if the DSE could increase capacity. In order to meet service frequencies similar to the proposed Project, a minimum of 6 buses loading simultaneously would be required, which cannot be physically accommodated in the existing location for the Union Station DSE, and an off-site loading facility would need to be developed to accommodate the new level of bus activity. Furthermore, the existing DSE service operates up to 8 buses per hour, while the TSM Alternative would require 77 buses per hour.

In addition to a new off-site loading facility, operational changes would be required on surrounding streets to accommodate the increased congestion from the TSM Alternative. Additional loading facilities would also be required at Dodger Stadium, including dedicated bus only lanes, to accommodate the increased level of DSE service.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6(e)(2) of the CEQA Guidelines indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR and that if the “no project” alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives. Selection of an environmentally superior alternative is based on comparison of the alternatives to determine which among the alternatives would reduce or eliminate the impacts associated with the Project to the greatest degree. The comparative impacts of the Project and the Project Alternatives are summarized in Table 4-3, Alternative Impact Comparison, which is located in Chapter 4, Alternatives.

Of the alternatives analyzed in this Draft EIR, the No Project Alternative would be considered environmentally superior because it would not involve new development and assumes on-site uses would continue to operate similar to existing conditions. Although the No Project Alternative would not meet any of the Project Objectives, it would avoid all of the Project’s significant impacts, including the Project’s significant and unavoidable construction noise and vibration impacts. Conversely, the No Project Alternative would not result in ART connections between the neighborhoods noted above. Additionally, VMT and vehicle congestion would not be reduced, and the associated reduction in GHG emissions and air quality improvements would not take place.

However, the CEQA Guidelines require that the Draft EIR identify an environmentally superior alternative other than the No Project Alternative. Because the TSM Alternative would also avoid the Project’s significant and unavoidable impact with respect to construction noise and vibration without the need for mitigation, and would reduce the range of impacts to the greatest extent listed in Table 4-3, it is deemed the Environmentally Superior Alternative. However, the TSM Alternative would not meet the majority of the Project’s Objectives in full or in part. Conversely, the Spring Street Alignment Alterative would meet all of the Project Objectives.

ES 12. DESIGN OPTIONS

DESIGN OPTION A

Design Option A would include a shift in the overall Project alignment between the Broadway Junction and Dodger Stadium Station to avoid aerial rights requirements over 451 E. Savoy

Street. Under Design Option A, the Project alignment would shift to be further west from 451 E. Savoy Street, which would result in the alignment crossing over a small portion of Cathedral High School. This Design Option includes changes to the Project components of Broadway Junction, Stadium Tower, and Dodger Stadium Station. The Broadway Junction under Design Option A would have similar dimensions, but would shift approximately 4 degrees to avoid aerial rights over 451 E. Savoy Street. The location of Stadium Tower would shift 115 feet to the west/northwest. Dodger Stadium Station would also shift further south to accommodate the shift in the Project alignment.

Design Option A would require six additional piles, as well as an additional 1,090 additional cubic yards (CY) of excavation and 463 additional CY of materials to be exported at Stadium Tower. Design Option A at Dodger Stadium Station would add eight piles, and an additional 27,492 CY of excavation and materials to be exported. The shift at Dodger Stadium Station would also result in the realignment of the Dodger Stadium perimeter roadway, which would require utility relocations. A total of six to eight weeks of additional time for utility relocation and an additional four weeks for construction of the Stadium Tower would be needed. Four additional weeks of construction activities for the Dodger Stadium Station would be required to complete Design Option A.

DESIGN OPTION B

In response to stakeholder feedback, who asked the Project Sponsor to assess the potential to reduce the number of towers along Alameda Street from two to one, Design Option B would include a 50-foot overall height increase at the Alameda Tower, and the removal of Alpine Tower. Design Option B would also require additional private aerial rights requirements due to the increased bend on the Alameda Tower that would result in gondola cables and cabins in closer proximity to private property. Design Option B would also require an additional 30 drilled piles and an increased pile cap thickness from five feet to eight feet, as well as an additional 1,260 CY of excavation and materials to be exported. A total of eight additional weeks of construction for the Alameda Tower would be required to complete Design Option B.

DESIGN OPTION C

In response to stakeholder feedback, who asked the Project Sponsor to consider a taller Chinatown/State Park Station to increase the height of cabins entering and existing the station along Spring Street, Design Option C would include a 35-foot overall height increase at the Chinatown/State Park Station. Design Option C would require drill piles that are 100 feet deep, and an increase in pile cap thickness from six feet to eight feet. The maximum depth of excavation would increase by two feet, and would result in an additional 717 CY increase in the amount of excavation and a 1,396 CY increase in the amount of materials to be exported. A total of eight additional weeks of construction for the Chinatown/State Park Station would be required to complete Design Option C.

USE OPTION D

In response to stakeholder feedback, Use Option D would substitute a non-passenger junction for the proposed Chinatown/State Park Station. As the station would be substituted for a junction, features that would be applicable to passengers would not be included in this Use Option, such as a passenger mezzanine and vertical circulation elements. This Design Use Option would have the same location, height, width, length, and architectural finish as the proposed Project. No other project changes are proposed under this Use Option, and all other construction and operational features would be the same, or similar to, the proposed Project.

DESIGN AND USE OPTION E

Design and Use Option E would include an ADA accessible pedestrian bridge that would gently slope from the central portion of the Los Angeles State Historic Park, over the Metro L Line (Gold), and up to North Broadway. The entrance to the pedestrian bridge would be located on the south side of Broadway, east of the intersection of North Broadway and Bishops Road, and would provide pedestrian access to neighborhoods and land uses north of Broadway. The Los Angeles State Historic Park General Plan and Final EIR[2], developed by the State Park and Recreation Commission, analyzed a potential bridge at this location. The potential bridge could provide much needed access to the Park for neighborhoods at the Park's northern boundary. Subsequent to the Los Angeles State Historic Park General Plan and Final EIR, the Department of Parks and Recreation conducted the "Bike and Pedestrian Bridge Study", a feasibility study of various bridge design alternatives and locations to explore and evaluate the feasibility of providing safe pedestrian and bike access from the Chinatown and Solano Canyon Communities into the Los Angeles State Historic Park ("Bridge Feasibility Study").[3] The Bridge Feasibility Study, released on January 15, 2020, sought to articulate the issues and benefits of each location to identify preferred bridge design concepts.

Design and Use Option E would require a total of 40 drill piles, which would result in approximately 700 CY of excavation and 400 CY of material to be exported. A total of approximately 60 weeks of construction would be required to complete Design and Use Option E, which could occur concurrently with construction of the proposed Project.

ES 13. SUMMARY OF ENVIRONMENTAL IMPACTS

Table ES-2 provides a summary of the environmental impacts of the proposed Project evaluated in this Draft EIR. Based on the analysis in Chapter 3.0, Environmental Impact Analysis, implementation of the proposed Project would result in significant and unavoidable impacts related to Noise and Vibration.

Project Design Features (PDFs), while not necessary for the impact significance determination, are included in Table ES-2 because they are inherent in the design of the proposed Project. Best Management Practices, or other measures required by law and/or permit approvals, are also requirements of the proposed Project. Additionally, Mitigation Measures have been identified and are additional actions designed to avoid, minimize, or compensate for significant environmental impacts and are required where significant impacts have been identified based on the analyses in Chapter 3.0 of this document. Where applicable, Mitigation Measures are described on Table ES-2.

---

2 California State Department of Parks and Recreation, Los Angeles State Historic Park General Plan and Final Environmental Impact Report, June 2005.

3 California State Department of Parks and Recreation, Los Angeles State Historic Park Bike and Pedestrian Bridge Study, Feasibility Study, 2019.

Table ES-2: Summary of Environmental Impacts

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
AESTHETICS			
AES-1: *Would the Project have a substantial adverse effect on a scenic vista?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required.	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.
AES-2: *Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*	**Construction:** No Impact. **Operations:** No Impact.	No mitigation measures required.	**Construction:** No Impact. **Operations:** No Impact.
AES-3: *In non-urbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required.	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.
AES-4: *Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required. **AES-PDF-A: Project Lighting.** The Project would also include the following Project Design Features related to lighting: • Building Lighting will not exceed 60 watts.	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		• Building Lighting outdoor luminaires will not exceed 6200 initial lumens. • Sign Lighting luminance will not exceed 10,000 candelas per m2 (cd/m2) during the day from after sunrise until 45 minutes prior to sunset. Sign Lighting will not exceed 300 cd/m2 at night from sunset until 45 minutes prior to sunrise. • Sign Lighting luminance shall transition smoothly from daytime luminance to nighttime luminance and vice versa. • Illuminated signs that have the potential to exceed 300 cd/m2 will include an electronic control mechanism to reduce sign luminance to 300 cd/m2 at any time when ambient sunlight is less than 100 footcandles (fc).	
AGRICULTURE AND FORESTRY RESOURCES			
AFR-1: *Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*	No Impact.	No mitigation measures required.	No Impact.
AFR-2: *Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?*	Less Than Significant Impact.	No mitigation measures required.	Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
AFR-3: *Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4256), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*	No Impact.	No mitigation measures required.	No Impact.
AFR-4: *Would the Project result in the loss of forest land or conversion of forest land to non-forest use?*	No Impact.	No mitigation measures required.	No Impact.
AFR-5: *Would the Project involve changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*	No Impact.	No mitigation measures required.	No Impact.
AIR QUALITY			
AIR-1: *Would the project conflict with or obstruct implementation of the applicable air quality plan?*	Less Than Significant Impact.	No mitigation measures required. **AIR-PDF-A:** All off-road diesel-powered construction equipment greater than 50 hp shall meet, at a minimum, the Tier 4 emission standards for nonroad diesel engines promulgated by USEPA.	Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
AIR-2: *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*	Less Than Significant Impact.	No mitigation measures required. Refer to **AIR-PDF-A** as defined in **AIR-1**.	Less Than Significant Impact.
AIR-3: *Would the project expose sensitive receptors to substantial pollutant concentrations?*	Less Than Significant Impact.	No mitigation measures required. Refer to **AIR-PDF-A** as defined in **AIR-1**.	Less Than Significant Impact.
AIR-4: *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*	Less Than Significant Impact.	No mitigation measures required. Refer to **AIR-PDF-A** as defined in **AIR-1**.	Less Than Significant Impact.
BIOLOGICAL RESOURCES			
BIO-1: *Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*	**Construction:** Significant Impact. **Operations:** Less Than Significant Impact.	**MM-BIO-A:** *Avoid and minimize project related impacts to special-status and/or roosting bat species*. During the maternity season (April 15 through August 31) prior to construction, a field survey shall be conducted by a qualified biologist to determine the potential presence of colonial bat roosts within 100 feet of the Alameda Station and Dodger Stadium Station footprints and SR-110 overpass over Stadium Way (near Stadium Tower) because these locations provide potentially suitable habitat. A visual inspection and/or one-night emergence survey of trees to be removed near the Alameda Station and Dodger Stadium Station and of the overpass shall be completed utilizing acoustic recognition technology to determine if any maternity roosts are present.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		To avoid any impacts on roosting bats resulting from construction activities for Stadium Tower, the following shall be implemented: <u>At the SR-110 Overpass</u> Should an active maternity roost be found at the SR-110 overpass, a determination (in coordination with a qualified bat biologist) shall be made whether indirect effects of construction-related activities (i.e., noise and vibration) could substantially disturb roosting bats, and if exclusionary devices should be used to remove bats. This determination shall be based on baseline noise/vibration levels, anticipated noise levels associated with construction of the Stadium Tower, and the sensitivity to noise-disturbances of the bat species present. If it is determined that noise could result in the temporary abandonment of a maternity-roost, construction-related activities shall be scheduled to avoid the maternity season (April 15 through August 31), or as determined by the biologist. To avoid any impacts on roosting bats resulting from construction activities at Alameda Station and Dodger Stadium Station, the following shall be implemented: <u>Trees</u> All trees to be removed as part of the Project at the Alameda Station, Stadium Tower, and Dodger Stadium Station sites should be evaluated for their potential to support bat roosts. In particular, any palm and eucalyptus trees that bats are known to use should be evaluated by a qualified biologist by conducting a one-night	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		emergence survey during acceptable weather conditions; or if conditions permit, physically examine the trees for presence or absence of bats (such as with lift equipment) before the start of construction/tree removal. Palm trees are present at the Alameda Station site along Alameda Street and eucalyptus trees are present at the Dodger Stadium Station site. The following measures would apply to trees to be removed that are determined to provide potential bat roost habitat by a qualified biologist. • If roosting bats are determined present during the maternity season (April 15 through August 31), the tree shall be avoided until after the maternity season when young are self-sufficient. If roosting bats are determined present during the winter months when bats are in torpor, a state in which the bats have significantly lowered their physiological state, such as body temperature and metabolic rate, due to lowered food availability (October 31 through February 15, but is dependent on specific weather conditions), a qualified bat biologist shall physically examine the roost if conditions permit for presence or absence of bats (such as with lift equipment) before the start of construction. If the roost is determined to be occupied during this time, the tree shall be avoided until after the winter season when bats are once again active. • Trees with potential colonial bat habitat can be removed outside of the maternity season and winter season (February 16 through April 14 and August 16 through October 30, or as determined by a qualified biologist)	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		using a two-step tree trimming process that occurs over 2 consecutive days. ○ Day 1, Step 1: Under the supervision of a qualified bat biologist, tree branches and limbs with no cavities shall be removed by hand (e.g., using chainsaws). This will create a disturbance (noise and vibration) and physically alter the tree. Bats roosting in the tree will either abandon the roost immediately or, after emergence, will avoid returning to the roost. ○ Day 2, Step 2: Removal of the remainder of the tree under the supervision of a qualified bat biologist may occur on the following day. Trees that are only to be trimmed and not removed would be processed in the same manner; if a branch with a potential roost must be removed, all surrounding branches would be trimmed on Day 1 under supervision of a qualified bat biologist and then the limb with the potential roost would be removed on Day 2. • Trees with foliage (and without colonial bat roost potential), such as sycamores, that can support lasiurine bats, shall have the two-step tree trimming process occur over one day under the supervision of a qualified bat biologist. Step 1 would be to remove adjacent, smaller, or non-habitat trees to create noise and vibration disturbance that would cause abandonment. Step 2 would be to remove the remainder of tree on that same day. For palm trees that can support western yellow bat (a special-status bat	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		species documented in the BSA with the potential to occur in the Project area), the two-step tree process shall be used over two days. Western yellow bats may move deeper within the dead fronds during disturbance. The two-day process will allow the bats to vacate the tree before removal. • The results of bat surveys, evaluations, and monitoring efforts that are undertaken shall be documented in a report by the qualified biologist at the conclusion of all bat-related activities. **MM-BIO-B:** *Avoid and minimize project related impacts to nesting birds.* To avoid impacts to nesting birds protected under the MBTA and CFGC resulting from construction activities that may occur during the nesting season, the following mitigation measure shall be implemented: • Construction activities, including the clearance of trees potentially suitable for nesting birds, shall occur outside of the nesting season (generally February 1 through September 30). If construction activities must occur within this time period, the following measures shall be employed: ○ A pre-construction nesting survey shall be conducted by a qualified biologist within 3 days (72 hours) prior to the start of construction activities to determine whether active nests are present within 500 feet of the construction zone. All nests found shall be recorded.	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		○ A minimum 300-foot no-work buffer shall be established around any active passerine bird nest. A minimum 500-foot no-work buffer shall be established around any active raptor nest. The qualified biologist shall monitor the nest on a weekly basis, and construction activities within 300 feet of an active nest of any passerine bird or within 500 feet of an active nest of any raptor shall be postponed until the biologist determines that the nest is no longer active. However, the standard 300 to 500 foot no-disturbance buffer distance may be adjusted (including increases or reductions to the buffer) by a qualified biologist on a case-by-case basis taking into consideration the location, type, duration and timing, and severity of work, distance of nest from work area, surrounding vegetation and line-of-sight between the nest and work areas (also taking into account existing ambient conditions from human activity within the line of sight), the influence of other environmental factors, and species' site specific level of habituation to the disturbance. If the qualified biologist determines nesting activities may fail as a result of work activities, the biologist shall immediately inform the construction manager and all project work shall cease (except access along established roadways) within the recommended no-disturbance buffer until the biologist determines the adults and young are no longer reliant on the nest site.	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		○ Buffers will be delineated on-site with bright flagging, for easy identification by project staff. The on-site construction supervisor and operator staff will be notified of the nest and the buffer limits and instructed of the sensitivity of the area to ensure the buffer is maintained. ○ A summary of preconstruction surveys and methodologies employed, monitoring efforts, and any no-disturbance buffers that were installed shall be documented in a report by the qualified biologist at the conclusion of each nesting season.	
BIO-2: *Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*	No Impact.	No mitigation measures required.	No Impact.
BIO-3: *Would the Project have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*	No Impact.	No mitigation measures required.	No Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
BIO-4: *Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*	**Construction:** Significant Impact. **Operations:** Less Than Significant Impact.	Refer to **MM-BIO-A** and **MM-BIO-B** as defined in **BIO-1.**	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact.
BIO-5: *Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*	**Construction:** Less Than Significant Impact. **Operations:** No Impact.	No mitigation measures required. **BIO-PDF-A** The Project will establish a Tree Protection Zone to protect trees during construction to establish and maintain a healthy environment for all retained trees during the course of construction. The Tree Protection Zone will apply to any trees within the construction footprint or any trees where a portion of their drip line overhangs the construction footprint (i.e., the trunk of a tree may be outside of the construction footprint, but the tree's drip line overhangs the construction footprint). The Tree Protection Zone generally encompasses an area within the drip line of the tree plus an additional 5 feet depending on the specie and size of the tree. Any construction activities within the Tree Protection Zone should follow the following guidelines for root protection. For utilities, any required trenching should be routed in such a manner as to minimize root damage. In areas where the grade around the Tree Protection Zone will be lowered, some root cutting may be unavoidable. Cuts should be clean and made at right angles to the roots. When practical, roots will be cut back to a branching lateral root to avoid root damage.	**Construction:** Less Than Significant Impact. **Operations:** No Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
BIO-6: *Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*	No Impact.	No mitigation measures required.	No Impact.
CULTURAL RESOURCES			
CUL-1: *Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*	**Construction:** Significant Impact. **Operations:** Less Than Significant Impact.	Refer to **MM-VIB-A** and **MM-VIB-B** as defined in **NV-2.** *The Winery* **CUL-PDF-A Pre-Construction Documentation of The Winery.** Prior to or issuance of building permits for the Alameda Station, the Project Sponsor will prepare documentation equal to Historic American Building Survey Level III for The Winery, per the *Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation*. The report will: 1. Be prepared by a historic preservation professional meeting the Secretary of the Interior's Professional Qualifications Standards for history, architectural history, or historic architecture with demonstrated experience in preparing HABS documentation. 2. Include full-color digital photographs (with a minimum resolution of 300 ppi and 3,000-pixel image size along one dimension) showing the following: a. The full north elevation (facing Cesar E. Chavez Avenue) and	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		i. The roofline, foundation, and any door, window, or walkway openings, ii. Detail views showing the typical existing condition of the exterior wall, and iii. Detail views showing any existing damage to the exterior such as cracks or spalling b. West elevation (facing Olvera Street), and i. The roofline, foundation, and any door, window, or walkway openings, and ii. Detail views showing the typical existing condition of the exterior brick wall, and iii. Detail views showing any existing damage to the exterior such as loose bricks and mortar c. East elevation (facing Alameda Street) i. The roofline and foundation, and ii. Detail views showing the typical existing condition of the exterior brick wall iii. Detail views showing any existing damage to the exterior such as loose bricks and mortar 3. Include written descriptive data, including detailed notes of its pre-construction condition, index to photographs, and photo key plan. Photographs of existing damage	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		will be keyed to a sketch of the elevation indicating its location. 4. Include copies of historic photographs and other supporting documentation, if available. 5. Be offered to the following repositories for use by future researchers and educators. Each repository will be contacted as to whether they are willing and able to accept the items, as well as their preferred format for transmittal. Copies need only be distributed to repositories that express interest. a. Los Angeles Public Library - One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs b. El Pueblo de Los Angeles Historical Monument Authority - One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs c. California State Library – One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs **CUL-PDF-B Post-Construction Documentation of The Winery.** Post-Construction: After construction is complete, pictures of The Winery equivalent to CUL-PDF-A will be taken to objectively compare the condition of The Winery before and after construction.	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		In the event that damage to the Winery not documented at the time of the pre-construction survey is identified as being caused by construction activities during construction monitoring, the Project Sponsor will retain an experienced professional or professionals qualified to carry out the repairs within 12 months of completion of the project. Repairs will conform to the Secretary of Interior's Standards for the Treatment of Historic Properties (36 CFR Part 68). ***El Grito (The Cry) Mural Project Design Features*** **CUL-PDF- C Pre-Construction Documentation.** Prior to the or issuance of building permits for the Alameda Station, the Project Sponsor will prepare documentation equal to Historic American Building Survey Level III for the *El Grito* mural, per the *Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation*. The report will: 1. Be prepared by a historic preservation professional meeting the Secretary of the Interior's Professional Qualifications Standards for history, architectural history, or historic architecture with demonstrated experience in preparing HABS documentation. 2. Include full-color digital photographs (with a minimum resolution of 300 ppi and 3,000-pixel image size along one dimension) showing the following:	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		a. The entirety of the *El Grito* mural from edge to edge, looking straight on b. The left half of the *El Grito* mural looking straight on c. The right half of the *El Grito* mural looking straight on d. Oblique views illustrating the curvature of the wall e. Sequential photographs showing the various panels and subjects in greater detail f. The back and sides of the curved wall on which the *El Grito* mural is located g. Detail views showing: i. Typical profile view of the *El Grito* mural (e.g., showing the depth of the tiles on the substrate) ii. Notch shapes at the top two corners (two views, left and right) iii. Curved shape of the sides of the *El Grito* mural (two views, left and right side) iv. Typical grout between tiles in two or more locations v. Bottom edge where the *El Grito* mural meets the plaza floor vi. Any existing damage or deterioration prior to construction 3. Include written descriptive data, including detailed notes of its pre-construction condition, index to photographs, and photo	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		key plan. Photographs of existing damage should be keyed to a sketch of mural indicating its location. 4. Include copies of historic photographs and other supporting documentation, if available. 5. Be offered to the following repositories for use by future researchers and educators. Each repository will be contacted as to whether they are willing and able to accept the items, as well as their preferred format for transmittal. Copies need only be distributed to repositories that express interest. a. Los Angeles Public Library - One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs b. UC Santa Cruz Library - One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs c. Los Angeles Department of Cultural Affairs (DCA) - One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs d. California State Library – One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		e. Mural Conservancy of Los Angeles - One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs f. Museo Eduardo Carillo - One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs **CUL-PDF-D Protection During Adjacent Construction.** Prior to the issuance of building permits for the Alameda Station, the Project Sponsor will ensure that the *El Grito* mural is sufficiently protected from any inadvertent damage caused by construction activities. Following National Park Service guidance for protecting historical resources during nearby construction, the following measures, at a minimum, should be implemented: 1. Vibration monitoring equipment (VIB-A) should be carefully installed so that it does not permanently damage the face of the *El Grito* mural. 2. The *El Grito* mural should be cushioned and buttressed from either side of the wall with padded wood supports. The padding may consist of insulating foam or similar material. 3. A protective barrier or barriers made from plywood should be installed over the front, back, top, and sides of the *El Grito* mural and curved wall to diffuse the force of any potential physical contact. The barrier should include removable panels or a similar feature	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		to ensure the vibration monitors and mural can be visually inspected during construction monitoring (CUL-PDF-C). 4. Plastic tarp or polyethylene sheeting should be secured over the wood barriers to protect against the accumulation of dust or contact with materials such as uncured concrete or other liquids that could damage or mark the surface of the *El Grito* mural. All of the protective measures described above should be installed and secured in such a way that does not damage the *El Grito* mural or the wall on which is it located. The barrier will not be physically attached to the *El Grito* mural or wall with screws, nails, or other fasteners. **CUL-PDF-E Construction Monitoring Plan (Built Resources).** Prior to the issuance of building permits for the Alameda Station, the Project Sponsor will prepare a Construction Monitoring Plan in coordination with the DCA. The Construction Monitoring Plan will identify specific project milestones at which a qualified professional meeting the Secretary of the Interior's Standards for architectural history or historic architecture will be notified by the Project Sponsor or Project Sponsor's contractor to visit the site and observe and document the *El Grito* mural's condition. Details will be recorded in construction monitoring memorandums submitted to DCA. These milestones will include, at a minimum: 1. Pre-Construction: Before protection measures are installed (CUL-PDF-D), to confirm the baseline condition of the *El Grito*	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		mural is still consistent with the information presented in the HABS-like documentation (CUL-PDF-C). 2. Pre-Construction: Once protection measures (CUL-PDF-D) are installed, to ensure they are sufficient, and their installation has not damaged the *El Grito* mural. 3. Construction: After each phase of active construction 4. Post-Construction: After construction is complete and protective measures have been removed. At this stage, pictures of the *El Grito* mural equivalent to CUL-PDF-C will be taken to objectively compare the condition of the *El Grito* mural before and after construction. The Construction Monitor will also be included on notifications from the real-time vibration monitoring equipment (VIB-A). In the event that damage to the *El Grito* mural not documented at the time of the pre-construction survey is identified as being caused by construction activities during construction monitoring, the Project Sponsor will retain an experienced professional or professionals qualified to carry out the repairs within 12 months of completion of the Project. Repairs will conform to the Secretary of Interior's Standards for the Treatment of Historic Properties 36 CFR Part 68.	
CUL-2: *Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?*	**Construction:** Significant Impact. **Operations:** No Impact.	**MM-CUL-A: Cultural Resources Monitoring and Mitigation Plan.** A Cultural Resources Monitoring and Mitigation Plan (CRMMP) shall be prepared for the Project by a qualified archaeologist meeting the Secretary of Interior Standards for Archaeology (36 CFR § 61) prior	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** No Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		to construction. Where specific project components, such as the Chinatown/State Park Station, have requirements specific to that component, the CRMMP will lay out regulatory requirements (such as PRC 5024) which will be adhered to. This includes SHPO consultation and following practices that seek to avoid and preserve state-owned historical resources, when prudent and feasible. The same would be for any specific requirement from El Pueblo de Los Angeles specific to the work at the Alameda station. The General Plan acknowledges the Park has archaeological sensitivities and, as such, recommends continued study of existing and potential resources as well as the need to constantly update and expand the knowledge of historic activities at the Park. As for the cultural resources associated with the Park, the General Plan states that the Park should "[i]dentify, document, evaluate, and interpret cultural resources at the Park," and "[p]rotect, stabilize, and preserve significant cultural resources within the Park." Specifically, the CRMMP shall be applicable to all ground disturbance activities extending into native soils within known archaeological sites and other areas of high sensitivity. Excavations within or within a specified radius of known archaeological sites shall be monitored up to depth at which the qualified archaeologist determines the base of the archaeological deposit has been reached. The qualified archaeologist shall supervise the archaeological monitor. Monitoring is expected to be required to the maximum depth of planned excavations at the Alameda Station and up to approximately 15 feet in depth at Alameda Tower and the	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		Chinatown/State Park Station. Work will also be monitored by Native American monitors in accordance with Mitigation Measure TCR-A. However, if in the course of excavations the qualified archaeologist determines that the site is disturbed or the sensitivity for significant archaeological resources is low because no resources have been encountered, then monitoring may be reduced or suspended. The monitoring plan shall define pre-construction coordination, construction monitoring for the excavations based on activities and depth of disturbance planned for each Project component (including ground disturbing activities in native soils within known archaeological sites), unanticipated discovery protocols, data recovery (including halting or diverting construction so that archaeological resources can be evaluated and recovered in a timeline manner), artifact and feature treatment, procurement (including a curation plan), and reporting. The Project Sponsor shall coordinate with the archaeologist and Metro to develop an appropriate treatment plan for the resources in accordance with California Public Resources Code (PRC) Section 21083.2(i) if they are determined by Metro to be potentially eligible for the CRHR or potentially qualify as unique archaeological resources pursuant to CEQA. Treatment may include implementation of archaeological data recovery excavations to remove the resource or preservation in place. Key staff shall be identified, and the process of notification and consultation (where entities specific to each station would be identified) shall be specified within the CRMMP as well as protocols for reporting.	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		If the discovery proves significant under CEQA, the archaeologist shall also be required to curate specimens in a repository with permanent retrievable storage and submit a written report to the lead agency within a year of completion of the fieldwork. Once complete, the final report shall be filed with the SCCIC. For Resource 19-004200 and the granite paving (within the Area of Direct Impact of the Project) at Site 19-003120, the CRMMP shall describe the required documentation and treatment of the resources during excavation and removal. **MM-CUL-B: Archaeological Resources Worker Training Program.** To mitigate unknown historical resources within the Area of Direct Impacts and mitigate potential impacts to them, qualified archaeologist shall be hired by the Project Sponsor to develop and conduct a worker training program for the Project with input from El Pueblo (as it pertains to the Alameda Station) and LASHP staff (as it pertains to the Chinatown/State Park Station) prior to the start of ground disturbing activities. The training shall be prepared by an archaeologist who meets the Secretary of the Interior's Standards for Archaeology and will be adjusted to the specific details at the two parks. The training shall provide information to construction workers about the known locations of archaeological resources and potential areas that may be sensitive for archaeological resources associated with the Project. Participation in the training by LASHP and El Pueblo staff, will be encouraged. In the event construction crews are phased or rotated, additional training shall be conducted for the new construction workers conducting ground-	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		disturbing activities. The qualified archaeologist shall retain documentation demonstrating that the appropriate construction workers attended the worker training program. An appropriate presentation shall be prepared by a qualified archaeologist which shall describe and illustrate resources likely to be encountered by Project excavation and outline the protocol to be followed in the event of a find. If any archaeological resources are encountered during ground-disturbing activities, work shall be temporarily halted in the vicinity of the find and the Construction Contractor shall contact the qualified archaeologist to examine and evaluate the resource in accordance with the provisions of CEQA as outlined by the CRMMP. **MM-CUL-C: Archaeological Testing Plan for 19-000887 and 19-004320 (Alameda Station).** To mitigate impacts to Resources 19-000887 and 19-004320, both of which include portions of the Zanja, an NRHP-eligible archaeological site, and where avoidance is not feasible, an archaeological testing plan and data recovery plan for the Area of Direct Impacts, which is located north of the Placita de Dolores, shall be prepared prior to ground disturbing activities and implemented after the paving is removed. Although the proposed Project is designed to not impact the portion of the Zanja Madre within 19-000887, there is the potential to encounter either previously unrecorded portions of the Zanja or artifact refuse from the overall site. Therefore, a testing plan shall be prepared for the portions of the sites that will be impacted outside of the known Zanja location. Within the Project Area of Direct Impacts, resource 19-000887 overlaps unevaluated resource 19-004320, which will	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		therefore also be included in the testing plan. The testing plan shall be prepared in consultation with El Pueblo de Los Angeles Historical Monument Authority specific to these resources at the Alameda Station. The testing plan shall propose limited archaeological excavations of a portion of the site overlapping the Area of Direct Impacts and contain maps showing the overlap of the sites with the project Area of Direct Impacts. The test excavations are intended to identify the location, integrity, and significance of archaeological deposits that may be impacted by the proposed Project. The testing plan shall outline excavation locations and methods, such as where and in what soils mechanical excavations may or may not be used, screen sizes, and the criteria thresholds that would require data recovery. The testing plan shall be implemented once the paving has been removed and far enough in advance of construction for there to be sufficient time to carry out the plan and to prepare a plan for and conduct a data recovery program if needed. If significant archaeological remains are encountered that appear to contribute to the significance of the overall site during the test excavations, data recovery excavations will be required, and a data recovery plan shall be prepared and implemented. The data recovery plan shall detail the treatment of the surviving archaeological remains, if testing identifies any. The data recovery plan will specify a statistically significant sample of the site to be excavated and shall describe the specific tools, screening size, and methods to be used. The plan shall	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		describe how structural remains, if any, will be exposed and mapped. Laboratory studies planned for the analysis of the finds shall also be described. **MM-CUL-D: Archaeological Testing Plan for LAUS Forecourt.** To mitigate impacts to Resource 19-001575, an NRHP-eligible archaeological site, an archaeological testing plan and data recovery plan for the Area of Direct Impacts shall be prepared and implemented prior to ground-disturbing activities. The testing plan shall propose limited archaeological excavations of a portion of the site overlapping the Area of Direct Impacts. The test excavations are intended to identify the location, integrity, and significance of archaeological deposits that may be impacted by the proposed Project. The testing plan shall outline excavation locations and methods, such as where and in what soils mechanical excavations may or may not be used, screen sizes, and the criteria threshold that would require data recovery. If significant archaeological remains are encountered that appear to contribute to the site's NRHP and CRHR eligibility during the test excavations, data recovery excavations will be required, and the data recovery plan shall be implemented. The data recovery plan shall specify a statistically significant sample of the site to be excavated and shall describe the specific tools, screening size, and methods to be used. The plan shall describe how structural remains, if any, will be exposed and mapped.	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		Laboratory studies planned for the analysis of the finds shall also be described. **MM-CUL-E: Archaeological Testing Plan for Los Angeles State Historic Park.** To mitigate unavoidable impacts to Resource 19-003120, an NRHP-eligible archaeological site, an archaeological testing plan and data recovery plan for the Area of Direct Impacts shall be prepared and implemented prior to ground-disturbing activities. The testing plan shall be prepared in consultation with California State Parks and SHPO (per PRC 5024.5). The testing plan shall propose limited archaeological excavations of a portion of the site overlapping the Area of Direct Impacts. The test excavations are intended to identify the location, integrity, and significance of archaeological deposits that may be impacted by the proposed Project; and will specifically be used to confirm and define potential foundations for the Southern Pacific Railroad office/freight house t are shown in Sanborn fire insurance maps to overlap the ADI for the station. The plan shall outline excavation locations and methods, such as where and in what soils mechanical excavations may or may not be used, screen sizes, and the criteria thresholds that would require data recovery. If significant archaeological remains are encountered that appear to contribute to the site's NRHP and CRHR eligibility during the test excavations and avoidance/preservation-in-place is not possible, data recovery excavations will be required, and the data recovery plan shall be implemented. The plan shall specify a statistically significant sample of the site to be excavated and shall describe the specific tools,	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		screening size, and methods to be used. The plan shall describe how structural remains, if any, will be exposed and mapped. Laboratory studies planned for the analysis of the finds shall also be described. **MM-CUL-F: Redesign of Placement of Park Amenity Structures to Avoid Archaeological Features at Los Angeles State Historic Park Station.** After implementation of CUL-E, if it is found that the Park amenities (e.g., concessions and restroom) at the Los Angele State Historic Park have the potential to impact any significant features found during the testing phase of CUL-E, the location of the park amenity structures will be reconfigured to avoid and/or diminish impacts to those features as feasible.	
CUL-3: *Would the Project disturb any human remains, including those interred outside of formal cemeteries?*	**Construction:** Significant Impact. **Operations:** No Impact.	Refer to **MM-CUL-D and MM-CUL-F** as defined in **CUL-2**.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** No Impact.
ENERGY			
ENE-1: *Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*	<u>Electricity</u> **Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact. <u>Fuel</u> **Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required.	<u>Electricity</u> **Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact. <u>Fuel</u> **Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
	<u>Natural Gas</u> **Construction:** Less Than Significant Impact. **Operations:** No Impact.		<u>Natural Gas</u> **Construction:** Less Than Significant Impact. **Operations:** No Impact.
ENE-2: *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*	Less Than Significant Impact.	No mitigation measures required.	Less Than Significant Impact.
GEOLOGY AND SOILS			
GEO-1: *Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?*	**Construction:** Significant Impact. **Operations:** Less Than Significant Impact.	**MM-GEO-A:** *Prepare a Site-Specific Final Geotechnical Report.* The Project Sponsor shall engage a California-registered geotechnical engineer to prepare and submit a site-specific final geotechnical investigation and report to the City of Los Angeles for review, consistent with the requirements of the CBC, applicable Los Angeles amendments, and California Geological Survey Special Publication 117 (as amended). A site-specific geotechnical exploration program, along with associated laboratory testing, is necessary to complete a design-level evaluation of the geologic hazards and conditions, seismic hazards, grading conditions, and foundation capacities. The site-specific final geotechnical report shall provide a description of the geological and geotechnical conditions at the site; the findings, conclusions, and mitigation recommendations for potential geologic and seismic hazards; and design-level geotechnical recommendations in support of grading and foundation design. Additionally, the geotechnical report shall include recommended measures to reduce potential impacts related to landslides, subsidence, liquefaction, differential settlement, expansive soils, soil corrosivity, or other potential ground failures induced by the proposed Project.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		The submittal and approval of the final geotechnical report shall be a condition of the grading and construction permits issued by the City of Los Angeles Department of Building and Safety. The Project Sponsor shall implement the recommendations contained in the approved report during project design and construction.	
GEO-2: *Would the Project result in substantial soil erosion or the loss of topsoil?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required.	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.
GEO-3: *Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*	**Construction:** Significant Impact. **Operations:** Less Than Significant Impact.	Refer to **MM-GEO-A** as defined in **GEO-1**.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact.
GEO-4: *Would the Project be located on expansive soil, as defined in Section 1803.5.3 of the current CBC, creating substantial direct or indirect risks to life or property?*	**Construction:** Significant Impact. **Operations:** Less Than Significant Impact.	Refer to **MM-GEO-A** as defined in **GEO-1**.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact.
GEO-5: *Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*	**Construction:** No Impact. **Operations:** No Impact.	No mitigation measures required.	**Construction:** No Impact. **Operations:** No Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
GEO-6: *Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*	**Construction:** Significant Impact. **Operations:** No Impact.	**MM-GEO-B:** *Prepare a Paleontological Resources Monitoring and Mitigation Plan (PRMMP).* A PRMMP shall be developed by a qualified paleontologist meeting the criteria established by the Society for Vertebrate Paleontology. The plan shall apply to paleontologically sensitive deposits, including older Quaternary alluvium and Puente formation deposits, that may be impacted by the proposed Project, as determined by a qualified paleontologist in consultation with the construction team and guided by geotechnical coring. The qualified paleontologist shall supervise the paleontological monitor, who shall be present during construction excavations into older Quaternary alluvial deposits and Miocene Puente formation deposits. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains, and where appropriate, collecting wet or dry screened sediment samples of promising horizons for smaller fossil remains. The frequency of monitoring inspections shall be determined by the paleontologist, and shall be based on the rate of ground-disturbing activities, the material being excavated, and the depth of excavation; and if found, the abundance and type of paleontological materials. If any paleontological materials are found, the paleontological monitor shall temporarily divert or redirect ground-disturbing activities in the area of the exposed fossil to facilitate evaluation, and if necessary, salvage. The paleontologist shall assess the discovered material(s) and provide a recommendation(s), if necessary, for the preservation, conservation, or relocation of the resource, as appropriate. The Project Sponsor shall comply with the recommendations of the	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** No Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		evaluating paleontologist, and ground-disturbing activities may resume once the paleontologist's recommendations have been implemented to the paleontologist's satisfaction. If paleontological materials are found, the paleontologist shall prepare a report identifying the resource and the recommendations proposed and implemented, within 1 year of completion of the fieldwork. A copy of the report shall be submitted to the Los Angeles County Natural History Museum.	
GREENHOUSE GAS EMISSIONS			
GHG-1: *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required.	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.
GHG-2: *Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?*	Less Than Significant Impact.	No mitigation measures required.	Less Than Significant Impact.
HAZARDS AND HAZARDOUS MATERIALS			
HAZ-1: *Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*	**Construction:** Significant Impact. **Operations:** Less Than Significant Impact.	**MM-HAZ-A:** *Prepare a Soil and Groundwater Management Plan*. The Project Sponsor shall retain a qualified environmental consultant to prepare a Soil and Groundwater Management Plan prior to any re-grading, decommissioning, or construction activities. The Soil and Groundwater Management Plan would be prepared and implemented to specify methods for handling and disposal in the event contaminated groundwater, contaminated soil, or structures are encountered during Project construction. The Soil and Groundwater Management Plan shall provide a summary of	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		the environmental conditions at each Project component site, including stations and towers. The Soil and Groundwater Management Plan shall include methods and procedures for sampling and analyzing soils and/or groundwater to classify them as either hazardous or non-hazardous; and if identified as hazardous, shall include additional methods and procedures for the proper handling and removal of impacted soils and/or groundwater for off-site disposal and/or recycle. Methods and procedures in the Soil and Groundwater Management Plan shall be in accordance with current federal, state, and local regulations, and be protective of workers and the environment. **MM-HAZ-B:** *Hazardous Materials Abatement.* Prior to demolition of the existing building at 1201 North Broadway, a licensed abatement contractor will conduct hazardous materials abatement, which would remove, dispose of, and transport hazardous materials in accordance with federal, state, and local regulations. The licensed abatement contractor would be required to comply with Cal/OSHA regulations governing asbestos standards and lead paint standards (California Code of Regulations Article 4 Sections 1529, 5208, and 1532), OSHA 29 CFR Section 1926.62 regarding lead construction, and OSHA 29 CFR Section 1926.1101 regarding asbestos exposure. The contractor would also be required to comply with SCAQMD Rule 1403, related to asbestos emissions during building demolition activities. Safe work measures would be taken during the hazardous materials abatement, including wetting the area to prevent possible release of hazardous materials into the	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		air, removing dust with high-efficiency particulate air vacuums and/or disposable wet wipe towels.	
HAZ-2: *Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials to the environment?*	**Construction:** Significant Impact. **Operations:** Less Than Significant Impact.	Refer to **MM-HAZ-A** and **MM-HAZ-B** as defined in **HAZ-1**.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact.
HAZ-3: *Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*	**Construction:** Significant Impact. **Operations:** Less Than Significant Impact.	Refer to **MM-HAZ-A** and **MM-HAZ-B** as defined in **HAZ-1**.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact.
HAZ-4: *Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*	**Construction:** Significant Impact. **Operations:** No Impact.	Refer to **MM-HAZ-A** and **MM-HAZ-B** as defined in **HAZ-1**.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** No Impact.
HAZ-5: *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive*	No Impact.	No mitigation measures required.	No Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
noise for people residing or working in the project area?			
HAZ-6: *Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required.	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.
HYDROLOGY AND WATER QUALITY			
HWQ-1: *Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required.	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.
HWQ-2: *Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*	**Construction:** Less Than Significant Impact. **Operations:** No Impact.	No mitigation measures required.	**Construction:** Less Than Significant Impact. **Operations:** No Impact.
HWQ-3: *Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required.	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
i. *result in substantial erosion or siltation on- or off-site;* ***ii.*** *substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;* ***iii.*** *create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or* ***iv.*** *impede or redirect flood flows?*			
HWQ-4: *Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*	Less Than Significant Impact.	No mitigation measures required.	Less Than Significant Impact.
HWQ-5: *Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required.	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
LAND USE AND PLANNING			
LUP-1: *Would the Project physically divide an established community?*	**Construction:** Less Than Significant Impact. **Operations:** No Impact.	No mitigation measures required.	**Construction:** Less Than Significant Impact. **Operations:** No Impact.
LUP-2: *Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*	Significant Impact.	**LUP-A:** *Obtain a Los Angeles State Historic Park General Plan Amendment*. Pursuant to Public Resources Code 5002.2, the proposed Project shall obtain an amendment to the Los Angeles State Historic Park General Plan to allow transit uses within the Los Angeles State Historic Park General Plan.	Less Than Significant Impact with Mitigation.
MINERAL RESOURCES			
MIN-1: *Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*	No Impact.	No mitigation measures required.	No Impact.
MIN-2: *Would the Project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*	No Impact.	No mitigation measures required.	No Impact.
NOISE			
NV-1: *Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable*	**Construction**: Significant and Unavoidable. **Operation**: Less Than Significant Impact.	**MM-NOI-A:** *Prepare a Construction Noise Management Plan.* Prior to the issuance of grading permits for the proposed Project, the Project Sponsor shall design a Construction Noise Management Plan to minimize the construction-related noise impacts to off-site noise-sensitive receptors. The Construction Noise Management Plan shall include the following measures to reduce noise levels:	**Construction**: Significant and Unavoidable. **Operation**: Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
standards or other agencies?		• **Noise Barriers**: Temporary construction noise barriers between the Project construction area and affected receptors shall be installed as identified below. The noise barriers shall be designed to have a sound transmission class (STC) rating of at least 25 and should have the ability to provide a range of noise reduction between 5 dBA and 15 dBA when the construction equipment is located below the elevation level of the noise barrier and there is no line-of-sight between the construction equipment and the noise-sensitive receptors. Specific locations and heights for the temporary noise barriers shall include the following by Project components: • Alameda Station ○ For the entire duration of construction, the Project shall provide a 24-foot temporary noise barrier between the Project construction site and NSR 3 [Mozaic Apartments]. ○ For the entire duration of construction, the Project shall provide an 8-foot temporary noise barrier between the Project construction site and NSR 1A [Union Station] and NSR 1B [First Five LA]. ○ During the Foundations and Columns phase, the Project shall provide a 10-foot temporary noise barrier between the Project construction activities occurring within Alameda Street and NSR 1A [Union Station], NSR 1B [First Five	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		LA], NSR 2 [El Pueblo], and NSR 3 [Mozaic Apartments]. ○ During a portion of the Structural Steel and Gondola Equipment Erection phase and during a portion of the Vertical Circulation, Hardscaping, Landscaping, and Interior Work phase, temporary platforms will be installed to facilitate construction activities. While the temporary platforms are installed, the Project shall provide a 10-foot temporary noise barrier on the temporary platforms between the Project construction site and NSR 3. • Alameda Tower ○ For the entire duration of construction, the Project shall provide an 8-foot temporary noise barrier between the Project construction site and NSR 4 [The California Endowment]. ○ During a portion of the Structural Steel and Gondola Equipment Erection phase, temporary platforms will be installed to facilitate construction activities. While the temporary platforms are installed, the Project shall provide a 10-foot temporary noise barrier on the temporary platforms between the Project construction site and NSR 4. • Alpine Tower ○ For the entire duration of construction, the Project shall	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		provide an 8-foot temporary noise barrier between the Project construction site and NSR 6 [Chinatown Senior Lofts] and NSR 7 [Homeboy Industries]. ○ During a portion of the Structural Steel and Gondola Equipment Erection phase, temporary platforms will be installed to facilitate construction activities. While the temporary platforms are installed, the Project shall provide a 10-foot temporary noise barrier on the temporary platforms between the Project construction site and NSR 6 and NSR 7. ○ NSR 5 [Future Residential] is currently an undeveloped city-owned parking lot and is proposed for future multi-family residential uses. If NSR 5 is occupied by residential units at the time of Project construction, the following noise barriers shall be provided: ▪ For the entire duration of construction, the Project shall provide an 8-foot temporary noise barrier between the Project construction site and NSR 5. ▪ During the Foundations and Columns and Structural Steel and Gondola Equipment Erection phases, the Project shall provide a 24-foot temporary noise barrier between the Project construction site and occupied	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		residential units at NSR 5 [Future Residential]. ▪ During a portion of the Structural Steel and Gondola Equipment Erection phase, temporary platforms will be installed to facilitate construction activities. While the temporary platforms are installed, the Project shall provide a 10-foot temporary noise barrier on the temporary platforms between the Project construction site and NSR 5. • Chinatown/State Park Station ○ For the entire duration of construction, the Project shall provide an 8-foot temporary noise barrier between the Project construction site and NSR 9 [Blossom Plaza], NSR 10 [Future Residential Development], NSR 11 [Capitol Milling], and NSR 14S [Los Angeles State Park]. The noise barrier will include a gate that may be temporarily opened for access during construction hours along Spring Street for construction access. ○ For the entire duration of construction, the Project shall provide a 10-foot temporary noise barrier between the Chinatown/State Park Station and NSR 8 [College Station] and NSR 12 [Future Residential Development].	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		○ During a portion of the Structural Steel and Gondola Equipment Erection phase, temporary platforms will be installed to facilitate construction activities. While the temporary platforms are installed, the Project shall provide a 10-foot temporary noise barrier on the temporary platforms between the Project construction site and NSR 8, NSR 12, and NSR 14S. • Broadway Junction ○ For the entire duration of construction, the Project shall provide a 24-foot temporary noise barrier between the Project construction site and NSR 13 [Future Development], NSR 14N [Los Angeles State Historic Park], and NSR 17 [Low Rise Residential]. ○ During the Demolition phase and the Foundations and Columns phase, the Project shall provide a 24-foot temporary noise barrier between the Project construction site and NSR 16 [Cathedral High School]. ○ During the Structural Streel and Gondola Equipment Erection phase and the Vertical Circulation, Hardscaping, Landscaping, and Interior Work phase, the Project shall provide an 8-foot temporary noise barrier between the Project construction site and NSR 16 [Cathedral High School]	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		◦ During a portion of the Structural Steel and Gondola Equipment Erection phase and during a portion of the Vertical Circulation, Hardscaping, Landscaping, and Interior Work phase, temporary platforms will be installed to facilitate construction activities. While the temporary platforms are installed, the Project shall provide a 10-foot temporary noise barrier on the temporary platforms between the Project construction site and NSR 13, NSR 14 N, NSR 16, and NSR 17. • Stadium Tower ◦ During the Foundations and Columns phase, the Project shall provide an 8-foot temporary noise barrier between the Project construction site and NSR 16 [Cathedral High School] and NSR 17 [Low Rise Residential]. ◦ During a portion of the Structural Steel and Gondola Equipment Erection phase, temporary platforms will be installed to facilitate construction activities. While the temporary platforms are installed, the Project shall provide a 10-foot temporary noise barrier on the temporary platforms between Project construction and NSR 16 and NSR 17. • **Equipment Maintenance**: Construction equipment shall be properly maintained per	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		manufacturers' specifications to prevent noise due to worn or improperly maintained parts and shall be fitted with the best available noise suppression devices (i.e., mufflers, lagging, and/or motor enclosures). All impact tools shall be shrouded or shielded, and all intake and exhaust ports on power equipment shall be muffled or shielded. • **Electrical Sources:** When possible, on-site electrical sources shall be used to power equipment rather than diesel generators. • **Sensitive Uses:** Fixed and/or stationary equipment (e.g., generators, compressors, concrete mixers) shall be located away from noise-sensitive receptors. • **Community Outreach:** The following shall be implemented to reduce impacts to the local community related to disturbances from construction noise: • Noise Disturbance Coordinator: A noise and vibration disturbance coordinator shall be established. The noise disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The noise and vibration disturbance coordinator shall determine the cause of the complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures to address the complaint. Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		surrounding property owners to contact the job superintendent if necessary. In the event a complaint is received, appropriate corrective actions shall be implemented and a report of the action provided to the reporting party. • Construction Notice: The construction contractor shall provide a construction notice to residents within 500 feet of the construction site for each Project component prior to initiation of construction activities. The construction site notice shall include job site address, anticipated equipment to be used and duration of construction activities, permit number, name and phone number of the job superintendent, construction hours, and the City telephone number where violations can be reported. The notice will also include the phone number of the noise disturbance coordinator. • **Limit Idling Equipment**: Construction equipment shall not idle for longer than 5 minutes, as required by section 2485 of the California Code of Regulations. **NOI-PDF-A: Gondola Cabin Noise Control Features.** The Project's gondola cabins shall include the following features: 1. Gondola cabins shall be designed with an interior-to-exterior noise reduction rating of no less than Sound Transmission Class (STC) 35.	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		2. If heating, ventilation, and air conditioning (HVAC) units are included in the gondola cabin design, they shall be designed with a sound power level of no more than 71 dBA.	
NV-2: *Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?*	**Construction**: Significant and Unavoidable. **Operation**: Less Than Significant Impact.	**MM-VIB-A:** ***Vibration Monitoring.*** Prior to the issuance of grading permits for the proposed Project, the Project Sponsor shall design a Vibration Monitoring Plan. The Plan shall provide for: • Vibration Monitoring Equipment: the placement of vibration monitoring equipment at least 26 feet away from the Avila Adobe (1970s addition), El Grito mural wall, and The Old Winery by a qualified professional for real-time vibration monitoring for construction work at the Alameda Station requiring heavy equipment or ground compaction devices. • Modification of Vibration Equipment: The monitoring devices shall notify the construction crew if vibration levels are within 0.1 PPV, in/sec, of the vibration damage threshold. The construction crew shall modify the construction equipment to ensure that the vibration damage threshold is not exceeded. **MM-VIB-B:** ***Force Adjustable Ground Compaction Devices.*** For construction work occurring at the Alameda Station in proximity to the Avila Adobe (1970s addition), El Grito Mural, and The Old Winery: • At a distance of 26 feet or more from the Avila Adobe (1970s addition), El Grito Mural and The Old Winery, any ground compacting equipment, including vibratory rollers and	**Construction**: Significant and Unavoidable. **Operation**: Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		plate compactors, shall be calibrated onsite prior to use to ensure vibration levels remain below the assumed reference level of 0.21 PPV, in/sec, at 25 feet. If the ground compacting equipment cannot achieve the assumed reference level, equipment with less vibration (less than 0.21 PPV, in/sec, at 25 feet), non-vibrating equipment, or hand tools shall be required for ground compaction activities. • Any ground compaction or excavation/drilling operations within 26 feet of the Avila Adobe (1970s addition), El Grito Mural or The Old Winery structures must be completed with non-vibrating equipment or hand tools. Refer to **CUL-PDF-A, CUL-PDF-B, CUL-PDF-C, CUL-PDF-D**, and **CUL-PDF-E** as defined in **CUL-1**	
NV-3: *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?*	No Impact.	No mitigation measures required.	No Impact.
POPULATION AND HOUSING			
POP-1: *Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required.	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
example, through extension of roads or other infrastructure)?			
POP-2: *Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required.	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.
PUBLIC SERVICES			
PS-1: *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: Fire Protection?*	**Construction:** Significant Impact. **Operations:** Less Than Significant Impact.	Refer to **WFR-PDF-A** as defined in **WFR-1.** Refer to **MM-TRA-B** as defined in TRA-3.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact.
PS-2: *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service*	**Construction:** Significant Impact **Operations:** Less Than Significant Impact.	Refer to **MM-TRA-B** as defined in TRA-3.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
ratios, response times, or other performance objectives for any of the public services: Police Protection?			
PS-3: *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Schools?*	**Construction:** Significant Impact **Operations:** Less Than Significant Impact.	Refer to **MM-TRA-B**as described in TRA-3.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact.
PS-4: *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services? Other public facilities?*	**Construction:** Significant Impact **Operations:** Less Than Significant Impact.	Refer to **MM-TRA-B**as described in TRA-3.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
PARKS AND RECREATIONAL FACILITIES			
PR-1: *Would the Project result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*	**Construction**: Less Than Significant Impact. **Operation**: Less Than Significant Impact.	No mitigation measures required.	**Construction**: Less Than Significant Impact. **Operation**: Less Than Significant Impact.
PR-2: *Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*	**Construction**: Less Than Significant Impact. **Operation**: Less Than Significant Impact.	No mitigation measures required.	**Construction**: Less Than Significant Impact. **Operation**: Less Than Significant Impact.
PR-3: *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Parks?*	**Construction**: Less Than Significant Impact. **Operation**: Less Than Significant Impact.	No mitigation measures required.	**Construction**: Less Than Significant Impact. **Operation**: Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
TRANSPORTATION			
TRA-1: *Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?*	Less Than Significant Impact.	No mitigation measures required.	Less Than Significant Impact.
TRA-2: *Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) (Vehicle Miles Traveled)?*	**Construction:** No Impact. **Operations:** No Impact.	No mitigation measures required.	**Construction:** No Impact. **Operations:** No Impact.
TRA-3: *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*	**Construction:** Significant Impact. **Operations:** Significant Impact.	**MM-TRA-A**: *Visibility Enhancements.* Prior to the completion of construction of the proposed Project, and in coordination with and subject to the approval of LADOT, the Sponsor shall design visibility enhancements for the following locations sufficient to alert drivers to the presence of pedestrians: • Alameda Tower • Chinatown/State Park Station Visibility enhancement features could include high visibility crosswalk treatments, advanced crossing warning signs, flashing beacons, upgraded lighting, and new or upgraded traffic controls, such as traffic signals and all-way stops and right turn on red restrictions and channelization of pedestrians to marked crosswalk locations via fencing. The mitigation measure would be implemented during the construction phase and would be completed prior to proposed Project operations.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact with Mitigation.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		MM-TRA-B: *Construction Traffic Management.* Plan**:** Prior to the issuance of a building permit for the proposed Project, a detailed Construction Traffic Management Plan (CTMP), including street closure information, detour plans, haul routes, and a staging plan, shall be prepared and submitted to the City for review and approval. The CTMP shall formalize how construction will be carried out and identify specific actions that will be required to reduce effects on the surrounding community. The CTMP shall be based on the nature and timing of the specific construction activities at each of the Project construction sites. This coordination will ensure construction activities of the concurrent related projects and associated hauling activities are managed in collaboration with one another and the proposed Project. The CTMP may be updated as construction progresses to reflect progress at the various Project construction sites. The CTMP will include, but not be limited to, the following elements as appropriate: • As traffic lane, parking lane, and sidewalk closures are anticipated, worksite traffic control plans, approved by the City of Los Angeles, shall be developed and implemented to route vehicular traffic, bicyclists, and pedestrians around any such closures. • Visibility to open pedestrian crossings will be maintained, or temporary or permanent measures consistent with TRA-A shall be implemented if determined to be appropriate in coordination with LADOT. In absence of measures to mitigate or eliminate visual obstructions for pedestrians crossing the	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		street, pedestrian crossings may be closed or relocated to more visible locations. • Existing school crossings, as denoted by yellow crosswalk striping consistent with the Manual on Uniform Traffic Control Devices (MUTCD) along proposed detour routes shall be evaluated in coordination with LADOT to determine if crossing guards should temporarily be assigned. If it is determined that crossing guards should be assigned, on days/times when detours are active, the proposed Project shall fund crossing guards during morning school arrival and afternoon school departure periods during periods when adjacent schools are in session. If school crossings along detour routes are unsignalized, temporary traffic signals will be evaluated in coordination with LADOT, and would be implemented by the proposed Project if deemed necessary. • As partial and full street closures are anticipated at various locations during portions of the Project construction, detour plans, approved by the City of Los Angeles, shall be developed and implemented to route vehicular traffic and bicyclists to alternative routes during these periods. • Ensure that access will remain accessible for land uses in proximity to the Project alignment and component sites during project construction. In some cases, alternative access locations would be provided or supervised temporary access through the worksite would be accommodated during construction phases	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		where access is hindered, such as foundation construction. • Coordinate with the City and emergency service providers to ensure emergency access is provided to the Project alignment and component sites and neighboring businesses and residences. Emergency access points will be marked accordingly in consultation with LAFD, as necessary. • Conduct construction management meetings with City staff and other surrounding construction-related project representatives (i.e., construction contractors) whose projects will potentially be under construction at around the same time as the Project bimonthly, or as otherwise determined appropriate by City Staff. • Provide off-site truck staging in a legal area furnished by the construction truck contractor. • Schedule deliveries and pick-ups of construction materials during non-peak travel periods to the extent possible and coordinate to reduce the potential of trucks waiting to load or unload for protracted periods. • During construction activities when construction worker parking cannot be accommodated at the Project component sites, identify alternate parking location(s) for construction workers and the method of transportation to and from the Project component sites (if beyond walking distance) for approval by the City 30 days prior to commencement of construction.	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		• Provide all construction contractors with written information on where their workers and their subcontractors are permitted to park and provide clear consequences to violators for failure to follow these regulations	
TRA-4: *Would the project result in inadequate emergency access?*	**Construction:** Significant Impact. **Operations:** Less Than Significant Impact.	Refer to **MM-TRA-B** as defined in **TRA-3**. **MM-TRA-C**: *Temporary Disaster Route Plan.* Prior to the issuance of a building permit for the proposed Project, and in coordination with and subject to the approval of LADOT, the Sponsor shall submit a temporary disaster route plan to LADOT, which shall include street closure information and detour plans in order to facilitate the movement of emergency vehicles through the study area and minimize effects on emergency response during a disaster. Construction activities and temporary lane closures could quickly be halted in event of an emergency to allow emergency vehicles to travel through the work zones. In addition to detours, the temporary disaster route plan could also include temporary operational measures that would be implemented by the City during a disaster, including temporary contra-flow lanes or reversing directions to flush vehicles during a disaster situation. The temporary disaster route plan would be prepared for the following locations: • During those periods when construction of the Alameda Station, the Chinatown/State Park Station, and the Alameda and Alpine Towers require partial closure of one direction or full closure of both directions of Alameda Street or Spring Street.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** Less Than Significant Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
TRIBAL CULTURAL RESOURCES			
TCR-1: *Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, in in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*	**Construction:** Significant Impact. **Operations:** No Impact.	Refer to **MM-CUL-D** as defined in **CUL-2**.	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** No Impact.
TCR-2: *Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion*	**Construction:** Significant Impact. **Operations:** No Impact.	Refer to **MM-CUL-A** and **MM-CUL-D** as defined in **CUL-2**. **MM-TCR-A:** *Native American Monitor.* Because of the potential to encounter tribal cultural resources, a Native American monitor shall be retained to monitor project-related, ground-disturbing construction activities (e.g., boring, grading, excavation, drilling, trenching) that occur after existing pavement and structures are removed at the location of the Alameda Station. If cultural resources are encountered elsewhere along the alignment during construction that, in the opinion of the archaeological Principal Investigator (as defined in 32 CFR Section 767.8), are likely of Native American origin, then	**Construction:** Less Than Significant Impact with Mitigation. **Operations:** No Impact.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		Native American monitoring may be extended to include the area of the find. The Principal Investigator will make the recommendation to the Project Sponsor and Metro if it seems the Native American monitoring should be extended. The appropriate Native American monitor shall be selected based on ongoing coordination with consulting tribes and shall be identified in the CRMMP. The CRMMP is described in Mitigation Measure CUL-A. Specifically, the CRMMP and Native American monitoring would be applicable to ground disturbance activities extending into native soils at the location of the Alameda Station and, if cultural resources are encountered elsewhere along the alignment during construction that, in the opinion of the archaeological Principal Investigator, are likely of Native American origin. Monitoring procedures and the role and responsibilities of the Native American monitor shall be outlined in the CRMMP. In the event the Native American monitor identifies cultural or archeological resources, the monitor shall be given the authority to temporarily halt construction (if safe) within 50 feet (15 meters) of the discovery to investigate the find and contact the archaeological Principal Investigator. The Native American monitor and consulting tribe(s) shall be provided an opportunity to participate in the documentation and evaluation of the find. If a data recovery plan is prepared, the consulting tribe(s) shall be provided an opportunity to review and provide input on the plan.	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
UTILITIES AND SERVICE SYSTEMS			
USS-1: *Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*	**Construction:** Significant Impact. **Operations:** Less Than Significant Impact.	**MM-USS-A:** *Development of a Utility Relocation Plan.* Before the start of construction-related activities, including the relocation of utilities, the Project Sponsor shall coordinate with the LADWP, LASAN, SoCalGas, and Metro to prepare a Utility Relocation Plan. The Project Sponsor shall also coordinate with the utility companies to minimize impacts to services throughout the Project and obtain their approval of the Utility Relocation Plan. The Utility Relocation Plan shall be prepared, reviewed, and approved by a licensed civil engineer and, at a minimum, include the following: • Plans that identify the utility infrastructure elements, including access for utility providers and easements, as applicable, that require relocation as a result of the proposed Project; • Safety measures to avoid any human health hazards or environmental hazards associated with capping and abandoning some utility infrastructure, such as natural gas lines or sewer lines; and • Timing for completion of the utility relocation, which shall be scheduled to minimize disruption to the utility companies and their customers.	**Construction:** Less Than Significant with Mitigation. **Operations:** Less Than Significant.
USS-2: *Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required.	**Construction:** Less Than Significant. **Operations:** Less Than Significant.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
development during normal, dry, and multiple dry years?			
USS-3: *Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required.	**Construction:** Less Than Significant. **Operations:** Less Than Significant.
USS-4: *Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*	**Construction:** Significant Impact. **Operations:** Less Than Significant Impact.	Refer to **MM-HAZ-A** as defined in **HAZ-1**.	**Construction:** Less Than Significant with Mitigation. **Operations:** Less Than Significant.
WILDFIRE			
WFR-1: *Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required. **WFR-PDF-A:** The Project will prepare a Fire Protection Plan, which will be implemented during construction of the Broadway Junction, Stadium Tower, and Dodger Stadium Station. The Fire Protection Plan will include the following measures that shall be implemented to the extent applicable in order to further reduce risks associated with ignition of wildland fire:	**Construction:** Less Than Significant. **Operations:** Less Than Significant.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		• Prior to the start of any construction activities, a Fire Prevention Program Superintendent shall be designated to interface with the LAFD and coordinate fire watch and site fire prevention and response. • In exceedance of regulatory requirements, the Fire Prevention Program Superintendent shall prohibit hot work construction activities during Red Flag Warnings, which are issued for a stated period of time by the National Weather Service using pre-determined criteria to identify particularly critical wildfire danger in a particular geographic area. • Prior to the start of any hot work construction activities, the Fire Prevention Program Superintendent will implement tiered fire watches with increased staff tasked with monitoring for ignitions during hot work activities (fire watch). The fire watch shall be provided during hot work and shall continue to monitor for a minimum of 30 minutes following completion of the hot work activities. The Fire Prevention Program Superintendent may determine during construction that this monitoring period be increased based on the potential for weather conditions that may increase the potential for sparks to be carried by the wind and result in ignition (i.e., the potential for high wind events, high temperature, and/or low relative humidity). • Prior to the start of any construction activities, the construction manager in coordination with the Fire Prevention Program Superintendent shall provide site fire safety training for all construction crew	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		members, including on the regulatory requirements set forth in Section 3.20.2, the proper use of firefighting equipment, and procedures to be followed in the event of a fire. Project staff shall be trained prior to the start of construction to identify and report to the appropriate authority potential fire safety hazards, including the presence of sparks or smoke. The construction manager shall maintain training records which will be available for review by Metro, the city, and LAFD. • Prior to the start of construction, the construction area shall be cleared of all dead and downed vegetation and dead or dry leaves and pine needles from the ground. Trees within the construction area shall either be removed or trimmed to keep branches a minimum of 10 feet from other trees. Vegetation within the construction area shall be controlled through periodic cutting and spraying of weeds. • Ongoing fire safety inspections and patrols of the construction site shall be integrated into Project site security procedures for the duration of construction. The assigned fire patrols shall verify the proper tools and equipment are on site, serve as a lookout for fire starts, including participating in a fire watch to make sure no residual fire exists following the completion of the construction activity. • Each construction area shall be equipped with fire extinguishers and firefighting equipment sufficient to extinguish small flames.	

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
		• The Fire Prevention Program Superintendent shall provide outreach and orientation services to responding fire stations including pre-staging measures prior to the start of hot work construction activities. • Any fire ignited on site shall be promptly reported to LAFD	
WFR-2: *Would the Project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required. Refer to **WFR-PDF-A** as defined in **WFR-1**. **WFR-PDF-B:** Prior to the start of construction, the Project shall provide a fuel modification zone surrounding the Stadium Tower construction site starting from the construction area perimeter of either 70 feet or until the nearest paved roadway that thins or removes all vegetation, dead or dry leaves and pine needles from the ground, and trims or remove trees to keep branches a minimum of 10 feet from other trees. Stadium Tower construction site plan shows a buffer zone of 70 feet or to nearest paved roadway.	**Construction:** Less Than Significant. **Operations:** Less Than Significant.
WFR-3: *Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	Refer to **WFR-PDF-A** as defined in WFR-1 and **WFR-PDF-B** as defined in **WFR-2**.	**Construction:** Less Than Significant. **Operations:** Less Than Significant.

Potential Environmental Impacts	Significance Determination	Project Design Feature(s) (PDF) and/or Mitigation Measure(s) (MM)	Significance Determination After Mitigation
WFR-4: *Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required.	Less Than Significant.
WFR-5: *Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*	**Construction:** Less Than Significant Impact. **Operations:** Less Than Significant Impact.	No mitigation measures required. Refer to **WFR-PDF-A** as defined in WFR-1 and **WFR-PDF-B** as defined in **WFR-2**. **WFR-PDF-C:** During operation of the Broadway Junction, Stadium Tower, and Dodger Stadium Station, security monitoring by staff and cameras shall be implemented. Project staff shall be trained to identify and report to the appropriate authority potential fire safety hazards, including the presence of sparks or smoke. Any fire ignited on site shall be promptly reported to LAFD.	**Construction:** Less Than Significant. **Operations:** Less Than Significant.

1.0 INTRODUCTION

LA Aerial Rapid Transit Technologies LLC, as the Project Sponsor, is proposing the Los Angeles Aerial Rapid Transit Project (proposed Project), which would connect Los Angeles Union Station (LAUS) to the Dodger Stadium property via an aerial gondola system in downtown Los Angeles. The Los Angeles County Metropolitan Transportation Authority (Metro) is the Lead Agency in the preparation of a Draft Environmental Impact Report (EIR) for the proposed Project in accordance with the California Environmental Quality Act (CEQA) statutes and guidelines, as amended (Public Resources Code [PRC], Section 21000-21178 and California Code of Regulations [CCR] Title 14, Chapter 3 Section 15000–15387). This Draft EIR has been prepared to evaluate potential environmental effects that would result from development of the proposed Project.

This chapter provides an overview of the purpose of this Draft EIR, a discussion of the environmental review process, and a description of the organization of this Draft EIR.

1.1 SUMMARY OF THE PROPOSED PROJECT

The proposed Project would connect LAUS to the Dodger Stadium property via an aerial gondola system. The proposed Project would also include an intermediate station at the southernmost entrance of the Los Angeles State Historic Park. The proposed Project would provide an aerial rapid transit (ART) option for visitors to Dodger Stadium, while also providing access between the Dodger Stadium property, the surrounding communities, including Chinatown, Mission Junction, Elysian Park, and Solano Canyon, and the Los Angeles State Historic Park, to the regional transit system accessible at LAUS.

The aerial gondola system would consist of cables, three passenger stations, a non-passenger junction, towers, and gondola cabins. When complete, the proposed Project would have a maximum capacity of approximately 5,000 people per hour per direction, and the travel time from LAUS to Dodger Stadium would be approximately seven minutes. The proposed Project would provide pedestrian improvements, including hardscape and landscape improvements, as well as amenities at the Los Angeles State Historic Park. The ART system has the ability to overcome grade and elevation issues between LAUS and Dodger Stadium, and would provide safe, zero-emission, environmentally friendly, and high-capacity transit connectivity in the Project area that would reduce greenhouse gas (GHG) emissions as a result of reduced vehicular congestion in and around Dodger Stadium and on neighborhood streets, arterial roadways, and freeways. The proposed Project would operate daily to serve existing residents, workers, park users, and visitors to Los Angeles.

A detailed description of the proposed Project is provided in Chapter 2.

1.2 PURPOSE OF THIS DRAFT ENVIRONMENTAL IMPACT REPORT

In accordance with Sections 15050 and 15367 of the CEQA Guidelines, Metro is the Lead Agency for the proposed Project, and has the principal responsibility for approving the proposed Project.

This Draft EIR has been prepared for the following purposes:

- To satisfy the requirements of CEQA (PRC Section 21000 et. seq., as amended) and the CEQA Guidelines (CCR, Title 14, Chapter 3, Section 15000 et. seq.).

- To inform public agency decision makers and the public of the environmental effects of the proposed Project, including any significant environmental effects, as well as possible ways to minimize those significant effects, and reasonable alternatives to the proposed Project.

- To enable Metro to consider environmental consequences when deciding whether to approve the proposed Project.

- To enable other responsible public agencies that must approve activities undertaken with respect to the proposed Project, including permits and other approvals, to consider the environmental effects of the proposed Project.

This Draft EIR was prepared in accordance with Section 15151 of the CEQA Guidelines, which defines the standards for EIR adequacy as follows:

> *"An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure."*

As described in CEQA and the CEQA Guidelines, lead agencies are charged with the duty to avoid or substantially lessen significant environmental impacts of a project, where feasible. For some effects, significant environmental impacts cannot be mitigated to a level considered less than significant; in such cases, impacts are considered significant and unavoidable. In discharging this duty, a lead agency has an obligation to balance the economic, social, technological, legal, and other benefits of a project against its significant unavoidable impacts on the environment. This Draft EIR is an informational document, designed to identify the potentially significant impacts of the proposed Project on the environment; to indicate the manner in which those significant impacts can be minimized; to identify reasonable and potentially feasible alternatives to the proposed Project that would avoid or reduce the significant impacts; and to identify any significant unavoidable adverse impacts that cannot be mitigated.

1.3 CEQA RESPONSIBLE AND TRUSTEE AGENCIES

The information in this Draft EIR may also be used by other agencies involved with the Project that have a responsibility under CEQA, including but not limited to, the following:

- California Department of Parks and Recreation
- California Department of Transportation
- City of Los Angeles

The California Department of Fish and Wildlife is a trustee agency (Section 15386[a] of the CEQA Guidelines) and must be notified if the project involves fish and wildlife of the state, rare and endangered native plants, wildlife areas, or ecological reserves.

1.4 ENVIRONMENTAL REVIEW PROCESS

1.4.1 Notice of Preparation and Scoping Meetings

In accordance with CCR Title 14, Section 15082, a Notice of Preparation (NOP) was prepared and distributed to notify agencies, organizations, and individuals that Metro planned to prepare a Draft EIR, and to request input on the environmental analysis to be performed. The 45-day comment period began on October 1, 2020, and concluded on November 16, 2020 for a 46-day comment period. As part of the EIR scoping process, Project information was made available to the public online through two primary means: 1) a virtual “open house”; and 2) an online virtual scoping meeting. The virtual open house was accessible to reviewing parties and the public throughout the public review period. The virtual open house and online virtual scoping meeting were made accessible through Metro’s project website at metro.net/aerialrapidtransit. The NOP and Project fact sheet were posted in the virtual open house, and the virtual scoping meeting was provided in English, Spanish, and Cantonese.

The online virtual scoping meeting was held on October 22, 2020, and included an overview of the proposed Project, an overview of the CEQA process, and the Project timeline for environmental review. The public was also able to submit questions and comments during the online meeting. A recording of the scoping meeting was posted on the Metro website following the meeting.

A total of 305 comments, composed of 8 agency comments, 20 organization comments, 226 individual comments, and 51 comments during the online virtual scoping meeting, were received in response to the NOP. In addition, an estimated 741 individuals visited the virtual open house and 75 individuals attended the online virtual scoping meeting. The NOP, and the public comments received during the 46-day review period for the NOP, are included in Appendix A of this Draft EIR.

The following list summarizes the broad topics in the public comments and questions that were received during the NOP comment period, and at the scoping meetings, related to environmental issues:

- Project station design, mass, and configuration
- Potential impacts to El Pueblo and Union Station
- Potential impacts on historic resources and tribal cultural resources
- Potential impacts on neighborhoods and residents related to aesthetics, air quality, noise, recreation, and transportation
- Potential impacts related to air quality and emissions
- Potential impacts related to geologic hazards
- Potential impacts related to noise
- Potential impacts related to transportation, including traffic, congestion, accessibility, and impacts during construction

- Potential impacts to the Los Angeles State Historic Park

The NOP included two potential alignment alternatives being considered for the proposed Project: the Spring Street Alternative and the Broadway Alternative. Due to feedback received during the scoping process, the Broadway Alternative is now being considered as the proposed Project. The Spring Street Alternative is discussed in Section 4.0, Alternatives.

1.4.2 Public Review of the Draft EIR

This Draft EIR is being distributed for a 60-day public review and comment period that will begin October 17, 2022 and end December 16, 2022. The timeframe of the public review period is identified in the Notice of Availability attached to this Draft EIR. During the public review and comment period, comments from public agencies, organizations, and individuals concerning the environmental issues analyzed in the Draft EIR and the Draft EIR's accuracy and completeness can be submitted by email or U.S. mail to the following address:

Mr. Cory Zelmer, Deputy Executive Officer
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, Mail Stop MS: 99-22-6
Los Angeles, CA 90012
Email: LAART@metro.net

Comments can also be submitted by phone at (213) 922-6913. Metro will conduct public hearings to take testimony on the Draft EIR during the 60-day public review and comment period. Upon close of the public review and comment period, written responses to all written comments and oral testimony pertaining to environmental issues received during the comment period will be prepared as part of the Final EIR. As required by CEQA, responses to comments submitted by commenting agencies will be distributed to those agencies for review prior to consideration of the Final EIR by Metro's Board of Directors. Upon completion of the Final EIR and other required documentation, the Board of Directors may adopt the findings relative to the proposed Project's environmental effects after implementation of mitigation measures and provide a statement of overriding considerations, certify the EIR, and approve the proposed Project.

1.4.3 Senate Bill 44

Senate Bill (SB) 44, effective January 1, 2022, added section 21168.6.9 to the Public Resources Code and provides for streamlined judicial review for "environmental leadership transit projects," so long as certain requirements are met. To qualify for the streamlined judicial review process established under SB 44, the proposed Project must be an "environmental leadership transit project," defined as a "fixed guideway" that (i) operates at zero emissions; (ii) reduces GHG emissions in the project's corridor "as defined in the applicable environmental document over the useful life of the project, without using offsets"; (iii) reduces 30 million vehicle miles traveled in the project's corridor "as defined in the applicable environmental document over the useful life of the project"; (iv) is consistent with the applicable sustainable communities strategy and regional transportation plan; and (v) incorporates sustainable infrastructure practices. (Cal. Pub. Res. Code § 21168.6.9(a)(1)(A)-(F). For the purposes of SB 44, this Draft EIR defines the "corridor of the project" as the area in which Dodger fans travel to and from games at Dodger Stadium, based on existing ticket sale data.

The proposed Project is a "fixed guideway" for the purposes of SB 44. SB 44 states that "fixed guideway" "has the same meaning as defined in Section 5302 of Title 49 of the United States

Code." (Cal. Pub. Res. Code § 21168.6.9(a)(2).) Section 5302 of Title 49 of the United States Code includes definitions related to the Federal Transit Administration's (FTA) public transportation programs and policies, including Fixed Guideway Capital Investment Grants. Section 5302 of Title 49 of the United States Code defines "fixed guideway" as "a public transportation facility—(A) using and occupying a separate right-of-way for the exclusive use of public transportation; (B) using rail; (C) using a fixed catenary system; (D) for a passenger ferry system; or (E) for a bus rapid transit system." (49 U.S.C. § 5302(7).) The FTA interprets "fixed guideway" to include aerial tramways. (See, *e.g.*, 69 FR 78209-78210; see also FTA, National Transit Database 2021 Policy Manual, at p. 28.) In addition, the proposed Project would exclusively use and occupy the airspace above the public right-of-way through a franchise agreement with the City of Los Angeles. For that reason, the proposed Project, as a type of aerial tramway, is properly classified as a "fixed guideway" as defined by SB 44.

Public Resources Code sections 21168.6.9(a)(1)(A)-(F) also outline a number of environmental standards the proposed Project must meet in order to qualify as an "environmental leadership transit project." The proposed Project's compliance with each of these conditions is outlined below.

First, the proposed Project will operate at zero emissions under section 21168.6.9(a)(1)(A). The proposed Project guideway is powered by electricity. The electrical power for the proposed Project would be supplied by the City of Los Angeles Department of Water and Power (LADWP) through the utility's Green Power Program, with battery storage backup as opposed to diesel generators at each station, tower, and the non-passenger junction in order to reduce GHG emissions and improve air quality. Accordingly, the primary electricity usage associated with the Project guideway would come from renewable resources and result in zero greenhouse gas (GHG) and criteria pollutant emissions (further, as discussed below, the Project would reduce emissions by reducing VMT), satisfying the requirements of section 21168.6.9(a)(1)(A).

Second, under section 21168.6.9(a)(1)(B), because the proposed Project is no more than two miles in length, it would reduce emissions by no less than 50,000 metric tons of greenhouse gases directly in the Project's corridor as defined within this Draft EIR over the useful life of the project, without using offsets. The proposed Project would reduce GHG emissions by 3,493 metric tons of carbon dioxide equivalent per year (MT CO_2e/year) in the buildout year of 2026 and by 6,277 MT CO_2e/year in the horizon year of 2042. Based on an interpolation for the years between 2026 and 2042, and holding the reduction constant after 2042 until 2056, the lifetime emissions of the project over the useful life of the project (30 years based on SCAQMD's guidance for GHG significance thresholds) would be a reduction of greater than 50,000 metric tons of GHGs at 166,653 MT CO_2e. Therefore, the proposed Project, as a 1.2 mile fixed guideway system, reduces emissions by over 50,000 metric tons of greenhouse gases in the Project's corridor, satisfying the requirements of section 21168.6.9(a)(1)(B).

Third, under section 21168.6.9(a)(1)(C), the proposed Project would reduce "no less than 30,000,000 vehicle miles traveled in the corridor of the project defined in the applicable environmental document over the useful life of the project." As a fixed guideway transit project, providing new high-frequency high speed transit connections between the regional transit hub of LAUS and Dodger Stadium, the proposed Project is forecast to reduce vehicle miles travelled (VMT), as game and event attendees shift their travel mode from driving to Dodger Stadium to utilizing transit on the proposed Project. In addition, the proposed Project would connect local and regional transit services serving Union Station. As detailed in Table 3.17-6 of this Draft EIR, the proposed Project is forecast to reduce annual VMT by 2,434,000 in the Project's first operational year in 2026, increasing as ridership increases to an annual VMT reduction of 5,067,000 in 2042.

Using the 2026 reduction figures alone, the proposed Project would therefore achieve a minimum of 30,000,000 VMT reduced in approximately 12.3 years. Based on an interpolation for the years between 2026 and 2042, and holding the reduction constant after 2042 until 2056, the lifetime VMT reduction of the project over the useful life of the project (30 years based on SCAQMD's guidance for GHG significance thresholds) would be a reduction of greater than 30,000,000 VMT at 129,629,500 VMT saved, substantially more VMT saved than is required under section 21168.6.9(1)(C).

Fourth, the proposed Project is consistent with the applicable sustainable communities strategy and alternative planning strategy and the applicable regional transportation plan under sections 21168.6.9(a)(1)(D) and 21168.6.9(a)(1)(E), respectively. In September 2020, the Southern California Association of Governments approved and fully adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), called Connect SoCal, the applicable sustainable communities strategy and regional transportation plan for the proposed Project.[1] The plan outlines ten main goals, each of which the proposed Project is consistent with.

Consistency with Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy)	
Goal	**Consistency Analysis**
Encourage regional economic prosperity and global competitiveness	The proposed Project would encourage regional economic prosperity and global competitiveness by serving existing residents, workers, and visitors from local communities.
Improve mobility, accessibility, reliability, and travel safety for people and goods	The proposed Project would improve mobility, accessibility, reliability, and travel safety for people and goods by reducing passenger vehicle miles traveled and by providing a new mode of public transportation.
Enhance the preservation, security, and resilience of the regional transportation system	By creating an additional transit option that links to the existing Los Angeles Union Station (LAUS), the proposed Project would help build preservation, security, and resilience of the regional transportation system.
Increase person and goods movement and travel choices within the transportation system	The proposed Project would create an increase in person and goods movement, and travel choices within the transportation system would be improved by providing an aerial rapid transit option in Downtown Los Angeles that would facilitate travel between Dodger Stadium, the surrounding communities, and the regional transit system accessible at LAUS.
Reduce greenhouse gas (GHG) emissions and improve air quality	The proposed Project would result in a net decrease of GHG emissions, thus; therefore, the proposed Project would be consistent with the Plan's efforts to reduce GHG emissions by 8% in 2020 and 19% in 2035, per the targets set by the California Air Resources Board for the region.

[1] Available at: https://scag.ca.gov/read-plan-adopted-final-plan. Accessed September 2022.

Consistency with Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy)	
Goal	**Consistency Analysis**
Support healthy and equitable communities	The proposed Project would support healthy and equitable communities by providing a potential mobility hub at the Dodger Stadium property, where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program to provide connectivity to Elysian Park and the surrounding communities, as well as a potential mobility hub at the Chinatown/State Park Station.
Adapt to a changing climate and support an integrated regional development pattern and transportation network	The proposed Project will facilitate adapting to a changing climate and supporting an integrated regional development pattern and transportation network by reducing emissions from on-road vehicles through offering an alternative mode of transportation. The proposed Project would facilitate integration of travel between Dodger Stadium, the surrounding communities, and the regional transit system accessible at LAUS.
Leverage new transportation technologies and data-driven solutions that result in more efficient travel	As a breakthrough and innovative technology for the region, the proposed Project would leverage new transportation technologies and data-driven solutions that result in more efficient travel. The proposed Project would advance future alternative transportation systems and technology in the Los Angeles area, while providing a template for other innovative aerial projects elsewhere in the State and the country.
Encourage development of diverse housing types in areas that are supported by multiple transportation options	The proposed Project would encourage development of diverse housing types in areas that are supported by multiple transportation options by providing an additional transportation option for the residents and visitors in the City of Los Angeles, and enabling access between Dodger Stadium, the surrounding communities, and the regional transit system accessible at LAUS.
Promote conservation of natural and agricultural lands and restoration of habitats	The proposed Project would promote conservation of natural and agricultural lands and restoration of habitats by being constructed in a previously developed area, and would not impede the region's goal of conserving land and restoring habitats.

The proposed Project is also consistent with multiple Connect SoCal guiding principles, including:

> 2. Place high priority for transportation funding in the region on projects and programs that improve mobility, accessibility, reliability and safety, and that preserve the existing transportation system;
>
> 4. Encourage RTP/SCS investments and strategies that collectively result in reduced non-recurrent congestion and demand for single occupancy vehicle use, by leveraging new transportation technologies and expanding travel choices; and

5. Encourage transportation investments that will result in improved air quality and public health, and reduced greenhouse gas emissions.[2]

The proposed Project would provide improved mobility, accessibility, reliability and travel choices for people traveling in Los Angeles to a major event destination (Dodger Stadium), as well as provide improved transit service to adjacent communities. The proposed Project would reduce greenhouse gas emissions by reducing VMT. Accordingly, the proposed Project would be consistent with goals in *Connect SoCal* and is thus consistent with the applicable sustainable communities strategy and regional transportation plan, satisfying sections 21168.6.9(a)(1)(D)-(E).

Fifth, section 21168.6.9(a)(1)(F) requires the Project Sponsor to demonstrate "how it has incorporated sustainable infrastructure practices to achieve sustainability, resiliency, and climate change mitigation and adaptation goals in the project, including principles, frameworks, or guidelines as recommended by one or more of the following: (i) [t]he sustainability, resiliency, and climate change policies and standards of the American Society of Civil Engineers[;] (ii) [t]he Envision Rating System of the Institute for Sustainable Infrastructure; [or] (iii) [t]he Leadership in Energy and Environment Design (LEED) rating system of the United States Green Building Council" (USGBC).

The proposed Project is an innovative and sustainable transit system that: provides a sustainable, high-capacity zero emission ART option for visitors to Dodger Stadium, while also providing access between Dodger Stadium, the surrounding communities, and the regional transit system accessible at LAUS. ART technology is quiet, minimizing noise and vibration, and the proposed Project would reduce VMT and congestion, leading to reduced GHG emissions and improved air quality.

The proposed Project has been reviewed against the policies and standards of the Envision Rating System of the Institute for Sustainable Infrastructure, as well as USGBC's LEED for Building Design and Construction and has incorporated sustainability features based on these rating systems.

These rating systems are structured around common principles and objectives, such as siting that encourages alternative methods of transportation and brings access to underserved communities and improves quality of life, siting that avoids usage of greenfield sites thereby avoiding destruction of biodiversity and habitats, cognizance of cultural resources, sustainable site design promoting green space and incorporating climate appropriate planting, mitigation of light pollution, mitigation of heat island effects, water efficiency, energy conservation, judicious management of materials and resources, and indoor environmental air quality. The Project Sponsor, has worked to set goals towards each of these objectives, as detailed in section 2.8.8 of this Draft EIR. In addition, section 2.8.8, provides a comprehensive list of the proposed Project's sustainability features, compiled from features included in the 2019 California Green Building Standards Code, USGBC's LEED rating, and The Institute for Sustainable Infrastructure's Envision Rating System. Accordingly, pursuant to Public Resources Code section 21168.6.9(a)(1)(F), the proposed Project would incorporate sustainable infrastructure practices to achieve sustainability, resiliency, and climate change mitigation and adaptation goals in the Project, including USGBC's LEED rating

[2] Connect SoCal The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, Adopted September 3, 2020, Page 10. Available at: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176. Accessed March 2022.

system and the Envision Rating System of the Institute for Sustainable Infrastructure's policies and standards.

Based on the foregoing, the proposed Project meets the definition of an environmental leadership transit project.

In addition, in accordance with Public Resources Code section 21168.6.9(e)(1)(A), the required notice is copied below:

THIS ENVIRONMENTAL IMPACT REPORT IS SUBJECT TO SECTION 21168.6.9 OF THE PUBLIC RESOURCES CODE, WHICH PROVIDES, AMONG OTHER THINGS, THAT THE LEAD AGENCY NEED NOT CONSIDER CERTAIN COMMENTS FILED AFTER THE CLOSE OF THE PUBLIC COMMENT PERIOD, IF ANY, FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT. ANY JUDICIAL ACTION CHALLENGING THE CERTIFICATION OR ADOPTION OF THE ENVIRONMENTAL IMPACT REPORT OR THE APPROVAL OF THE PROJECT DESCRIBED IN SECTION 21168.6.9 OF THE PUBLIC RESOURCES CODE IS SUBJECT TO THE PROCEDURES SET FORTH IN THAT SECTION. A COPY OF SECTION 21168.6.9 OF THE PUBLIC RESOURCES CODE IS INCLUDED IN THE APPENDIX TO THIS ENVIRONMENTAL IMPACT REPORT.

The proposed Project has complied with and will comply with all other requirements in Public Resources Code section 21168.6.9, the full and complete text of which is included as Appendix R to this Draft EIR. In particular, Public Resources Code section 21168.6.9 requires two separate public meetings on the project during this Draft EIR's public comment period—one to provide the public with information on the Draft EIR's key findings and analysis, and the other to obtain public comments on the Draft EIR.

Although Public Resources Code section 21168.6.9 only requires one informational meeting, Metro will host two informational workshops to inform the public of the key analyses and conclusions of the Draft EIR within 10 calendar days of the Draft EIR's release on October 22, 2022 and October 25, 2022. Similarly, while Public Resources Code section 21168.6.9 only requires one public hearing to be held within 10 calendar days before the public comment period's close, Metro will also hold two public hearings on December 10, 2022 and December 13, 2022 to receive testimony on the Draft EIR. The transcript of the public hearings will be included as an Appendix to the Final EIR.

1.5 DOCUMENT ORGANIZATION

In accordance with the CEQA Guidelines, this Draft EIR addresses the potential environmental impacts of the proposed Project, and was prepared following input from the public and the responsible and affected agencies through the CEQA environmental process. The content and format of this Draft EIR meet the current requirements of CEQA and the CEQA Guidelines. This Draft EIR is organized into the following sections, with supporting technical appendices, so the reader can easily obtain information about the proposed Project and its specific issues.

Executive Summary: This section provides an overview of the information provided in detail in subsequent chapters. It consists of a summary of the proposed Project and alternatives; a discussion of issues raised by the public and agencies; and a table that summarizes the potential environmental impacts in each issue area, the significance determination for those impacts, mitigation measures, and significance after mitigation.

Chapter 1 – Introduction: This chapter briefly discusses the purpose and use of the Draft EIR; identifies the environmental topics assessed in the Draft EIR; and describes the environmental review process and organization of this Draft EIR.

Chapter 2 – Project Description: This chapter provides a detailed description of the proposed Project including project location; project purpose, need, and objectives; characteristics of the project components; and required discretionary actions.

Chapter 3 – Environmental Setting, Impacts, and Mitigation Measures: This chapter describes the potential environmental effects of implementing the proposed Project. The discussion in Chapter 3 is organized into 20 environmental issue areas with detailed analyses, as follows:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

For each environmental issue in Chapter 3 and in the above bullet pointed list, the analysis and discussion are organized into seven subsections as described below:

- *Regulatory Setting* – This subsection presents the federal, state, and local regulations, plans, and policies that are applicable to the proposed Project.

- *Environmental Setting* – This subsection describes, from a local and regional perspective, the physical environmental conditions in the vicinity of the proposed Project and along the proposed Project alignment at the time of publication of the NOP. The environmental setting establishes the baseline conditions used by Metro to determine whether specific Project-related impacts would be significant.

- *Methodology* – This subsection describes the methods and assumptions used in the impact analysis and identifies a set of thresholds by which the level of impact is determined.

- *Environmental Impacts* – This subsection provides information on the environmental effects of the proposed Project and whether the impacts of the proposed Project would meet or exceed the established significance criteria.

- *Mitigation Measures* – This subsection identifies feasible mitigation measures that would avoid or substantially reduce significant adverse Project-related environmental impacts.

- *Level of Significance after Mitigation* – This subsection indicates whether Project-related impacts would be reduced to below a level of significance with implementation of the mitigation measures identified in the Draft EIR. This subsection also identifies any residual significant and unavoidable adverse effects of the proposed Project that would result even after the mitigation measures have been implemented.

Chapter 4 – Alternatives: This chapter describes and evaluates the comparative merits of a reasonable range of Project alternatives that would feasibly attain most of the basic objectives of the proposed Project and avoid or substantially lessen potentially significant Project-related impacts. This chapter also describes the analysis and rationale for selecting the range of alternatives discussed in the Draft EIR and identifies the alternatives considered by Metro that were rejected from further detailed analysis during the planning process. Chapter 4 also includes a discussion of the environmental effects of the No Project Alternative and identifies the environmentally superior alternative.

Chapter 5 – Other CEQA Considerations: This chapter presents a discussion of other statutory requirements of CEQA, including the following:

- *Cumulative Impacts* –This subsection addresses the potentially significant cumulative impacts that may result from the proposed Project when taking into account related or cumulative impacts resulting from other past, present, and reasonably foreseeable future projects.

- *Significant Unavoidable Adverse Impacts* – This subsection identifies and summarizes the unavoidable significant impacts described in greater detail in Section 3.

- *Effects Not Found to be Significant* – This subsection identifies and summarizes the issue areas that were determined to have no adverse environmental effect or a less than significant environmental effect given the established significance criteria.

- *Irreversible Environmental Changes* – This subsection addresses the extent to which the proposed Project would result in a significant commitment of non-renewable resources.

- *Growth-Inducing Impacts* – This subsection describes the potential of the proposed Project to induce economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment.

Chapter 6 – Design and Use Options: This chapter describes and evaluates Project design and use options. The design and use options are analyzed compared to the proposed Project and it is determined whether the impacts of the design options would be less than, the same, or exceed the proposed Project.

Chapter 7 – Acronyms and Abbreviations: This chapter provides an alphabetical list of all acronyms and abbreviations used in this Draft EIR.

Chapter 8 – List of Preparers and Persons Consulted: This chapter lists the individuals involved in the preparation of this Draft EIR and the organizations and persons consulted.

Chapter 9 – References: This chapter provides a bibliography of reference and source materials used in the preparation of this Draft EIR.

This page intentionally left blank.

2.0 PROJECT DESCRIPTION

2.1 Overview of the Project

The proposed Los Angeles Aerial Rapid Transit Project (proposed Project) would connect Los Angeles Union Station (LAUS) to Dodger Stadium property via an aerial gondola system. The proposed Project would also include an intermediate station at the southernmost entrance of the Los Angeles State Historic Park. The proposed Project would provide an aerial rapid transit (ART) option for visitors to Dodger Stadium, while also providing access between the Dodger Stadium property, the surrounding communities, including Chinatown, Mission Junction, Elysian Park, and Solano Canyon, and the Los Angeles State Historic Park, to the regional transit system accessible at LAUS. The aerial gondola system would be approximately 1.2 miles and consist of cables, three passenger stations, a non-passenger junction, towers, and gondola cabins. When complete, the proposed Project would have a maximum capacity of approximately 5,000 people per hour per direction, and the travel time from LAUS to Dodger Stadium would be approximately seven minutes. The proposed Project would provide pedestrian improvements, including hardscape and landscape improvements, as well as amenities at the Los Angeles State Historic Park. The ART system has the ability to overcome grade and elevation issues between LAUS and Dodger Stadium and provide safe, zero emission, environmentally friendly, and high-capacity transit connectivity in the Project area that would reduce greenhouse gas (GHG) emissions as a result of reduced vehicular congestion in and around Dodger Stadium and on neighborhood streets, arterial roadways, and freeways. The proposed Project would operate daily to serve existing residents, workers, park users, and visitors to Los Angeles.

2.2 ART Background

Forms of aerial transit technology have been available and utilized for the last 100 years. Modern applications have seen the evolution of aerial transit technology as a feasible mode of urban rapid transit. The two primary types of aerial transit used in urban environments are tramways and detachable gondolas. In an aerial transit system, cabins are suspended above grade by cables strung between stations and towers. The system is typically electrically powered and is propelled by turning a motorized wheel. Figure 2-1 provides a general overview of how these aerial technology components integrate with each other to deliver a complete aerial system.

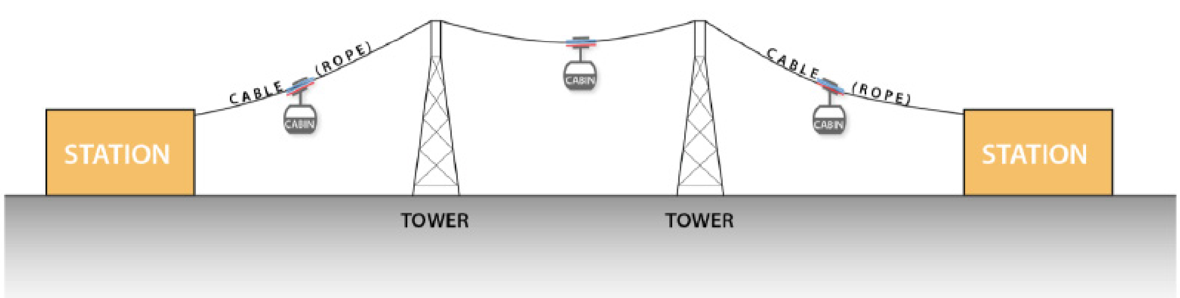


Figure 2-1: Aerial System Key Components

As shown in Table 2-1, modern aerial transit systems are currently operating in several urban locations around the world. Examples of two systems in the United States include the Portland Aerial Tram in Portland, Oregon, and the Roosevelt Island Tramway in New York, New York. An aerial tram system typically has two cabins that shuttle back and forth between two end terminals. An aerial gondola system includes multiple cabins that travel on a continuously circulating cable, which allows for an overall higher system capacity and ability to move more people per hour in each direction. A gondola system also provides flexibility in the ability to add or subtract gondola cabins from the system in order to accommodate demand.

Established aerial gondola transit systems worldwide, such as in La Paz, Bolivia, and Mexico City, Mexico, are being used as rapid transit for the urban population that they serve. The proposed Project would employ a Tricable Detachable Gondola system (also known as "3S").[1] 3S Gondola system cabins carry approximately 30 to 40 passengers, more than monocable systems, allowing for higher capacity passenger transport. Similar to the systems used in Koblenz, Germany, Phu Quoc, Vietnam, and Toulouse, France, the Project is expected to provide a smoother, more stable ride than would a monocable system.

2.3 Project Location

The proposed Project is located in the City of Los Angeles, situated northeast of downtown Los Angeles. Figure 2-2 shows the regional location of the proposed Project. The proposed Project would commence adjacent to LAUS and El Pueblo de Los Angeles (El Pueblo) and terminate at Dodger Stadium, with an intermediate station at the southernmost entrance of the Los Angeles State Historic Park. The proposed Project would include three stations, a non-passenger junction, and three cable-supporting towers at various locations along the alignment. As shown in Figure 2-3, the proposed Project location would generally be located within public right-of-way (ROW) or on publicly owned property, following Alameda Street and then continuing along Spring Street in a northeast direction through the community of Chinatown to the southernmost corner of the Los Angeles State Historic Park. The alignment would then continue northeast over the western edge of the Los Angeles State Historic Park and the Los Angeles County Metropolitan Transportation Authority (Metro) L Line (Gold) to the intersection of North Broadway and Bishops Road. At this intersection, the proposed Project alignment would turn and continue northwest following Bishops Road toward its terminus at Dodger Stadium, located in the Elysian Park community. Figure 2-3 provides an overview of the proposed Project location. A more detailed description of the proposed alignment and Project components is provided in Section 2.6.

2.3.1 Local Community Context

The proposed Project would be located within the City of Los Angeles, within the downtown, El Pueblo, Chinatown, Mission Junction, and Elysian Park neighborhoods. A portion of the proposed Project would travel over the Los Angeles State Historic Park. The proposed Project would cross over SR-110 near Dodger Stadium.

Downtown is characterized by high-density commercial and residential uses and is considered the governmental, financial, and industrial hub of Los Angeles.[2] In the Project area, the El Pueblo de Los Angeles (described further in Section 2.3.3 below) is located in the Civic Center district of the Central City Community Plan Area. The Civic Center district is physically bisected by US Route 101 (US-101), which separates El Pueblo from the southern portion of the Civic Center. The Civic Center contains the concentration of civic buildings, including city, county, state, and federal buildings, in downtown, such as City Hall, Kenneth Hahn Hall of Administration, the Hall of Records, and the Federal Court House.

---

1 *The naming convention for this system is derived from the German word "seil", which translates in English to "rope". Hence, Tricable Detachable Gondola systems are known as a "3S" systems due to the use of three ropes, or cables.*

2 *City of Los Angeles Department of City Planning, Central City Community Plan, January 2003, available at: https://planning.lacity.org/plans-policies/community-plan-area/central-city, accessed March 4, 2022.*

Table 2-1: ART Precedents

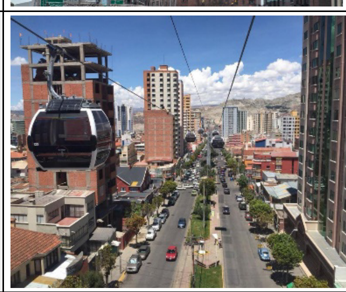
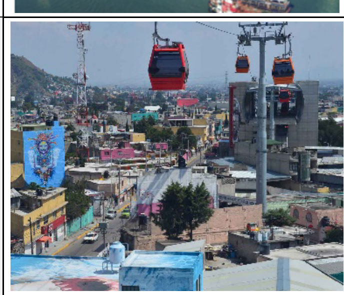
Location	Photo	Year Opened	Technology	Capacity (persons per hour, per direction)	Distance	Annual Ridership Estimates	Time	Cabin Size
Portland, Oregon		2007[1]	Reversible Tramway[1]	980[8]	0.62 miles[1]	2.1 million (2016)[12]	4 minutes[1]	79 people[1]
Roosevelt Island, New York		1976 (upgraded 2010)[2]	Reversible Tramway[2]	1,500[9]	0.59 miles[11]	2.7 million (2014)[16]	3 minutes[11]	110 people[11]
La Paz, Bolivia		2014[3] (newest line added 2019)[17]	Monocable Detachable Gondola[3]	3,000[10]	20.3 miles[10]	101 million (gondola network, 2019)[13]	5-17 minutes[10]	10 people[3]
London, England		2012[4]	Monocable Detachable Gondola[4]	2,500[4]	0.68 miles[4]	1.2 million (2019)[14]	5 minutes[8]	10 people[4]
Mexico City, Mexico		2016[5] (new line to open in 2022)[18, 19]	Monocable Detachable Gondola[5]	3,000[5]	3.0 miles[5]	7.3 million (2019)[15]	17 minutes[5]	10 people[5]

Table 2-1: ART Precedents

Location	Photo	Year Opened	Technology	Capacity (persons per hour, per direction)	Distance	Annual Ridership Estimates	Time	Cabin Size
Koblenz, Germany		2010[6]	Tricable Detachable Gondola (3S)[6]	3,800[6]	0.55 miles[6]	not available	4 minutes[20]	35 people[20]
Phu Quoc, Vietnam		2018[7]	Tricable Detachable Gondola (3S)[7]	3,500[7]	4.9 miles[7]	not available	16 minutes[7]	30 people[7]
Toulouse, France		2022[21]	3S[21]	2,000[21]	1.67 miles[21]	2.5 million[22]	10 minutes[21]	34 people[21]

Sources:

1. *Portland Aerial Tram, Learn More, n.d., available at: http://www.gobytram.com/about.*
2. *Roosevelt Island Operating Corporation, History, n.d., available at: https://rioc.ny.gov/169/History.*
3. *Doppelmayr Garaventa Group, First trip on the Línea Celeste Section 1 and Línea Blanca, 2018, January 31, available at: https://newsroom.doppelmayr.com/en/doppelmayr/news/first-trip-on-the-l%C3%ADnea-celeste-section-1-and-l%C3%ADnea-blanca/.*
4. *Doppelmayr Garaventa Group, 10-MGD Emirates Air Line, 2020, available at: https://www.doppelmayr.com/products/references/10-mgd-emirates-air-line/.*
5. *The Gondola Project, February 9, 2019, available at: http://gondolaproject.com/category/installat/Data%20shown%20only%20includes%20Mexicable%20and%20does%20not%20include%20Cablebus%20lines%205.ions/cablebus/*
6. *Doppelmayr Garaventa Group, 35-TGD BUGA Koblenz, n.d., available at: https://www.doppelmayr.com/de/systeme/referenzen/35-tgd-buga-koblenz/.*
7. *Doppelmayr Garaventa Group, Doppelmayr opens the world's longest ropeway, 2018, February 5, available at: https://newsroom.doppelmayr.com/en/doppelmayr/press/doppelmayr-opens-the-world/.*
8. *Dale, Steven, et al. Cable Car Confidential: The Essential Guide to Cable Cars, Urban Gondolas & Cable Propelled Transit. Creative Urban Projects, 2013.*
9. *Senate Hearing Before the Committee on Appropriations, Department of Transportation and Related Agencies Appropriations for Fiscal Year 1978, 95th Congress, H.R. 7557, United States Government Printing Office Washington, 1978, Google Books, available at: https://books.google.com/books?id=MUyomyzyB_EC&pg=PA1612&lpg=PA1612&dq=roosevelt+island+aerial+tram+capacity+of+people+per+hour+per+direction&source=bl&ots=fGboxL5fjB&sig=ACfU3U07UDFZCVm1uzj9jUeQwkzCtGD61w&hl=en&sa=X#v=onepage&q=roosevelt%20island%20aerial%20tram%20capacity%20of%20people%20per%20hour%20per%20direction&f=true*
10. *Mi Teleférico. Trans-Americas Journey, March 18, 2021, available at: https://trans-americas.com/mi-teleferico-cable-cars-la-paz-bolivia/*
11. *Roosevelt Island Operating Corporation, Aerial Tramway Vital Statistics, n.d., available at: https://rioc.ny.gov/173/Aerial-Tramway-Vital-Statistics.*
12. *OHSU News, Portland Aerial Tram Turns 10, 2017, January 27, available at: https://news.ohsu.edu/2017/01/28/portland-aerial-tram-turns-10.*
13. *Communication with Cesar Dockweiler who is responsible for design, implementation and operation of Mi Teleférico in La Paz, April 10, 2020.*
14. *https://en.wikipedia.org/wiki/Emirates_Air_Line_(cable_car).*
15. *Speeding up the Mobility Transition: Victor Jasso Interview (Mexicable) as of August 2019, available at: https://www.intertraffic.com/news/infrastructure/speeding-up-in-mobility-victor-jasso-mexicable/*
16. *Staten Island NY Local News, Staten Island Tram would require new technology to make trips to Manhattan, 2015, June 4, available at:* https://www.silive.com/news/2015/06/staten_island_tram_would_requi.html
17. *Doppelmayr Garaventa Group, Doppelmayr completes the world's biggest urban ropeway network, 2019, March 12, available at:* https://newsroom.doppelmayr.com/en/doppelmayr/news/doppelmayr-completes-the-world-news/
18. *Sistema de Transporte Masivo y Teleférico, Mexicable Línea 2: "Indios Verdes - Hank González" (En Construcción), Retrieved on 2022, August 11, available at:* https://masivoedomex.blogspot.com/2020/07/mexicable-linea-2.html
19. *In addition to Mexicable, an alternate public gondola transit system was added to the Mexico City Metro System under the name Cablebus, and two lines opened to the public in 2021.* https://mexicobusiness.news/infrastructure/news/cablebus-lines-1-and-2-begin-operating-july
20. *Doppelmayr Garaventa Group, 3S Installation BUGA Koblenz 2011, 2010, November 1, available at:* https://newsroom.doppelmayr.com/en/doppelmayr/news/3s-installation-buga-koblenz-2011/
21. *POMA, 3S Aerial Tramway – TELEO, n.d., available at: https://www.poma.net/en/work/teleo/*
22. *Personal communication with Mr. Frederic Demoulin, Urban Ropeways Project Manager, Leitner-Poma of America, Inc., on August 12, 2022*

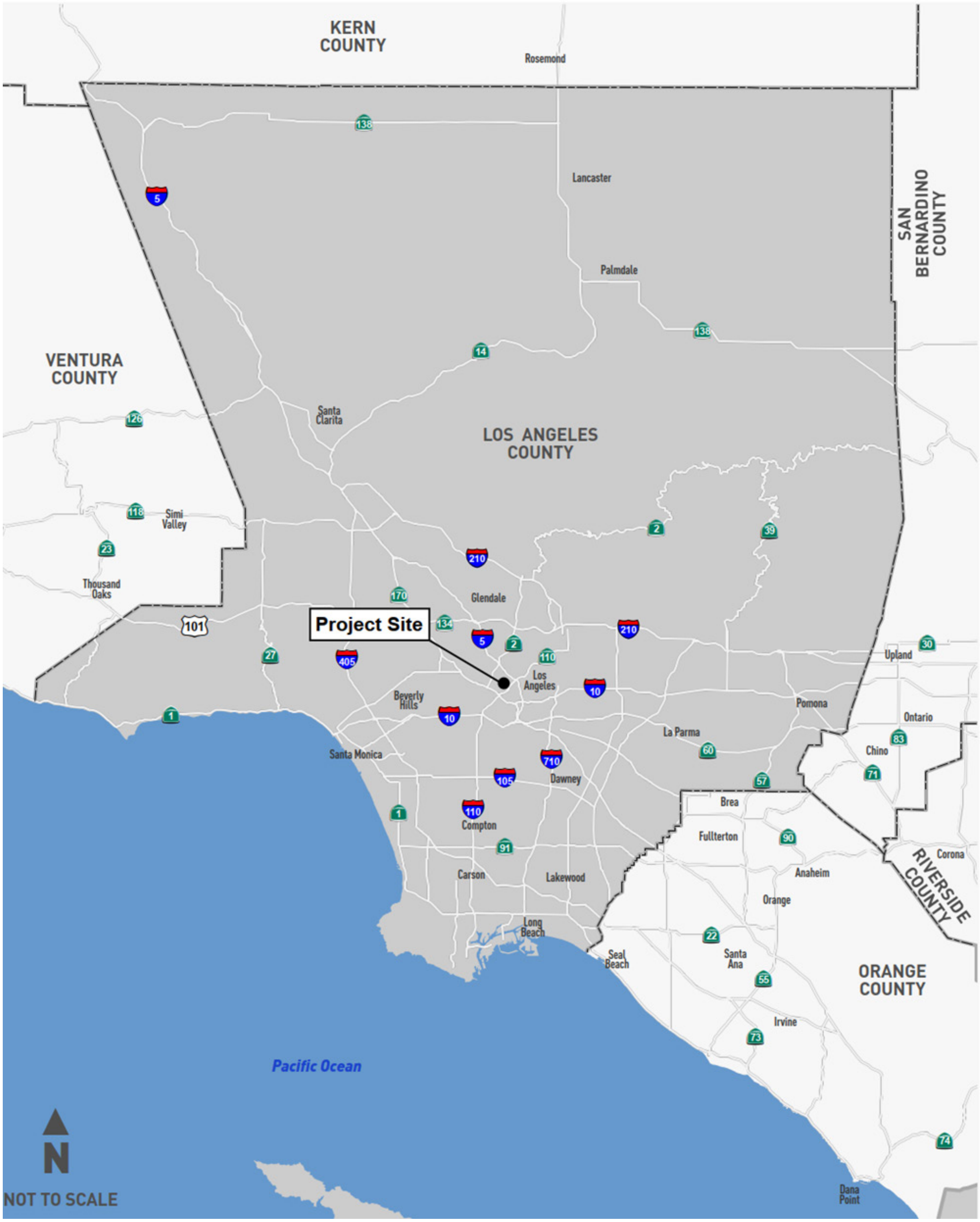


Figure 2-2: Regional Location Map

Figure 2-3: Proposed Project Location

LAUS, Chinatown, the Los Angeles State Historic Park, and the Mission Junction neighborhood are located within the Central City North Community Plan Area, which is characterized by low-rise multi-family residential neighborhoods, commercial districts, and industrial uses. The area around LAUS is characterized by transit activity, residential, commercial, and office uses. In the Chinatown community, land uses transition from industrial uses to low-rise commercial and residential uses. The commercial district in Chinatown consists of low-rise buildings with pedestrian-oriented storefronts. As described in the Central City North Community Plan, the businesses in this district provide services for the Chinese population that has historically resided in the area, with restaurants, retail businesses, banks, and professional offices making up an ethnically distinct commercial district that attracts people from throughout the region.[3] Industrial uses in the Project area are primarily centered around the former site of the historic Southern Pacific Railroad Company's River Station railyard, which is located on the present-day site of the Los Angeles State Historic Park. Mission Junction, the area south and southeast of the Los Angeles State Historic Park, includes a mix of low-rise commercial and retail business, light industrial/warehouse uses, and multi-family residential uses. Farther to the south is the William Mead Homes public housing complex, which is operated by the City Housing Authority and contains over 400 residential units. The Los Angeles State Historic Park is discussed further in Section 2.3.4.

The Elysian Park community is located north of downtown Los Angeles and is characterized by medium-density residential neighborhoods, open space areas, and commercial corridors. The Elysian Park community includes Dodger Stadium (discussed further in Section 2.3.5 below), Elysian Park, and Solano Canyon.[4] Dedicated in 1886, Elysian Park is the oldest and second largest park in the City and features hiking trails, a bike path, horseshoe pits, picnic tables, restroom facilities, a recreation center, Little League baseball fields, Grace E. Simons Lodge event venue, Radio Hill Gardens, Chavez Ravine Arboretum and the Chavez Ravine Disc Golf Course.[5] Located in the southeastern portion of the Elysian Park community, Solano Canyon consists of a low-density single-family residential neighborhood, directly east of Dodger Stadium.

2.3.2 Los Angeles Union Station

Located at 800 North Alameda Street, LAUS is southern California's primary transportation hub and is a City-designated Historic-Cultural Monument. LAUS provides local and regional access via multiple modes of transport and service providers, such as Metro, Metrolink, Amtrak, and municipal and private bus operators, all of which converge at the station. LAUS connects multiple counties, including Los Angeles, Orange, Riverside, San Bernardino, Ventura and San Diego, via an extensive regional and commuter rail and bus system. Additionally, LAUS connects riders across the Country via Amtrak. LAUS currently attracts up to 36 million transit riders per year; this equates to approximately 100,000 people per day whose journeys depart, transfer, or arrive in Los Angeles via LAUS. By 2040, it is projected that the usership of LAUS will double, where it is anticipated the station will serve up to 72 million people per year, translating to approximately 200,000 daily riders.[6]

Metro purchased LAUS in 2011 and prepared the LAUS Master Plan, which encompasses approximately 38-acres, to guide transforming the station into a world-class transportation

---

[3] *City of Los Angeles Department of City Planning, Central City North Community Plan, available at: https://planning.lacity.org/plans-policies/community-plan-area/central-city-north, accessed March 4, 2022.*

[4] City *of Los Angeles Department of City Planning, Silver Lake-Echo Park-Elysian Valley Community Plan, August 2004, available at: https://planning.lacity.org/plans-policies/community-plan-area/silver-lake-echo-park-elysian-valley, accessed August 16, 2022.*

[5] *City of Los Angeles Department of Recreation and Parks, Elysian Park Master Plan, June 2006, available at: https://www.elysianpark.org/s/EP1_Introduction.pdf, accessed August 16, 2022.*

[6] *Los Angeles County Metropolitan Transportation Authority, Los Angeles Union Station Master Plan, Los Angeles Union Station Design Report, available at: https://www.metro.net/projects/la-union-station/, accessed March 4, 2022.*

facility.[7]According to the LAUS Master Plan, the three programmatic goals for LAUS include (1) transit optimization; (2) creating a great destination; and (3) improved connectivity. In order to accommodate the projected users of LAUS and to improve safety, Metro is developing a number of projects in and around LAUS to increase its functionality as a transportation hub and allow for more connectivity with the surrounding community. Metro's LAUS Forecourt and Esplanade Improvements Project is currently being developed in coordination with the City of Los Angeles, and would include repurposing the existing northwestern parking lot at LAUS into a pedestrian forecourt and gathering space, as well as pedestrian and bicycle enhancements along Alameda Street and Los Angeles Street.[8]

In 2015, Metro, in collaboration with the City of Los Angeles, completed the Connect US Action Plan, outlining active transportation strategies to connect people to LAUS, the 1st/Central Regional Connector Station, and the historic neighborhoods surrounding them. The Connect US Action Plan seeks to "transform streets into safer and more beautiful places to walk and bike" and "unify the historic/cultural neighborhoods of El Pueblo, Chinatown, Cornfield Arroyo Seco, Boyle Heights, Arts District, Little Tokyo, and Civic Center." The Connect US Action Plan identified potential pedestrian and bicycle linkages including a proposed esplanade with a walkway and bike path along Alameda Street from the Arts District to College Street, which may be extended north to the Los Angeles State Historic Park.

2.3.3 El Pueblo de Los Angeles

El Pueblo de Los Angeles (El Pueblo), also known as the Los Angeles Plaza Historic District, is a national and state registered Historical Monument and City-designated Historic-Cultural Monument located in downtown Los Angeles directly west of LAUS. El Pueblo is historically significant as the birthplace of the City of Los Angeles, established in September 1781 by settlers from present day northern Mexico.[9] The Historic District comprises approximately 9.5 acres and is generally bounded by Cesar E. Chavez Avenue to the north, Los Angeles Street and Alameda Street to the east, Arcadia Street to the south, and Spring Street to the west. El Pueblo currently serves as a living museum, attracting over two million visitors per year to its many historic features, including Olvera Street, which is a pedestrian-oriented marketplace containing restaurants, craft shops, and other retail businesses reflecting the Mexican heritage of the City. This area attracts visitors from throughout the region, as well as tourists from around the world. El Pueblo includes the Avila Adobe, the City's oldest surviving residence; Pico House, built by the last governor of California under Mexican rule, and the City's first grand hotel; the Plaza Firehouse, the City's first firehouse; and Our Lady Queen of Angels Catholic Church, the City's oldest church and the only building at El Pueblo still used for its original purpose.[10]

2.3.4 Los Angeles State Historic Park

Previously known as the "Cornfields," the Los Angeles State Historic Park is located on the historical site of the Southern Pacific Railroad's River Station, which is a City-designated Historic-Cultural Monument. Since 2005, the site has undergone significant rehabilitation and repurposing into public open space and parkland. In 2014, the Los Angeles State Historic Park was closed to undergo significant renovation. Since its re-opening in 2017, the Los Angeles State Historic Park

---

7 *Los Angeles County Metropolitan Transportation Authority, Los Angeles Union Station Master Plan, available at: https://www.metro.net/projects/la-union-station/.*

8 *Los Angeles County Metropolitan Transportation Authority, Los Angeles Union Station Forecourt and Esplanade Improvements Project Final Environmental Impact Report, March 2018, available at:* https://www.dropbox.com/sh/55np14p60s3tch0/AABwyW69bkwUScao1ov2-kD2a/Environment%20Documents?dl=0&subfolder_nav_tracking=1*, accessed March 4, 2022.*

9 *City of Los Angeles, El Pueblo de Los Angeles Historical Monument, About Us, available at: https://elpueblo.lacity.org/about-us, accessed March 4, 2022.*

10 *City of Los Angeles, El Pueblo de Los Angeles Historical Monument, History, available at: https://elpueblo.lacity.org/history-el-pueblo, accessed March 4, 2022.*

has welcomed visitors and the local community for passive recreation opportunities, offers guided tours and hosts community events. The Los Angeles State Historic Park hosts various events throughout the year including craft markets, concerts, movie nights, and festivals. These events attract visitors from the surrounding local communities and throughout the region. The revitalized green space provides a location for Angelenos to exercise and socialize in a landscaped setting, within a region that has been historically limited in terms of access to parkland.

Los Angeles State Historic Park comprises 32 acres of open space. The site is bounded by the Metro L Line (Gold) ROW and Broadway to the north, the channelized Los Angeles River to the east, Spring Street and commercial/industrial uses to the south, and Metro L Line (Gold) ROW and commercial/industrial uses to the west. Views of downtown Los Angeles are available from the majority of the site.

The Los Angeles State Historic Park is located adjacent to the Mission Junction neighborhood of the City's Cornfield Arroyo Seco Specific Plan (CASP) Area. The intent of the CASP is to revitalize an underserved vehicular-oriented industrial area by encouraging development of mixed-use, pedestrian-oriented neighborhoods, with higher densities around transit. The area adjacent to the Los Angeles State Historic Park is being intensified with a number of recently approved mixed-use developments, which include both residential units and commercial office spaces.

2.3.5 Dodger Stadium

Originally opened in 1962, Dodger Stadium is located at 1000 Vin Scully Avenue and is home to the Los Angeles Dodgers Major League Baseball (MLB) team. The stadium is located on the hillside of Chavez Ravine and overlooks downtown Los Angeles to the south and the San Gabriel Mountains to the north. It is the third oldest continually used ballpark in MLB and has hosted more than 147 million fans since its opening in 1962.[11] Dodger Stadium is the largest MLB stadium in terms of capacity, with approximately 56,000 seats. In addition to MLB games, other special events are hosted at Dodger Stadium throughout the year. The stadium is directly surrounded by surface parking and is accessible via SR-110, US Route 101 (US 101), and Interstate 5 (I-5) freeways as well as surface streets. It is located within the hills of Elysian Park, and is also surrounded by densely populated residential neighborhoods including Solano Canyon, Echo Park, Elysian Park, Silver Lake, Chinatown, and Angelino Heights.

2.3.6 Project Purpose, Need, and Objectives

The proposed Project would consist of cables, three passenger stations, a non-passenger junction, three towers, and gondola cabins. The proposed Project alignment would extend approximately 1.2 miles beginning near El Pueblo and LAUS on Alameda Street and ending at the Dodger Stadium property. Alameda Station would be located on Alameda Street adjacent to the planned LAUS Forecourt and Placita de Dolores between Los Angeles Street and Cesar E. Chavez Avenue. Alameda Tower would be located on the Alameda Triangle, a City ROW between Alameda Street, North Main Street, and Alhambra Avenue. Alpine Tower would be located on a City-owned parcel, currently being used as non-public parking storage for City vehicles, at the northeast corner of Alameda Street and Alpine Street, adjacent to the Metro L Line (Gold). Chinatown/State Park Station would be located adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park. Broadway Junction is a non-passenger junction that would be located at the intersection of North Broadway and Bishops Road. Stadium Tower would be located on hillside private property north of Stadium Way between the Downtown Gate and SR-110. Dodger Stadium Station would be located in the southeast portion of the Dodger Stadium property near the Downtown Gate.

---

[11] *Major League Baseball, Dodger Stadium History, available at: https://www.mlb.com/dodgers/ballpark/information/history, accessed March 4, 2022.*

2.3.7 Purpose and Need

The proposed Project would improve mobility and accessibility for the region by providing a daily, high capacity aerial rapid transit connection between the regional transit system at LAUS, Dodger Stadium, Los Angeles State Historic Park, Elysian Park, and surrounding communities via the intermediate Chinatown/State Park Station. The proposed Project would include a mobility hub at Chinatown/State Park Station. The proposed Project would also provide a potential mobility hub at the Dodger Stadium property to provide connectivity to Elysian Park and the surrounding communities. The proposed Project is needed to alleviate existing congestion and associate air pollution while providing safe, zero emission, environmentally friendly, and high-capacity transit connectivity in the Project area that would reduce GHG emissions as a result of reduced vehicular congestion in and around Dodger Stadium and on neighborhood streets, arterial roadways, and freeways.

Dodger Stadium draws large regional crowds, with approximately 100 baseball games and other events each year. The vast majority of visitors drive their personal vehicles to access the venue. These vehicles create congestion on the surface streets leading up to and around Dodger Stadium, including Sunset Boulevard/Cesar E. Chavez from LAUS and throughout the surrounding communities. In addition to traffic delays in and around local streets, congestion occurs on the nearby freeways, including SR-110, I-5, and US 101. The communities in the vicinity of the proposed Project alignment were identified as being in the 90 – 100 percentile of communities disproportionately burdened by multiple sources of pollution in the State.[12] As the region's population grows and resulting travel needs continue to increase, the local and regional roadway system is likely to experience greater congestion.[13]

Dodger Stadium is one of the region's most visited venues; however, there are no permanent transit connections to the venue. Currently, Dodger Stadium Express buses provide a connection between LAUS and Dodger Stadium on game days, carrying approximately 1,850 riders on average per game. Other high-capacity venues in the region include the Crypto.com Arena, which hosts the Los Angeles Lakers and Los Angeles Clippers professional basketball teams and Los Angeles Kings professional hockey team; the Los Angeles Memorial Coliseum, which hosted the Los Angeles Rams professional football team between 2016 and 2019 and hosts the University of Southern California collegiate athletic events; and the Banc of California Stadium, home to the Los Angeles Football Club (LAFC). These venues are accessible directly by public transit, including the Metro A Line (Blue) and E Line (Expo). Additionally, the new SoFi Stadium in Inglewood, which began hosting the Los Angeles Rams and Los Angeles Chargers professional football teams in 2020, will be accessible via a planned people mover connecting the future Metro Crenshaw/LAX line station to the stadium.[14, 15] The Intuit Dome, the future home of the Los Angeles Clippers professional basketball team, is anticipated to open in 2024 and will also be served via the planned people mover connecting the future Metro Crenshaw/LAX line station to the center.[16] [17] As such, there is an increased need for Dodger Stadium to seek additional transit connections. Metro acknowledges that there is a need for improved transit options that link with

---

12 California Office of Environmental Health Hazard Assessment, CalEnviroScreen 4.0 Map, https://oehha.ca.gov/calenviroscreen/maps-data, accessed August 16, 2022

13 *Southern California Association of Governments, 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, or "Connect SoCal" available at: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, accessed August 11, 2022.*

14 *California State Transportation Agency, Transit and Intercity Rail Capital Program, Fourth Round Selected Project – Project Detail Summary, April 2020, available at: https://calsta.ca.gov/-/media/calsta-media/documents/2020-tircp-detailed-project-award-summary.pdf, accessed March 4, 2022.*

15 *Los Angeles County Metropolitan Transportation Authority, Crenshaw/LAX Transit Project, available at: https://www.metro.net/projects/crenshaw_corridor/, accessed March 4, 2022.*

16 *NBA.com, Intuit Dome, available at: https://www.nba.com/clippers/intuitdome, accessed June 28, 2022.*

17 *City of Inglewood, Inglewood Transit Connector Project Final Environmental Impact Report, available at: https://www.cityofinglewood.org/DocumentCenter/View/17236/ITC_FEIR_Feb2022*

the growing Metro network to meet existing and future travel demands and access to Dodger Stadium.

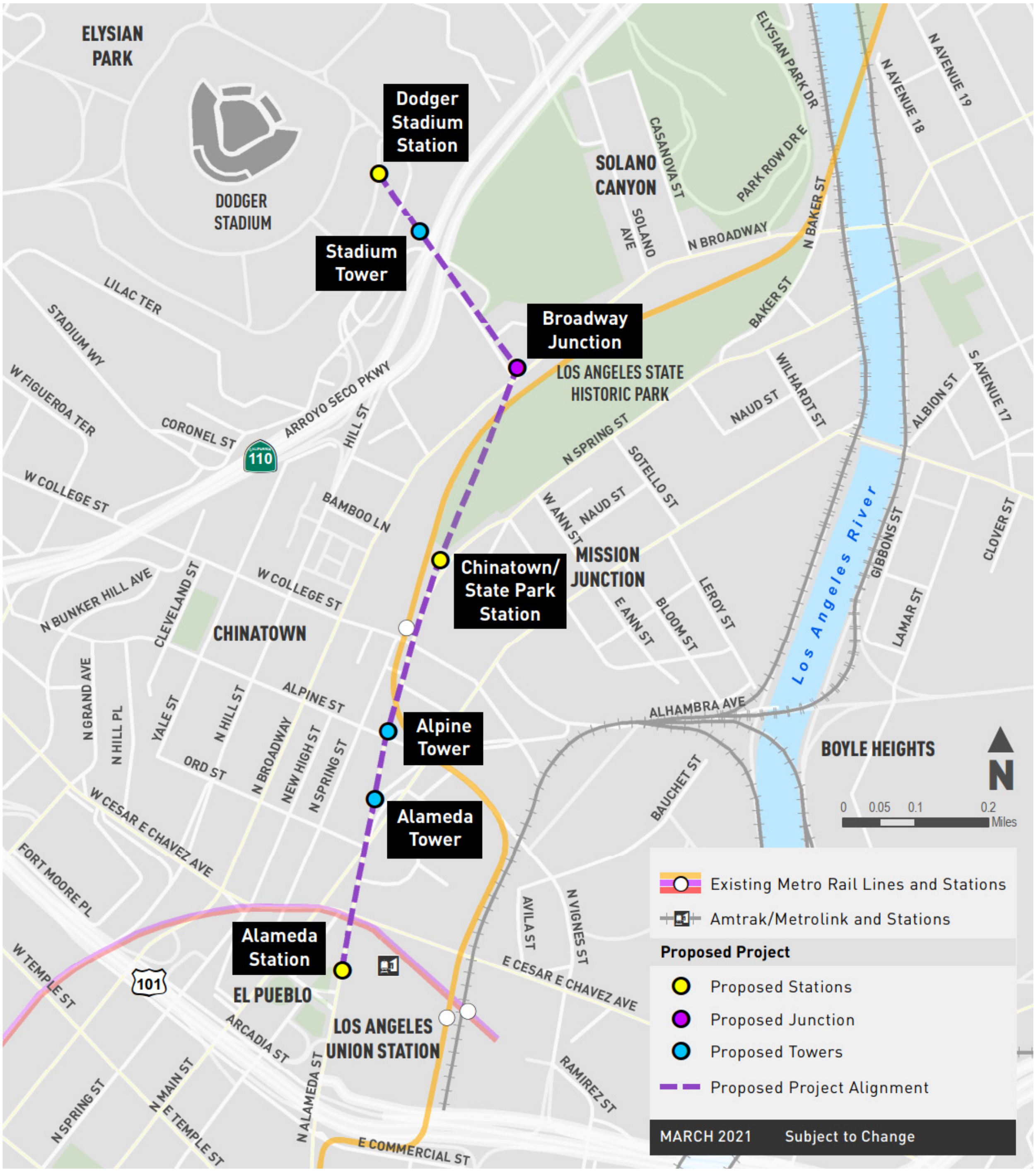


Figure 2-4: Proposed Project Alignment

Within two hours prior to the start of and after a game or event at Dodger Stadium, more than 10,000 people could be transported to the stadium via the proposed Project. The average attendance at a Dodger game was approximately 49,000 for the 2019 season.[18] Given the capacity of this system, approximately 20 percent of the fans could take aerial transit connected to Metro's regional transit system. This would reduce vehicular congestion in and around Dodger Stadium, on neighborhood streets, arterial roadways, and freeways during game and special event days.

When complete, the travel time from LAUS to Dodger Stadium would be approximately seven minutes during peak operations (games/events at Dodger Stadium). By creating a high-quality and high-capacity rapid transit connection between LAUS and Dodger Stadium, the proposed Project would provide a more viable choice in making a trip to a Dodger game or event at the stadium. With Metro's existing and planned expansion of its transit system, coupled with other providers such as Metrolink, Amtrak, and other municipal bus operators whose services all converge at LAUS, the proposed Project provides the opportunity for anyone in the Los Angeles County region to access Dodger Stadium via public transit.

The proposed Project, which would include passenger stations at LAUS, the southern entrance of Los Angeles State Historic Park, and Dodger Stadium, would also provide new connections to and between currently underserved neighborhoods and uses along the proposed alignment, including Chinatown, Mission Junction, the Los Angeles State Historic Park, Elysian Park, and Solano Canyon. With the proposed Project's ability to overcome grade and elevation issues, while providing safe, zero-emissions, environmentally-friendly, and high-capacity transit connectivity, the proposed Project would operate daily to link the Dodger Stadium property and the neighborhoods along the proposed alignment to the region's rapidly growing regional transit system at LAUS.

2.3.8 Project Objectives

The overall purpose of the proposed Project is to provide a direct transit connection between LAUS and the Dodger Stadium property via an aerial gondola system and improve connectivity for the surrounding communities by linking to the Los Angeles State Historic Park, Elysian Park, and the neighborhoods along the proposed alignment and the region's rapidly growing regional transit system at LAUS. ART is a proven, zero emission, safe, sustainable, high-capacity, and highly efficient form of transportation that would function as both a reliable rapid transit system and first/last mile connector. The proposed Project would operate daily to serve existing residents, workers, park users, and visitors to Los Angeles.

The proposed Project objectives are as follows:

- Expand mobility options for transit riders through a direct connection between LAUS and Dodger Stadium, a regional event center.
- Attract new transit riders to the Metro system through a unique experience of an aerial transit system connecting to Dodger Stadium.
- Improve the Dodger Stadium visitor experience by providing efficient, high-capacity, and faster alternative access to Dodger Stadium.
- Enhance safety of neighborhoods adjacent to Dodger Stadium by reducing the number of vehicles in the area.

[18] *ESPN.com, MLB Attendance Report – 2019, available at: http://www.espn.com/mlb/attendance/_/year/2019, accessed March 4, 2022.*

- Reduce transportation related pollution and greenhouse gas (GHG) emissions as a result of reduced vehicular congestion in and around Dodger Stadium, on neighborhood streets, arterial roadways, and freeways during game and special event days.
- Increase connectivity of people to the region's public transportation hub at LAUS and the Dodger Stadium property.
- Improve transit rider experience by providing unique scenic views of the Los Angeles area to ART passengers and Dodger fans.
- Bring a world class aerial transit system to the Los Angeles area.
- Enhance community connectivity by providing first/last mile transit and pedestrian access to areas that have historically been underserved, including the Los Angeles State Historic Park and Elysian Park.
- Identify comparable, affordable, and accessible fare opportunities for community and Los Angeles State Historic Park and Elysian Park access.
- Minimize the Project's environmental footprint through the integration of sustainability and environmentally-friendly design features into the materials, construction, operations, and maintenance of the proposed Project.
- Provide a sustainable form of transit by operating the ART system with the use of zero emission electricity with battery storage backup in order to reduce GHG emissions and improve air quality.
- Maximize the Project's alignment along the public ROW and publicly owned property and minimize aerial rights requirements over private properties, taking into account existing and future adjacent land uses.

2.4 Description of the Proposed Project

The proposed Project would connect LAUS and the Dodger Stadium property through an aerial gondola system. The proposed Project would utilize a detachable "3S", or tricable, technology that enables larger passenger cabins and more carrying capacity than other available aerial technology to support the transit demand created during Dodger games and events at Dodger Stadium. The proposed Project would also provide transit access to the Los Angeles State Historic Park and the surrounding communities. The aerial technology that comprises an aerial gondola system consists of major components connected by the cables (ropeway). The major components of the proposed Project include stations where passengers would enter and exit the system, a non-passenger junction where the alignment turns, towers to support the cables, and cabins in which the passengers ride.

2.4.1 Design

The proposed Project's design goal is to develop a common architectural design that unifies the overall aerial gondola system, while allowing for each major component to contribute to the respective localized urban condition. Of equal importance is the desire to minimize the perceived scale and mass of the stations and non-passenger junction. The proposed architectural design, therefore, takes advantage of a simple barrel vault form to provide the minimum enclosure needed to protect the ropeway equipment and provide shade and weather protection to passengers on the boarding platform. This barrel form would utilize a hollow structural steel section structure and metal panel assembly to allow the introduction of custom perforation patterns that take cues from the immediate neighborhood culture, while also providing a visual lightness to the form. The canopy of the non-passenger junction has the potential to diverge from this assembly, utilizing a clipped system of narrow metal tubes to create a pattern, while still achieving a transparency that brings lightness to the form. Rather than proposing a single uniform color palette for the entire system, colors for the material finishes at each station and junction will be selected to be complementary to each of their respective sites and surrounding urban fabric. Each station could also provide an opportunity for site specific artwork that is reflective of the unique neighborhood culture, and could be commissioned from local artists. Figure 2-5 depicts the illustrative design of Alameda Station for the proposed Project.

Each of the towers would be designed so that their bases would not impede adjacent vehicular and pedestrian circulation, while supporting the ropeway and cabins that are primarily aligned above the public ROW. The resulting tower structure gently swoops from the base up to connect to the ropeway. A light-toned gray high performance coating will accentuate the faceted steel panels that comprise the tower's swooping form. The neutral light-tone gray is intended to conform with the surrounding urban environment and will not provide a highly metallic or mirrored finish to minimize glare. Figure 2-6 depicts the illustrative design of towers for the proposed Project.

2.4.2 Cables and Ropeway Technology

Aerial gondola systems are classified based on the number of cables (ropes) used in their operation. The proposed Project would use a detachable 3S system, which relies on three steel cables to support and move the cabins. This tri-cable technology enables the highest capacity of any aerial gondola system, as it is able to accommodate larger cabins and longer spans while providing greater lateral stability.

Due to the length and geometry of the proposed Project, it is anticipated that two ropeway systems would be used. The first section would carry passengers from Alameda Station to Broadway Junction. The second section would carry passengers from Broadway Junction to Dodger Stadium Station. The transition between the two systems would occur in Broadway Junction in a manner inconspicuous to the passengers. No change of cabins would be required to travel through Broadway Junction.

The proposed Project's tri-cable technology would be comprised of two stationary cables (track ropes) that provide support for the running wheels of the cabins, and a third cable (haul rope) that would circulate continuously around the system. The haul rope is looped around two sheaves – the "drive bullwheel" at one station/junction and the "return bullwheel" at the opposing station/junction. The haul rope, which is the propulsion rope, is moved by the turning of the drive bullwheel. The drive bullwheel is turned by motors located at the station or junction. The return bullwheel acts like an idler wheel providing haul rope location control, but no motive power. The haul rope moves at a steady pace around the bullwheels pulling the cabins along the ropeway and in and out of each station or junction. As cabins enter the station, they detach from the haul rope. Once a cabin is detached from the haul rope, the cabin can move at a speed independent of the haul rope, allowing the cabins "online" (i.e., not in a station) to continue to move at a higher speed while the cabins in the station slow down for unloading and loading.

One haul rope loop would be for the ropeway system between Alameda Station and Broadway Junction, and one haul rope loop would be for the ropeway system between Broadway Junction and Dodger Stadium Station. For the section from Alameda Station to Broadway Junction, the drive bullwheels and associated motors and drive equipment are anticipated to be at the Broadway Junction and the return bullwheels would be located at Alameda Station. At Chinatown/State Park Station within this section, sheaves would control the haul rope. For the section from Broadway Junction to Dodger Stadium Station, the drive bullwheels and associated motors and drive equipment are anticipated to be at Dodger Stadium Station, and the return bullwheels would be located at Broadway Junction. The track ropes end at stations or the junction. Within the stations or junction, track ropes are wrapped around large bollards. Additional length

Figure 2-5: Illustrative Design of a Station

***This illustrative design depicts Alameda Station**

Figure 2-6: Illustrative Design of a Tower *This Illustrative design depicts Alameda Tower in the foreground and Alpine Tower in the middle ground.

of track rope is supplied and stored in spools within a station or junction for future use. The system includes a tension system to maintain rope tension and the appropriate ropeway sags.

2.4.3 Stations and Junction

The proposed Project would include three passenger stations and one non-passenger junction. The basic elements of each station include mechanical, electrical, and plumbing systems, boarding platforms, and vertical circulation (e.g., stairs, escalators, and elevators). The stations also would include areas for ticketing, fare checking, and queueing (described in Section 2.8.2 below); loading and unloading of passengers; operations; and system equipment. Stations would be secured nightly by closing the vertical access to the platforms. Security monitoring would be provided by staff and by cameras, which would feed into the control rooms constructed at each station and the system control room at Dodger Stadium Station. Each station would be staffed at all times during operations.

The boarding platforms at Alameda Station and Chinatown/State Park Station would be elevated so that the cabins have sufficient space to travel above people, cars, trees, and other urban elements in the immediate vicinity of these stations. The cabins would descend into the station and ascend as they leave the station. Dodger Stadium Station would be designed so that passengers would unload and load at ground level. The length and sizing of the arrival/departure platforms would be designed to accommodate the space needed for cabin deceleration and acceleration, and would be compliant with the accessibility requirements of the Americans with Disabilities Act (ADA). As cabins enter a station, they would detach from the haul rope and be under the control of tire conveyors, which are made up of a series of tires in stations and junctions that move the cabins, including to decelerate and accelerate, while the cabins are detached from the haul rope. The cabin would slow down as it enters the station to a speed at which the passengers could exit, and the cabin doors would then open allowing passengers to exit and enter the cabin.

At Alameda Station and Dodger Stadium Station, the cabin doors would open and passengers would unload. The cabins would then execute a U-turn in the station before passing through the load zone for passengers. Upon reaching the end of the load zone, the doors would close. The cabins would then speed up until the cabin speed matches that of the haul rope, and the cabin would reattach to the haul rope and depart the station. At Chinatown/State Park Station, the process would be similar, except the cabins would not execute a U-turn. Rather, they would detach from the haul rope, slow to boarding speed, open the doors for exit and entry, close the doors, speed up, and reattach to the haul rope.

The junction would be a non-passenger facility that is required for the ART system in order to turn the cables of the proposed Project and remain along the alignment. The junction would include mechanical systems, including equipment necessary for the cabins to detach from the haul rope, slow to a speed to turn, accelerate, and then reattach to the haul rope. The junction would also include vertical circulation (i.e., elevators and stairs) for maintenance access.

At each end of a station or junction, the rope position would be controlled by a pressure frame, which would support and guide the ropes. The pressure frames also provide a means for transitioning cabins from the ropes to the station or junction equipment. The approximate lengths of the pressure frames at each of the proposed Project stations and junction are anticipated to be: Alameda Station – 40 feet; Chinatown/State Park Station – 40 feet (south end) and 60 feet (north end); Broadway Junction – 60 feet (south end) and 40 feet (west end); and Dodger Stadium Station – 60 feet.

Within the stations and junction, overhead bridge cranes would allow the insertion or removal of equipment as may be required for maintenance activities.

2.4.4 Towers

The proposed Project would require three towers to be constructed between the stations and the junction. The towers would be designed as monopoles and would support the steel cables required for the 3S system described in Section 2.5.2 above. The towers would be built to current seismic and structural standards.

Additionally, at towers, mechanical equipment would provide rope control and maintenance functions. The track ropes are supported by the profile beams. Between the profile beams, the haul rope rides on a series of wheels, or sheaves, which maintain the rope position. A hoisting gantry is provided at the towers to perform heavy maintenance activities. The ropeway equipment is supported atop the tower by the crossarm.

2.4.5 Gondola Cabins

The proposed Project would utilize 3S gondola cabins. As discussed in Section 2.5.2, 3S technology enables larger passenger cabins and, thus, more carrying capacity than other available aerial gondola technology. The 3S cabins typically carry between 30 to 40 passengers each, depending on the exact configuration of seating and cabin amenities selected. The cabins would allow for sitting or standing; would accommodate wheelchairs, baby strollers, and bicycles; and would be fully ADA accessible.

Cabins would feature a ventilation system and sealed windows for viewing purposes, which, for security reasons, would not open. Each cabin would have a security camera on board with a feed to the control room, as well as a “push to talk” button, which would open two-way communications with the control room. The control room would be able to address all cabins at once, or an individually selected cabin. Each cabin would have a set of two sliding doors that open and close automatically under safety controls in stations. Cabin windows could be equipped with privacy glass that can become opaque while adjacent to sensitive views.

The cabins would move at a maximum speed of 13.4 miles per hour during peak operations. As they enter a station, the cabins would slow down to a speed of roughly one foot per second (less than one mile per hour) to allow passengers to enter and exit the moving cabin. This is achieved by detaching the cabins from the haul rope in the station. Once a cabin is detached from the haul rope, the cabin can move at a speed independent of the haul rope, allowing the cabins “on line” (i.e., not in a station) to continue to move at a higher speed. If needed, a cabin could be stopped to accommodate passenger boarding. At peak operations, it is anticipated cabins would arrive in a station approximately every 23 seconds and, once a new load of passengers has boarded, the cabin would re-attach to the cable and advance to the next station. Outside of stations, moving cabins would be spaced approximately 450 feet from one another during peak operations.

2.4.6 Aerial Clearance

Industry standards for the design and operation of ropeways and cabins are documented in the American National Standards Institute (ANSI) Standard B77.1, which is developed in coordination with manufacturers, consumers, and regulators. ANSI B77.1 regulates vertical and horizontal clearances between the ropeway and cabins to elements such as vehicles, pedestrians, vegetation, buildings, and other structures. ANSI B77.1 provides minimum clearance requirements depending on the nature of the element and whether the clearance is vertical or horizontal.

To define the width of the ropeway path which must be clear of elements, the horizontal clearance outside of the cabin paths as required by the ANSI B77.1 safety standard for passenger ropeways was used.[19] ANSI B77.1 includes two criteria, both of which must be met, for horizontal clearance between the cabin and an adjacent element: when hanging vertically, the cabins must be no closer than five feet to any obstruction that is not part of the ropeway system; and when the cabins are tilted within a prescribed range (as from wind), the cabins must not come into contact with anything. For the proposed Project, the five-foot requirement is slightly wider than the swing requirement, so the five-foot requirement controls the design path width. The proposed Project would include five feet on each side of the vertically hanging cabins for a required aerial clearance width of 53 feet 2 inches. The proposed Project would also include an Additional Separation Buffer. Figure 2-7 depicts the proposed Project's anticipated aerial rights requirements and the Additional Separation Buffer.

Vertical clearances are dependent upon the nature of the element below the ropeway and cabins. ANSI B77.1 requires the following vertical clearances: vehicles – five feet[20]; vegetation or terrain – five feet; at-grade where pedestrians are present – eight feet; buildings – five feet; and roadways or railways – to be determined with authority having jurisdiction. Subject to these ANSI B77.1 requirements, vehicles, vegetation or terrain, pedestrians, buildings, and roadways or railways are permitted below the ropeway and cabins.

The above discussion addresses ANSI B77.1 - 2017 and ANSI B77.1 – 2022 requirements for clearances. While California has not codified the 2017 or 2022 versions of ANSI B77.1, the State follows industry best practices and the current version of ANSI B77.1 is considered the de facto requirement by the California Division of Occupational Safety and Health (Cal/OSHA), the agency responsible for the regulation of passenger ropeways within California. The proposed Project would meet and anticipates exceeding the ANSI B77.1 – 2017 and ANSI B77.1 – 2022 requirements for clearances.

2.5 Proposed Project Alignment and Components

The proposed Project "alignment" includes the suspended above-grade cables and cabins following the position of the Project components along the proposed alignment from Alameda Station to Dodger Stadium Station. The proposed alignment and locations, heights, widths, sizes, and design of the Project components listed in Section 2.6.1 are approximate and may change slightly during final design based on the discretionary entitlements, reviews, and approvals required for implementation of the Project.

2.5.1 Proposed Project Alignment

The proposed Project alignment described below is preferred because it best accommodates various technical and design objectives and considerations.

The proposed Project alignment was chosen as it maximizes alignment along the public ROW and publicly owned property and minimizes aerial rights over private properties, taking into account existing and future adjacent land uses. Figure 2-8 shows the portions of the proposed alignment over public ROW and publicly owned property and the portions of the proposed alignment over private property. *Proposed Alignment Plan and Profile* (Appendix Q) includes additional detail as to the public ROW, publicly owned property and private properties. Additional considerations for the location of the proposed alignment included minimizing utility relocations,

[19] *American Nat'l Standards Inst., ANSI B77.1-2017 Passenger Ropeways – Aerial Tramways, Aerial Lifts, Surface Lifts, Tows and Conveyors – Safety Standard. On May 5, 2022, ANSI B77.1-2022 was approved and is in publication. The aerial clearance requirements of ANSI B77.1 are unchanged in the revision from 2017 to 2022.*

[20] *While ANSI B77.1 requires five feet for vehicles, the proposed Project is providing a minimum of 28 feet above roadways.*

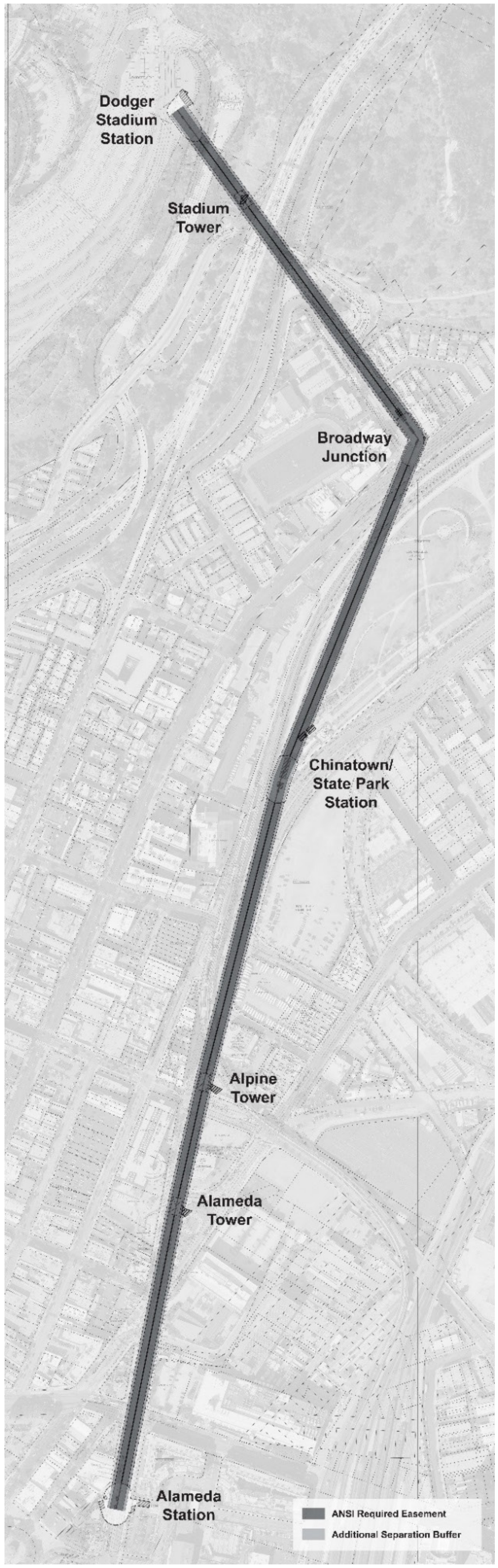


Figure 2-7: ANSI Requirements and Additional Separation Buffer

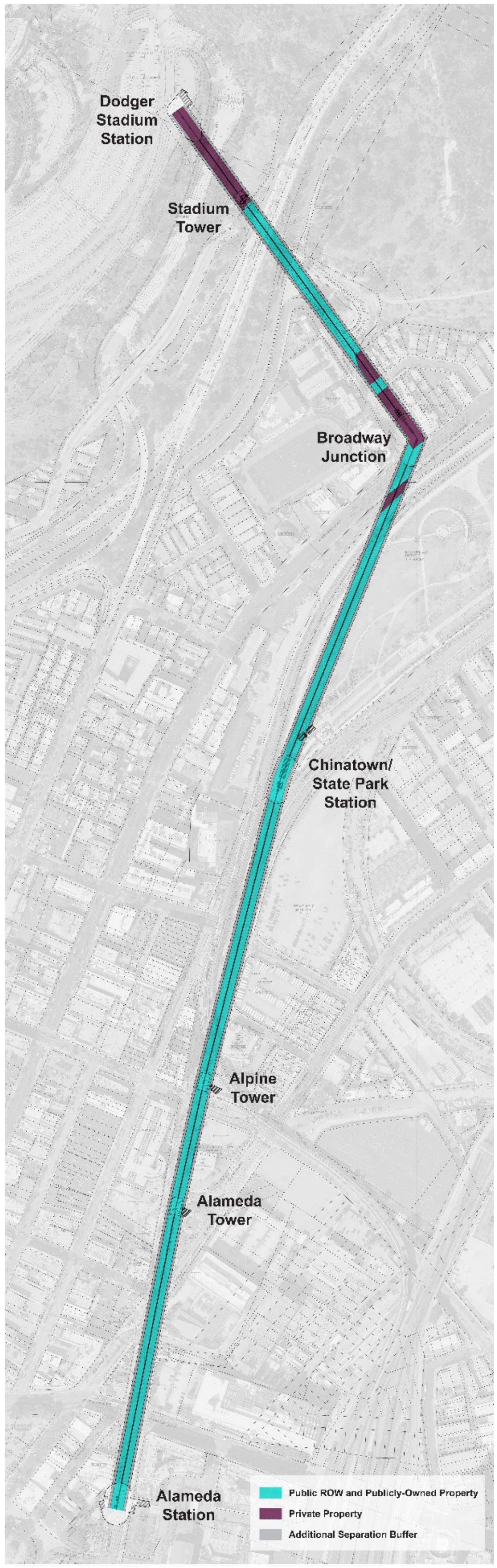


Figure 2-8: Proposed Alignment Over Public ROW/Publicly-Owned Property and Private Property

reducing changes to travel lanes, parking lanes, and bicycle and pedestrian circulation, location of historic and archaeological resources, and use of uneven or difficult topography. The proposed alignment profile is provided in *Proposed Alignment Plan and Profile* (Appendix Q).

The proposed Project alignment would extend approximately 1.2 miles beginning near El Pueblo and LAUS on Alameda Street. The proposed Alameda Station would be constructed over Alameda Street between Los Angeles Street and Cesar E. Chavez Avenue, adjacent to the Placita de Dolores and planned LAUS Forecourt. The location of Alameda Station was selected because it maximizes the proposed alignment over public ROW and publicly owned property and minimizes aerial rights over private properties. The Alameda Station location was also selected because of its high visibility and proximity to LAUS and El Pueblo, safe and convenient pedestrian connection to and from the LAUS passenger terminal and El Pueblo, as well as adjacency to public space for passenger access. The location is also compatible with Metro's plans at LAUS, including the planned LAUS Forecourt and Esplanade Improvements Project. Additional considerations include minimizing impacts to historic and archaeological resources.

From Alameda Station, the proposed Project alignment would remain primarily above the public ROW with portions above private property, and travel north along Alameda Street to the proposed Alameda Tower, which would be constructed on the Alameda Triangle, a portion of City ROW between Alameda Street, North Main Street, and Alhambra Street.

From Alameda Tower, the proposed Project alignment would continue north along Alameda Street and cross Alpine Street. The proposed Alpine Tower would be constructed at the corner of Alameda Street and Alpine Street on City-owned property. In the process of selecting tower locations, the proposed Project prioritizes the use of public property and minimizes private land acquisition, and also considers the proposed Project's relationship to existing adjacent and potential future land uses. Technical considerations of tower locations also includes optimizing the height of the towers and minimizing the number of towers. Additionally, the proposed Project limits the bend on the towers to less than two degrees.

From Alpine Tower, the proposed Project alignment would follow the public ROW and continue over the elevated Metro L Line (Gold). North of College Street, Alameda Street becomes Spring Street, and the proposed alignment would generally follow Spring Street in a northeast trajectory until it reaches the southernmost point of Los Angeles State Historic Park, where the proposed Chinatown/State Park Station would be constructed partially on City ROW and partially within the boundaries of the Los Angeles State Historic Park. The Chinatown/State Park Station location minimizes the proposed Project's footprint within the Los Angeles State Historic Park

The alignment then crosses over the western edge of the Los Angeles State Historic Park and the Metro L Line (Gold) tracks. The Chinatown/State Park Station location avoids adjacent private properties while maintaining transit access to surrounding communities within a half mile walkshed to transit, including the Park, Chinatown, Mission Junction including William Mead Homes, Los Angeles River, and North Broadway.

The proposed Project alignment would continue traveling north towards the intersection of North Broadway and Bishops Road. Broadway Junction would be located at the northern corner of the intersection of North Broadway and Bishops Road (1201 North Broadway). From Broadway Junction, the proposed Project alignment would travel northwest primarily along Bishops Road, with portions above private property, crossing over SR-110 towards Dodger Stadium. The proposed Stadium Tower would be located on hillside private property north of Stadium Way between the Downtown Gate entrance road to Dodger Stadium and SR-110. The northern terminus of the system would be located in a parking lot at the Dodger Stadium property, where the proposed Dodger Stadium Station would be constructed.

2.5.1.1 Alameda Station

Alameda Station would be located on Alameda Street adjacent to the planned LAUS Forecourt and Placita de Dolores between Los Angeles Street and Cesar E. Chavez Avenue. The station would be approximately 173 feet long, 109 feet wide, and 78 feet high at its tallest point, with the passenger loading platform approximately 31 feet above Alameda Street. Vertical circulation elements (i.e. elevators, escalators, stairs) for pedestrian access, which would also serve as queuing areas to the station, would be introduced at-grade north of the Placita de Dolores in a proposed new pedestrian plaza at El Pueblo on the west in an area currently used as a parking and loading area for El Pueblo. Figure 2-9 is an illustrative drawing showing the proposed new pedestrian plaza at El Pueblo. On the east, vertical circulation elements would be introduced at-grade from the planned LAUS Forecourt. Installation of the vertical circulation elements may include removal of approximately 12 trees, removal of parking and loading for El Pueblo, and installation of landscaping and hardscape. Figure 2-10 shows the proposed location of the Alameda Station, and Figure 2-11 shows cross sections of the station.

Figure 2-9: Proposed Pedestrian Plaza at El Pueblo

Alameda Tower

Alameda Tower would be located on the Alameda Triangle, a City ROW between Alameda Street, North Main Street, and Alhambra Avenue consisting of a small green space flanked on all sides by roadways. Alameda Tower would be 195 feet tall with the cable suspended 175 feet above-ground. The Alameda Tower would require the removal of approximately 10 trees and vegetation. Implementation of Alameda Tower would include reuse and integration of the existing pavers located at the Alameda Triangle, as well as landscape and hardscape updates to the Alameda Triangle. Figure 2-12 shows the proposed location of Alameda Tower, and Figure 2-13 shows the elevation and profile of the tower.

Figure 2-10: Proposed Alameda Station Location

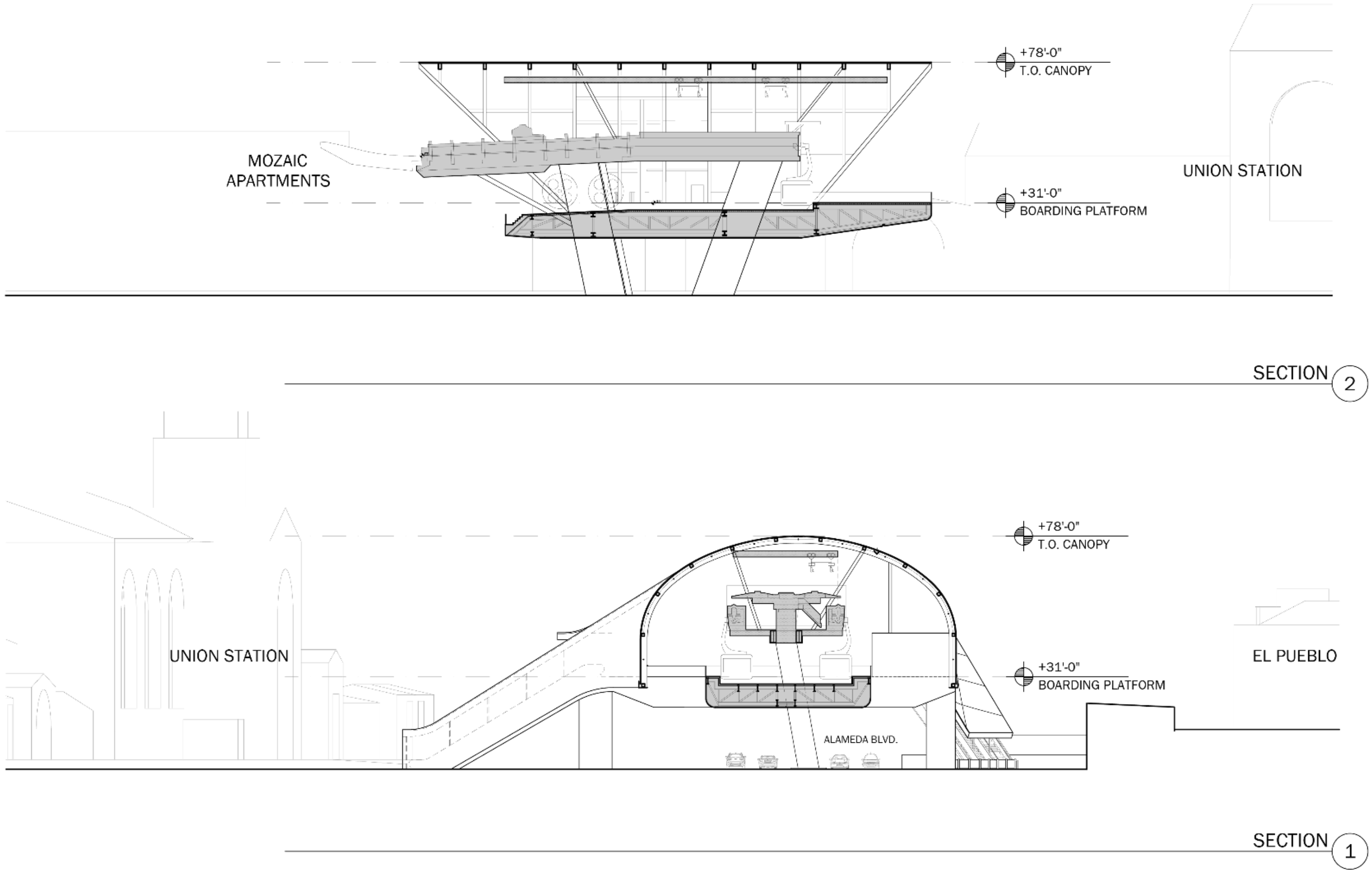


Figure 2-11: Alameda Station Cross Sections

Figure 2-12: Proposed Alameda Tower Location

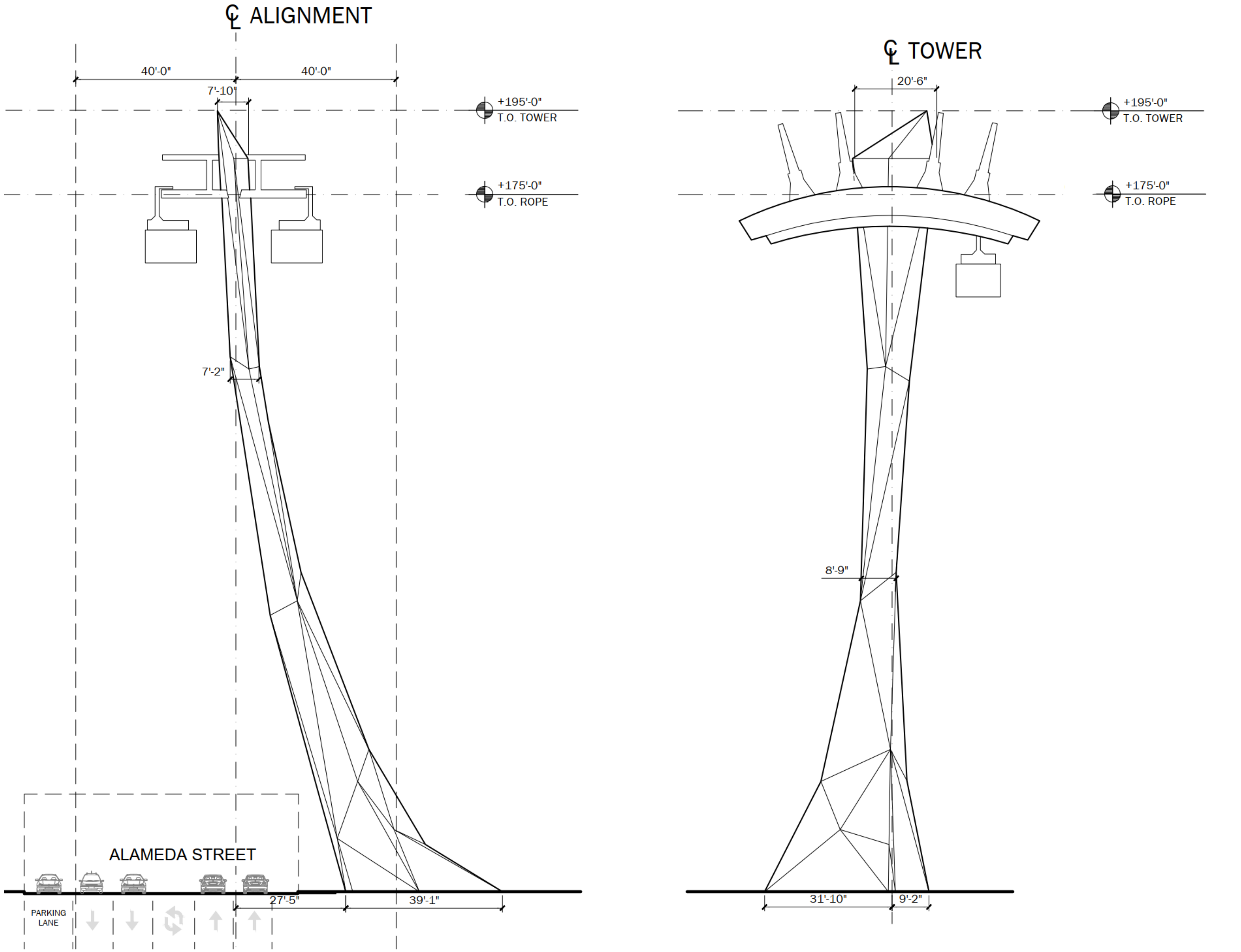


Figure 2-13: Alameda Tower Elevations

2.5.1.2 Alpine Tower

Alpine Tower would be located on a City-owned parcel, currently being used as non-public parking storage for City vehicles, at the northeast corner of Alameda Street and Alpine Street, adjacent to the Metro L Line (Gold). Alpine Tower would be 195 feet tall at its tallest point, with the cable suspended 175 feet above ground. Alpine Tower would also include the installation of landscaping and hardscaping near the base of the tower. Figure 2-14 shows the proposed location of Alpine Tower, and Figure 2-15 shows the elevation and profile of the tower.

2.5.1.3 Chinatown/State Park Station

Chinatown/State Park Station would be located adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park. The southern portion of the station would be located on City ROW, while the northern portion of the station would be integrated into the southern boundary of the Los Angeles State Historic Park. The station would be approximately 200 feet long, 80 feet wide, and 98 feet tall at its tallest point, with the passenger boarding platform approximately 50 feet above-grade. Access to the boarding platform would be from the mezzanine via elevators and stairs. Comprised of three levels, elevators and stairs from the ground level would lead up to a mezzanine, 27 feet above-grade, and ramps for the queuing area would lead up to the boarding platform, which is 50 feet above-ground.

Chinatown/State Park Station would also include Park amenities, including approximately 740 square feet of concessions, 770 square feet of restrooms, and a 220 square foot covered breezeway connecting the concessions and restrooms. Additionally, Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. Figure 2-16 is an illustrative drawing of the potential pedestrian improvements between Metro's L Line (Gold) Station and Chinatown/State Park Station. The Chinatown/State Park Station would require the removal of approximately 30 trees and vegetation; however, it would include the installation of landscaping and hardscaping, including integration of the granite pavers. The aerial rights requirements for the proposed Project would require the additional removal of approximately 51 trees within the Los Angeles State Historic Park; however, the proposed Project would include the installation of replacement trees. Chinatown/State Park Station would provide passenger access to Chinatown, the Los Angeles State Historic Park, and to nearby neighborhoods and land uses, including the Mission Junction neighborhood, which includes the William Mead Homes public housing complex. Figure 2-17 shows the proposed location of Chinatown/State Park Station, and Figure 2-18 shows cross sections of the station.

Figure 2-14: Proposed Alpine Tower Location

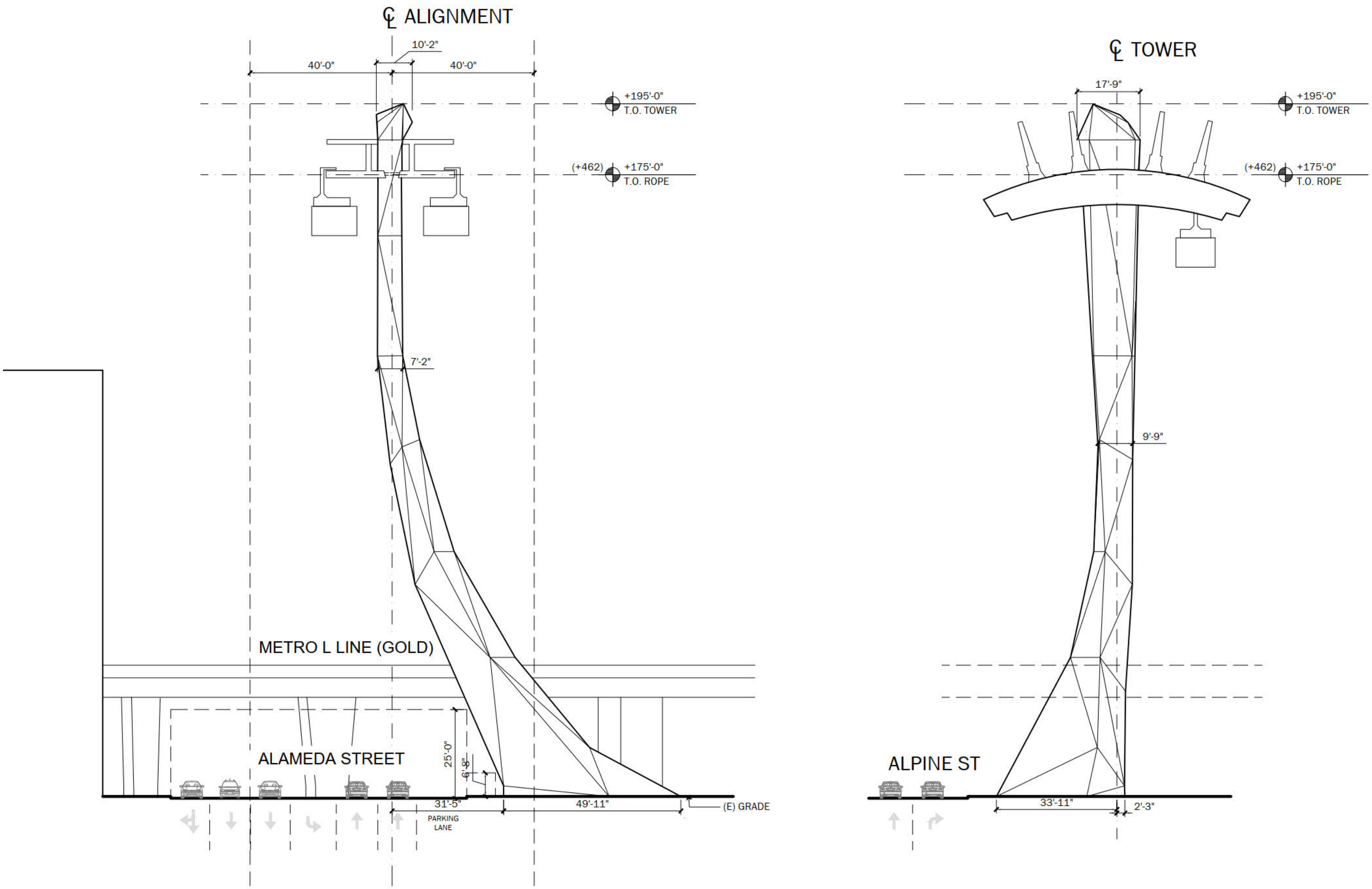


Figure 2-15: Alpine Tower Elevations

Figure 2-16: Illustrative Design of Pedestrian Improvements at Chinatown/State Park Station

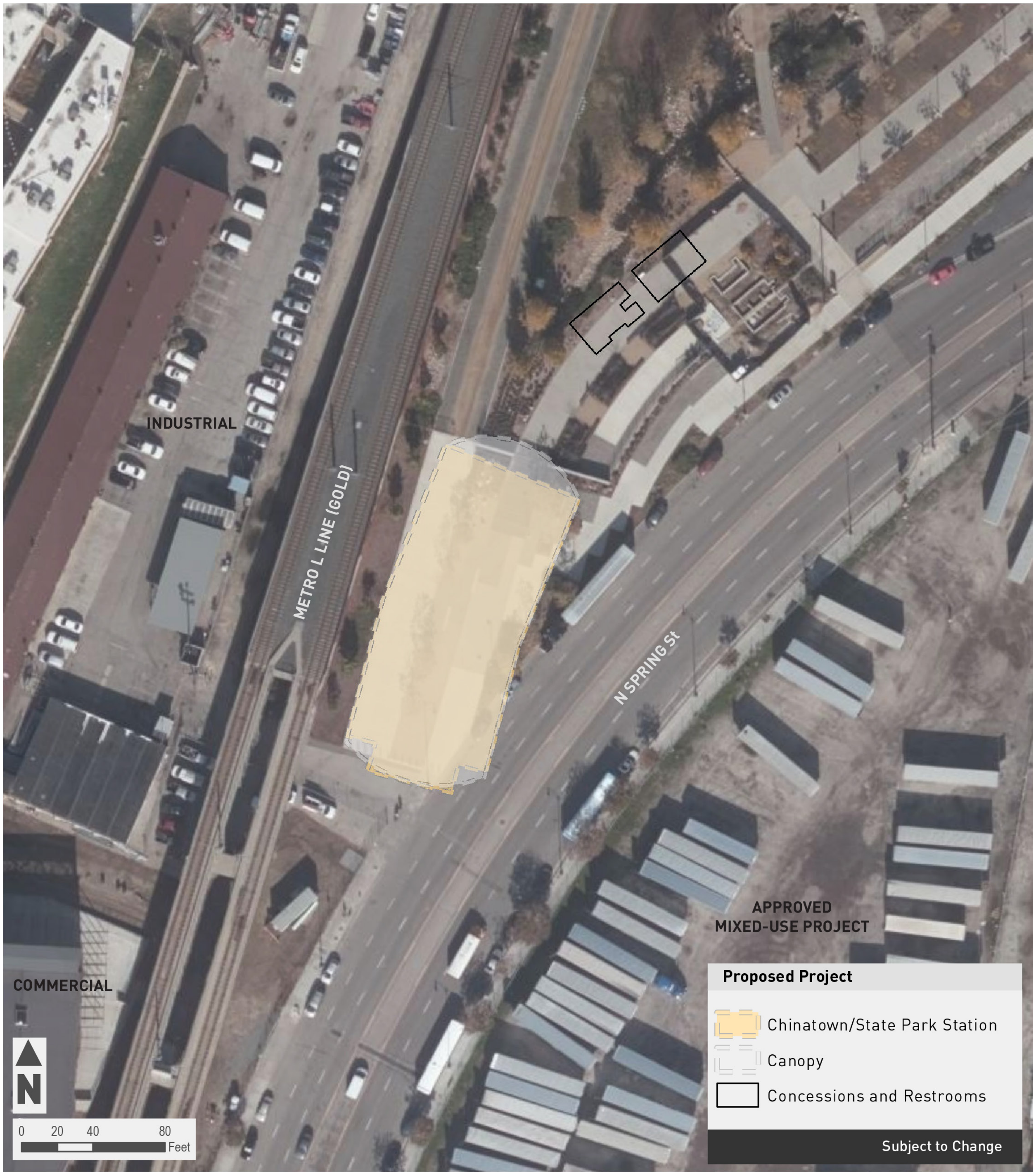
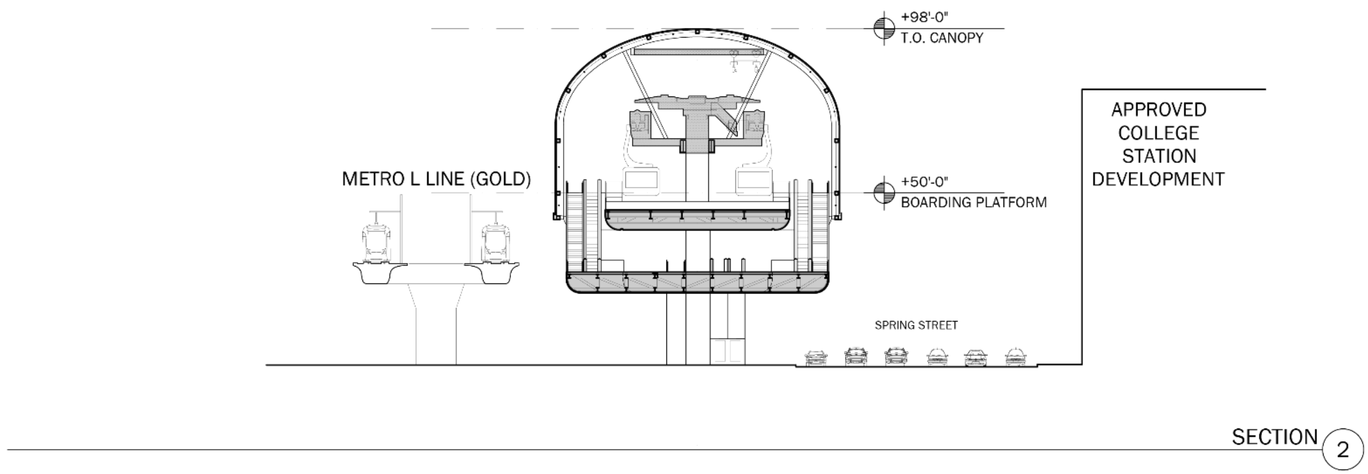


Figure 2-17: Proposed Chinatown/State Park Station Location



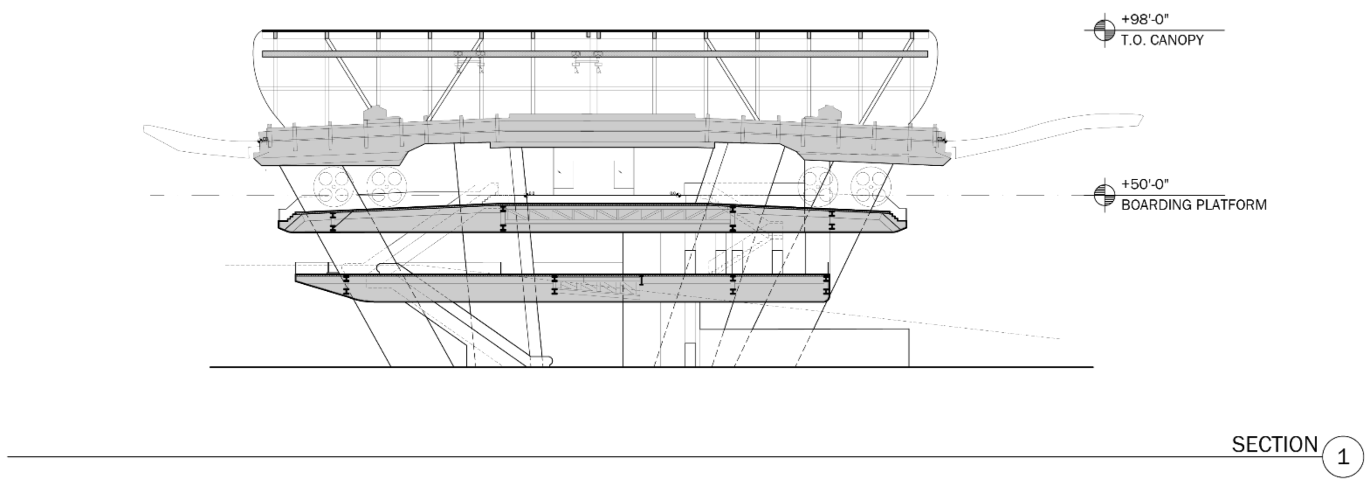


Figure 2-18: Chinatown/State Park Station Cross Sections

2.5.1.4 Broadway Junction

Broadway Junction is a non-passenger junction that would be located at the intersection of North Broadway and Bishops Road. The junction would primarily be located on privately-owned property with a portion of the junction and overhead cable infrastructure cantilevered and elevated above the public ROW. The existing commercial building located at 1201 N. Broadway would be demolished. Broadway Junction would be approximately 227 feet long, 60 feet wide, and 98 feet high at its tallest point, with the platform approximately 50 feet above the ground. Vertical circulation elements (i.e. elevators and stairs) would be installed on the northwest side of the junction for staff and maintenance access to the platform. The Broadway Junction would require the removal of approximately 25 trees and vegetation. Figure 2-19 shows the proposed location of Broadway Junction, while Figure 2-20 shows cross sections of the junction.

2.5.1.5 Stadium Tower

Stadium Tower would be located on hillside private property north of Stadium Way between the Downtown Gate and SR-110 and would stand 179 feet tall with the cable suspended 159 feet above-ground. Stadium Tower would include removal of approximately 10 trees and vegetation, however, it would include the installation of landscaping near the base of the tower. The surrounding fire buffer area around the Stadium Tower would include the removal of approximately 21 significant trees and vegetation. Figure 2-21 shows the proposed location of Stadium Tower, and Figure 2-22 shows the elevation and profile of the tower.

2.5.1.6 Dodger Stadium Station

Dodger Stadium Station would be located in the southeast portion of the Dodger Stadium property near the Downtown Gate. This station would be approximately 194 feet long, 80 feet wide, and 74 feet high at its tallest point. Cabins at this station would arrive and depart from an at-grade boarding platform, with the passenger queuing area also at-grade. Dodger Stadium Station would include a subterranean area below the platform for storage and maintenance of cabins, as well as staff break rooms, lockers, and parts storage areas. The cabins would be transferred between the station platform and the subterranean area by way of a cabin elevator. Automated parking and controls would manage the process of storing cabins or returning them to service. Cabins would be returned to and stored at Dodger Stadium Station when the system is not in use.

Restrooms for passenger use would be located at the station. Dodger Stadium Station would also include a pedestrian connection to Dodger Stadium, including hardscape and landscape improvements and potential seating. Figure 2-23 is an illustrative drawing showing the pedestrian connection between Dodger Stadium Station and Dodger Stadium.

Figure 2-19: Proposed Broadway Junction Location

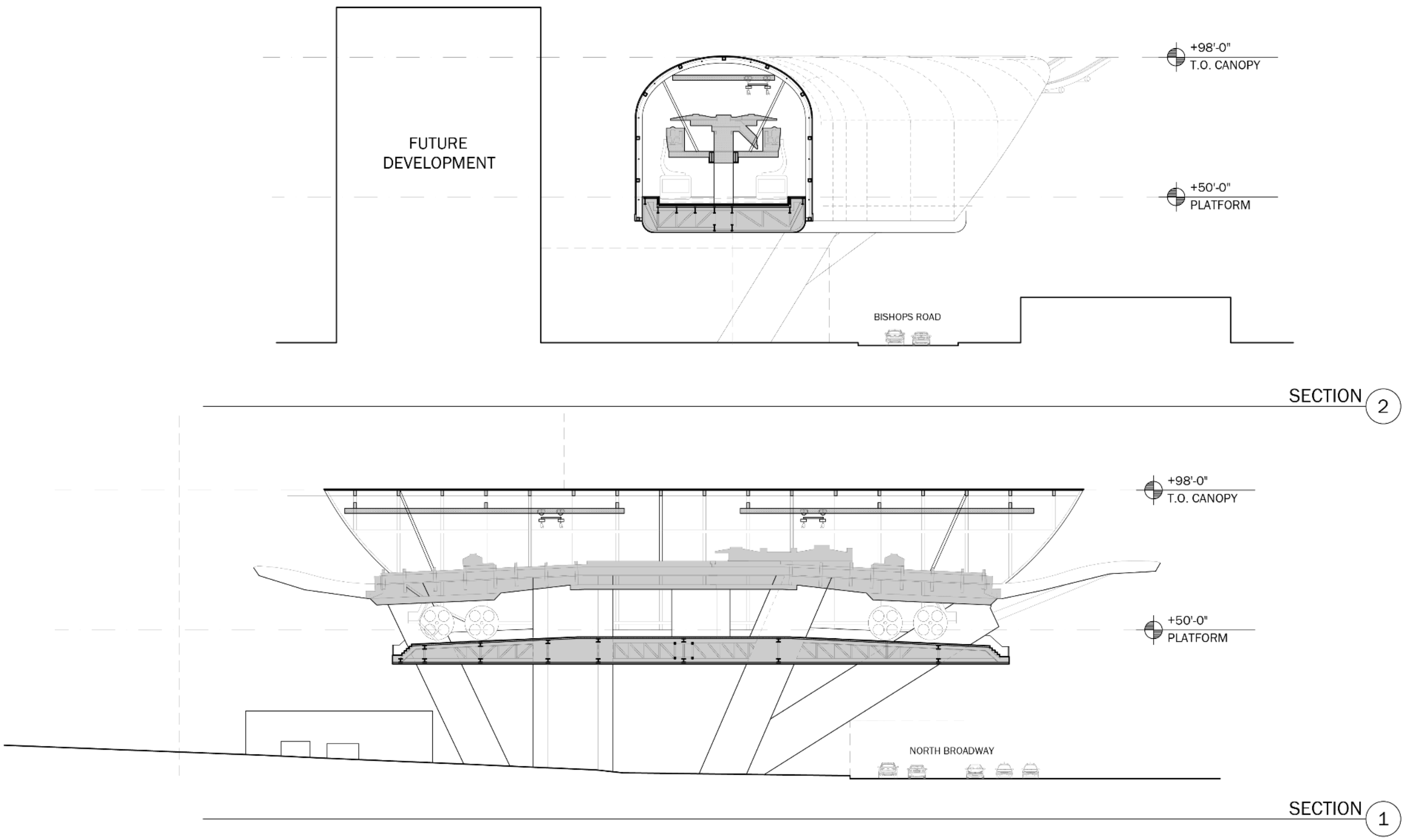


Figure 2-20: Broadway Junction Cross Sections

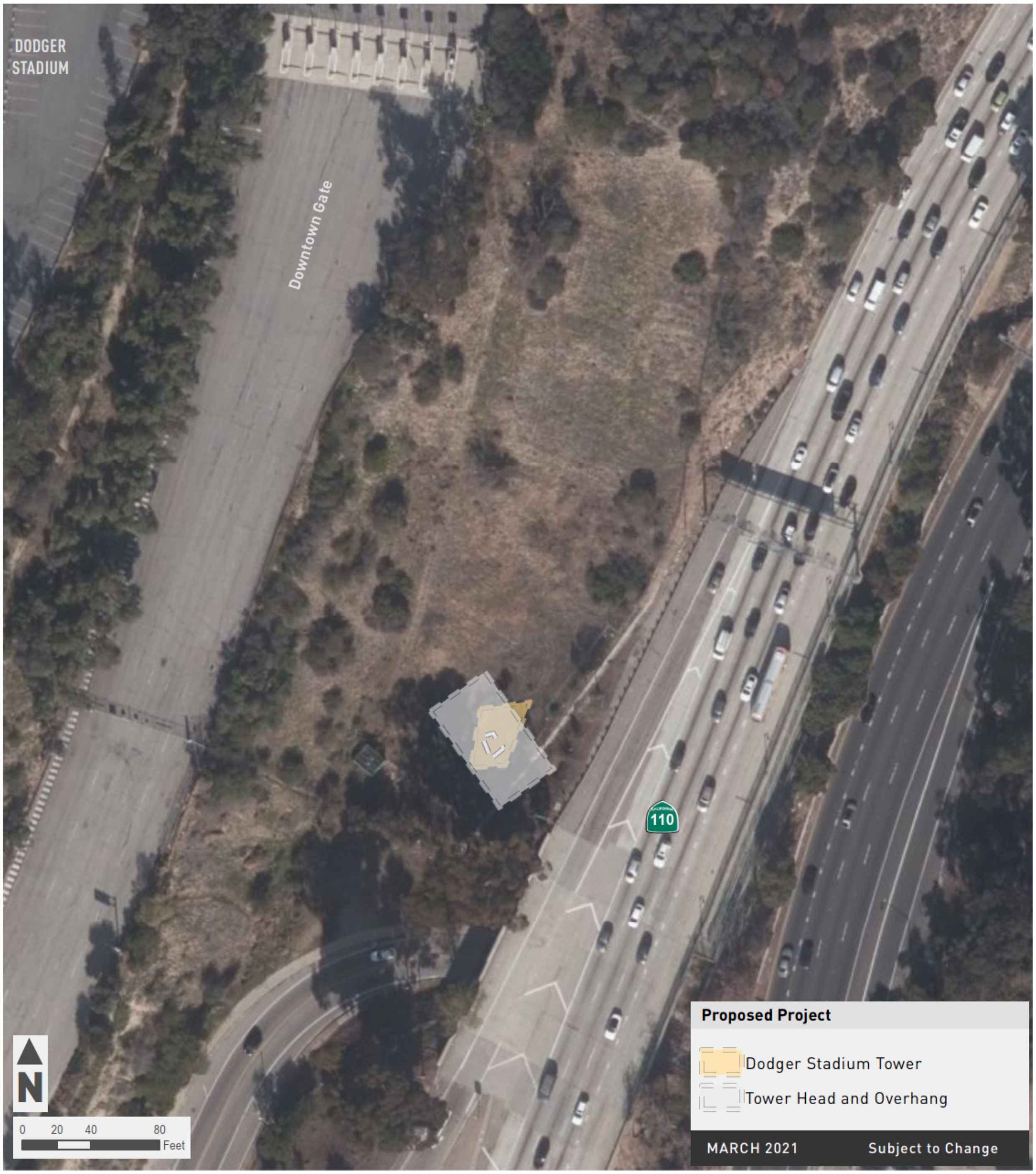


Figure 2-21: Proposed Stadium Tower Location

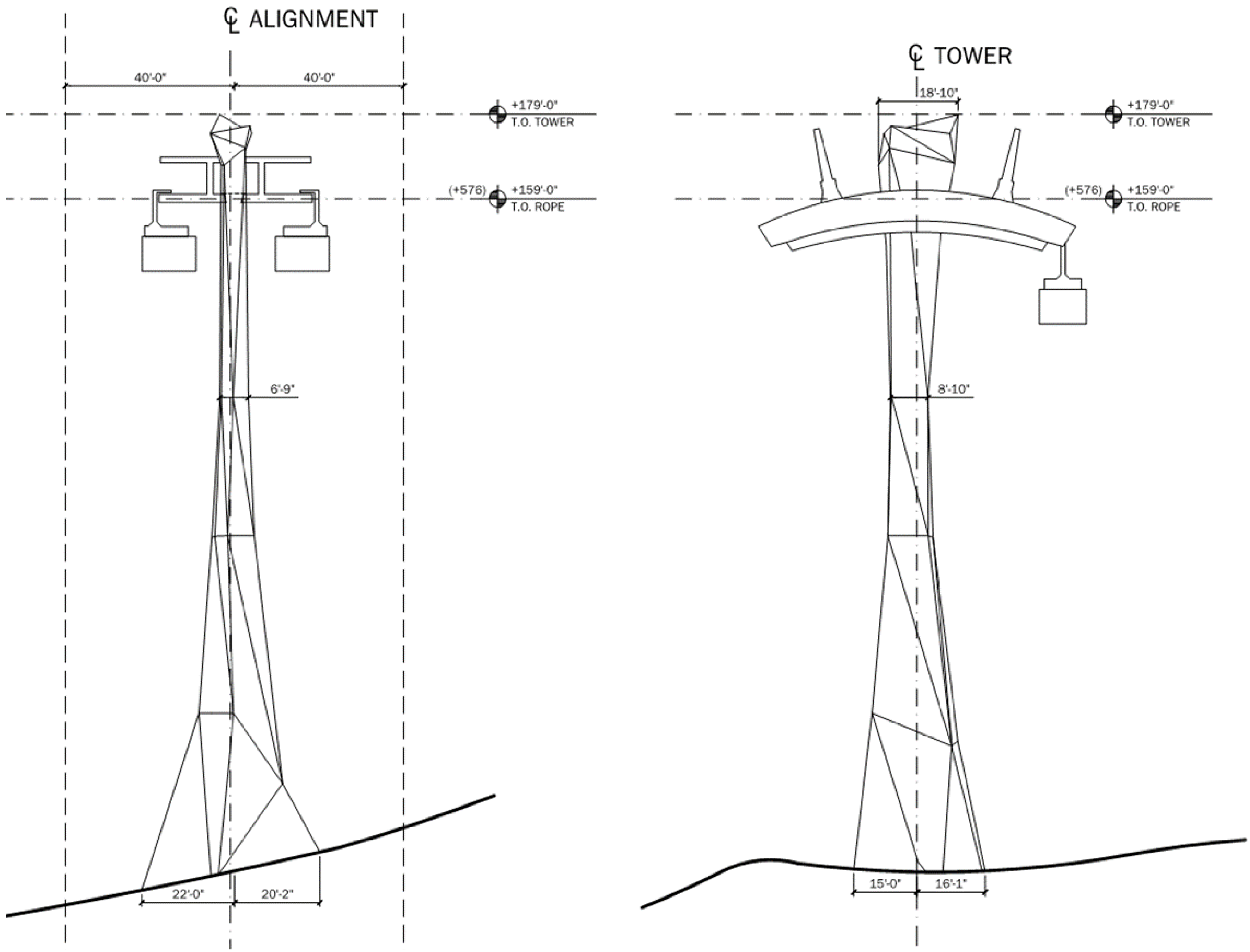


Figure 2-22: Stadium Tower Elevations

Figure 2-23: Illustrative Drawing of Pedestrian Connection between Dodger Stadium Station and Dodger Station

Dodger Stadium Station would be located adjacent to Dodger Stadium in a portion of the existing parking lot. The Project Sponsor will request consideration by the Los Angeles Dodgers of the potential for Dodger Stadium Station to potentially include a mobility hub where outside of game day periods, passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program and individual bike lockers, to access Elysian Park and other nearby neighborhoods, including Solano Canyon. Issues to be addressed in connection with a potential mobility hub could include maintaining security for Dodger Stadium and the surrounding surface parking areas

Implementation of Dodger Stadium Station would require the removal of parking spaces, as well as removal of approximately 33 trees and vegetation, however, it would include the installation of replacement landscaping. Figure 2-24 shows the proposed location of Dodger Stadium Station, while Figure 2-25 shows cross sections of the station.

Figure 2-24: Proposed Dodger Stadium Station Location

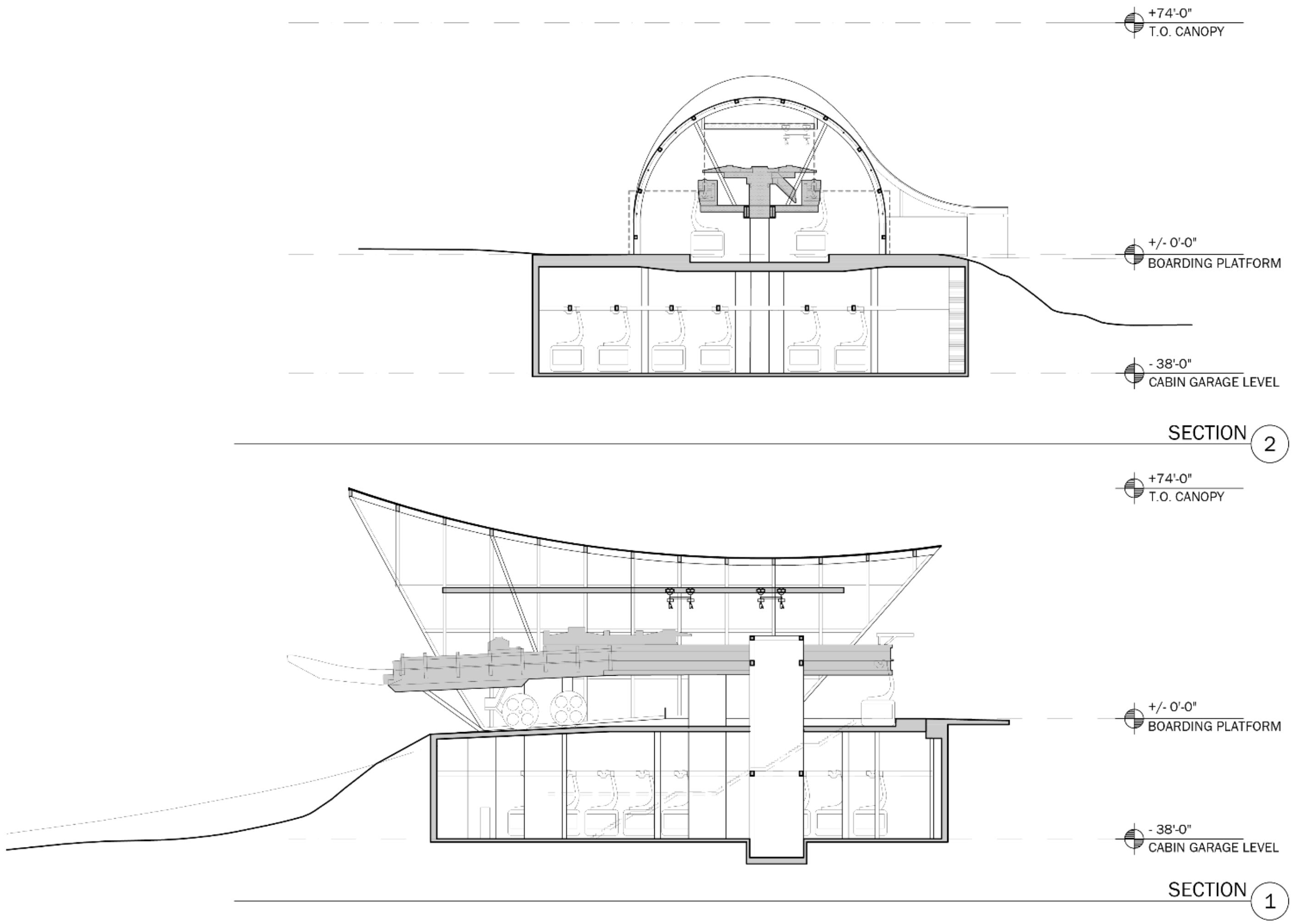


Figure 2-25: Dodger Stadium Station Cross Sections

2.5.1.7 Summary of Proposed Project Components

Table 2-2 provides an overview of the station and junction components associated with the proposed Project. Table 2-3 provides an overview of the proposed towers associated with the proposed Project.

2.6 Ridership

The proposed Project would be configured to operate based on the anticipated ridership for Dodger games and special events at Dodger Stadium, events at the Los Angeles State Historic Park, commuters and residents in adjacent neighborhoods, and visitors to Los Angeles. The proposed Project has the flexibility to operate at varying speeds and capacity depending on ridership. The capacity could quickly be increased or decreased to meet demand by increasing or decreasing the number of cabins on the ropeway and the speed of the haul rope. During peak operations, the proposed Project would carry up to approximately 5,000 people per hour per direction, and the travel time from LAUS to Dodger Stadium would be approximately seven minutes. The cabins would move at a maximum speed of 13.4 miles per hour with headways of approximately 23 seconds, which represents the time between cabins.

The proposed Project would provide service to all pre-season, regular season, and post-season Los Angeles Dodger games and any special events (e.g., concerts, the Los Angeles Marathon) at the Dodger Stadium property. The proposed Project would also provide service to events at the Los Angeles State Historic Park. In addition to providing service on game and special event days at Dodger Stadium and events at the Los Angeles State Historic Park, it is anticipated that the proposed Project would also provide daily service between 6:00am to 12:00am, subject to operational changes in response to ridership demand. Service would be to the following riders:

- Dodger game/Stadium event attendees;
- Dodger game/Stadium event employees;
- Tourists or others who want to ride ART;
- Visitors to the Los Angeles State Historic Park and Elysian Park; and
- Commuters or residents in adjacent neighborhoods, including El Pueblo, Chinatown, Mission Junction, Elysian Park, Echo Park, and Solano Canyon.

The proposed Project would provide an additional transit option to riders along the proposed alignment, as it would provide a direct connection between LAUS and Chinatown and Mission Junction and Elysian Park with Chinatown/State Park Station and Dodger Stadium Station. From Dodger Stadium Station, riders could use the proposed pedestrian connections and/or potential mobility hub to access Elysian Park and other nearby neighborhoods, including Solano Canyon. It is anticipated that the proposed Project operations would vary the number of cabins in service and speed throughout the day, based on demand.

Table 2-2: Proposed Project Station and Junction Details

Station Name	Location	Passenger Station	Station Size (square feet)	Canopy Size (square feet)	Height of Platform (feet above-ground)	Height of Station (feet above-ground)
Alameda Station	Alameda Street between Los Angeles Street and Cesar E. Chavez Avenue	Yes	15,279	19,217[a]	31	78
Chinatown/State Park Station[b]	Along Spring Street within the southernmost point of Los Angeles State Historic Park	Yes	22,361[c]	15,212	50	98
Broadway Junction	Intersection of North Broadway and Bishops Road	No	12,615	13,331	50	98
Dodger Stadium Station	Dodger Stadium parking lot	Yes	37,395[d]	16,001	At-Grade	74

a. The canopy size square footage for Alameda Station includes approximately 3,064 sf or canopy over the vertical circulation.

b. Chinatown/State Park Station also includes 1,419 sf of Park Amenities

c. The station size square footage for Chinatown/State Park Station includes an approximately 8,063 sf mezzanine.

d. The station size square footage for Dodger Stadium Station includes an appromately 24,650 sf subterranean area below the station's platform for storage and maintenance of cabins, as well as staff break rooms, lockers, and parts storage areas.

Table 2-3: Proposed Project Tower Details

Tower Name	Location	Height to Top of Tower	Cable Height
Alameda Tower	Alameda Triangle, a City ROW between Alameda Street, North Main Street, and Alhambra Avenue	195 feet	175 feet
Alpine Tower	Northeast corner of Alameda Street and Alpine Street on a City-owned parcel	195 feet	175 feet
Stadium Tower	Private property north of Stadium Way	179 feet	159 feet

2.7 System Operations

2.7.1 Typical Operating Logistics

During operations, the cabins would travel on a continuous loop between Alameda Station and Dodger Stadium Station. Cabins would pass through passenger stations at roughly one foot per second (less than one mile per hour) to allow for unloading and loading. If needed, a cabin could be stopped to accommodate passenger boarding. After the cabins pass through the unload/load zones, the doors would close and the cabins would accelerate to match the line speed of the haul rope before reattaching to the haul rope.

At Alameda Station, arriving cabins (southbound) would decelerate, doors would open, and passengers would unload. The cabins would execute a U-turn in the station before passing through the load zone (for northbound passengers), load passengers (if any), close doors, then accelerate to be reattached to the haul rope.

At Chinatown/State Park Station, cabins would detach from the rope and decelerate to the station speed. Since passenger access would be provided at this station, the cabins would decelerate to about one foot per second (less than one mile per hour) and the doors would open. After traveling through the unload and load zones, the cabin doors would close, and the cabins would accelerate to line speed and then reattach to the haul rope.

At Broadway Junction, where passenger unloading or loading is not proposed, the cabins would detach from the haul rope, decelerate to a speed of approximately six mph, execute a slight turn to follow the alignment, and then re-accelerate and reattach to the haul rope. As described in Section 2.5.2, Alameda Station to Broadway Junction and Broadway Junction to Dodger Stadium Station systems come together at Broadway Junction. When the cabins detach from the haul rope in the Junction, their move from one haul rope to the other haul rope would not be perceptible by passengers.

At Dodger Stadium Station, the cabins would decelerate, doors would open, and passengers would unload. Since Dodger Stadium Station would be an end station, the cabins would execute a U-turn in the station before passing through the load zone (for southbound passengers), load passengers (if any), close doors, then accelerate and reattach to the haul rope.

As described above, gondola cabins would enter, traverse, and depart stations under fully automated control. Operation of the proposed Project would require approximately 20 personnel. Station attendants would be located within each station to assure safe boarding or to execute stops, if necessary. Attendants would also provide customer interaction and observation; if a passenger needs special assistance, an attendant may either further slow or stop a cabin. A separate operator may sit in a booth adjacent to the boarding area and monitor screens, which would show activities in each cabin and station, as well as the system controls.

2.7.2 Queueing and Ticketing/Fare Checking

Queueing areas would be built into and as necessary, adjacent to, each of the stations to provide a gathering place for passengers waiting to enter the stations, thereby preventing crowding of sidewalks and walkways by passengers around stations. Queueing for Alameda Station would occur in the planned LAUS Forecourt area on the east side of Alameda Street, and north of the Placita de Dolores in a proposed new pedestrian plaza at El Pueblo on the west side of Alameda Street. At Chinatown/State Park Station, queueing would occur on the mezzanine and boarding platform levels. At Dodger Stadium Station, the queueing area would be located on the north side of the station in a designated queueing area adjacent to the station.

Ticketing for the proposed Project would use either a chip-based card system or electronic ticketing that could be purchased and saved on a personal mobile device. Using these types of technologies would allow for contactless fare checking at the stations. Riders would pre-purchase their ticket prior to entering the boarding platform and fares would be checked using a card reader/scanner.

2.7.3 Signage

Similar to other transit projects that incorporate signage, the proposed Project would include signage to support wayfinding for transit passengers, including information about transit connections and other important information to facilitate transit usage. Private funding for the proposed Project is anticipated to be supported by naming rights and sponsorship revenues, and such sponsors would be recognized in Project signage, which would be designed consistent with applicable Metro, City, and State approval requirements. Such signage may include identification and other static signs, electronic digital displays and/or changeable message light-emitting diode (LED) boards that include both transit information and other content, which may include off-site advertising that generates proceeds to support transit system costs and operations. Signage would be architecturally integrated into the design of the ART system including its stations, the junction, towers, and cabins. In addition, directional and pedestrian signage would be placed adjacent to and throughout the proposed Project as necessary to facilitate access and safety, including along the pedestrian improvements between Metro's L Line (Gold) Station and the pedestrian connection between Dodger Stadium Station and Dodger Stadium. Project signage would be illuminated by means of low-level external lighting, internal lighting, or ambient light. Exterior lights would be directed onto signs to minimize off-site glare. Signage would be in conformance with all applicable requirements of the Los Angeles Municipal Code (LAMC), and in accordance with LAMC, lighting intensity will be minimized in order to avoid negative impacts to adjacent residential properties.

2.7.4 Lighting

Project lighting would include low-level lighting for security and wayfinding purposes adjacent to and within the stations, junction, towers, within cabins, at the vertical circulation, and areas for ticketing, fare checking, and queueing. In addition, low-level lighting to accent signage, architectural features, landscaping, adjacent pedestrian plazas, Chinatown/State Park Station mobility hub, and potential Dodger Stadium Station mobility hub would be installed at the stations, junction, and towers. Lighting would also be provided underneath the elevated stations and junction. Lighting for the pedestrian access enhancements, including the pedestrian improvements between Metro's L Line (Gold) Station and the pedestrian connection between Dodger Stadium Station and Dodger Stadium, would include new pole lights for security and wayfinding purposes, as well as low-level lighting to accent signage and landscaping.

Lighting would be low-level and primarily integrated within the architectural features. Exterior lighting would be shielded or directed toward the areas to be lit to limit spillover onto adjacent properties and off-site uses, and would meet all applicable LAMC lighting standards. The lighting would also meet all applicable safety standards.

2.7.5 Maintenance

The proposed Project would require routine maintenance that would be performed by the system operator. The overall system would be observed on a daily basis as part of the startup routine.

Routine maintenance activities would generally take place during overnight periods or other scheduled down time. Cabins and their associated grips and hangers would be maintained in the shop at Dodger Stadium Station. A work carrier cabin would be provided to facilitate work at tower equipment. Annual maintenance activities may require crane access at tower locations, including the potential to require the temporary closing of traffic lanes.

Rope maintenance schedules would be determined through a combination of system design and periodic monitoring. The haul rope would need replacement approximately every five to 10 years. This would require pulling a new haul rope, which would take up to two weeks to complete.

On a periodic basis, the system would undergo formal testing as prescribed by Cal/OSHA and appropriate ropeway standards. This formal testing is required by standards to occur at least every seven years. It is anticipated that the system would be closed to riders for up to two days during the formal testing events.

Backup power would be provided by battery storage located at each station and tower and the non-passenger junction. The battery storage system would be tested on a regular basis and would provide backup power to allow unloading of the system in the event of a power grid failure.

2.7.6 Safety Systems and Ancillary Elements

The proposed Project would be designed to minimize operational disruptions resulting from equipment issues, which are often predictable and avoidable. The Project would focus on avoiding such issues through preventative maintenance and by including redundant equipment.

Operational disruptions resulting from equipment issues would be minimized through robust design and periodic and preventative maintenance. Robust design is an approach where, after the design requirements are engineered, extra design factors are incorporated into the system. Information from other modern urban aerial rapid transit systems as well as the operating history of this system would be taken into account to schedule preventative and periodic maintenance. Combining experience from other systems with historical data from this system's operation would provide an evolving and robust maintenance program. The documentation would reflect daily, weekly, monthly and annual activities. Daily activities would largely focus on inspections to verify normal operation of components prior to public operations. Longer-term activities would generally focus on maintaining, replacing, or rebuilding components. Maintenance recommendations including inspection procedures and scheduled activities are required to be provided by the equipment provider. Compliance with those recommendations is required by Cal/OSHA, the authority responsible for regulating passenger ropeways in California.

To account for the possibility of potential mechanical issues that could potentially interrupt operations, the system would design and implement redundancies. Examples of redundancies include installation of two independent motors so that if the primary motor fails, the second motor would be utilized to unload passengers from the system. Additional redundancies could include elements such as bullwheels, brakes, and conveyors.

2.7.7 Emergency Operations Plan

Safety and emergency procedures would be separated into two types: personal events and equipment events. As described in Section 2.7.7, the proposed Project would be designed to minimize service interruptions resulting from either type of event.

For personal events, such as a medical situation, operators would have the ability to contact local security, law enforcement or other emergency response agencies. In addition to attendants at each station, the system would include video surveillance and audio communications in each station and in each cabin. These features would allow for control room operators to see and communicate with passengers at any point in their trip. The most common passenger need would be assistance with loading or unloading, which the attendant can resolve. The combination of staff and surveillance would allow operators to respond to events as appropriate. Security and response procedures for the larger crowds on event days would be established and followed.

In stations, the video surveillance would also serve to provide equipment monitoring. By observing operations from the control room, the equipment monitoring could allow for faster resolution of any system alarms or faults and may facilitate identification of unscheduled maintenance needs. Video surveillance at towers would be primarily for the purpose of equipment monitoring and diagnosis.

An Emergency Operations Plan would be prepared as part of the proposed Project and would include emergency response protocols and safety procedures developed in conjunction with the operator, system provider, and local authorities (e.g., LAFD and LAPD). The plan would address operational changes and communication protocols required in response to a range of potential emergencies such as a medical emergency in a cabin or in a station or a fire near the alignment. The plan would consider a wide range of scenarios for which default operational responses would be determined. In addition, the plan will include communication protocols with local authorities for further instruction and coordination.

The plan would also address the unlikely scenario where the system cannot be moved to unload passengers normally at stations. As noted above, the robust design, periodic and preventative maintenance, and equipment redundancies are intended to minimize this scenario. However, the plan would include procedures to evacuate passengers directly from cabins, if needed. Such an evacuation would involve emergency response services and would use specialized equipment such as ladder trucks, bucket trucks, or descending devices. An Evacuation Plan would be developed as part of the Emergency Operations Plan as required by industry standard ANSI B77.1 and Cal/OSHA regulations, to describe the preferred methods of evacuation based on the location of cabins, environmental conditions, and unusual terrain. The Evacuation Plan would include the required equipment and procedures for evacuation, site control, and passenger communications. Analysis and coordinated practice of the evacuation modes would be performed in advance of opening the system. The Evacuation Plan would document the procedures, equipment and personnel necessary to evacuate the system, as well as provide for documenting of training and practice. Such analysis, practice, and documentation are required by Cal/OSHA.

System components would be equipped with security features to ensure system safety. The gates and entrances to the stations would be locked at night and would be equipped with security features to prevent entrance by unauthorized personnel. The towers would have no publicly accessible gates or entrances and would be inaccessible to unauthorized personnel. Maintenance doors at the base of the towers will be secured at all times and only accessible by authorized personnel. The system components will be equipped with security cameras to monitor activity at stations, the junction, the towers, and in each cabin.

2.7.8 Power Requirements

Operational power requirements can be separated into two categories: normal operations and emergency operations. Power requirements for the proposed Project would be provided by the City of Los Angeles Department of Water and Power's (LADWP) Green Power Program, through a connection to their power grid, and would include the power to operate the gondola system and the non-gondola system components (i.e., lights, ventilation, escalators, elevators). When operating at capacity, normal operations are estimated to require a total of approximately 2.5 megawatts of power.

Power requirements for emergency operations consist of the energy needed for operations in the event of a power grid failure. The proposed Project would include the installation of backup battery storage at each station, tower, and junction to provide backup power to allow unloading of the system in the event of a power grid failure. The total backup power required to allow unloading of the system is 1.4 megawatts.

2.7.9 Sustainability Features

The proposed Project would provide a sustainable, high-capacity zero emission ART option for visitors to Dodger Stadium, while also providing access between Dodger Stadium, the surrounding communities, and the regional transit system accessible at LAUS. ART technology is quiet, and the proposed Project would reduce VMT and congestion, leading to reduced GHG emissions and improved air quality.

The proposed Project's stations, junction, towers, and gondola cabins would incorporate energy efficient, sustainable, water and waste efficient, and resilient features, as feasible. The proposed stations and junction are designed to be open-air buildings, allowing for passive ventilation strategies and providing direct access to outdoor air and natural daylight, while also providing adequate shade protection from heat. The cabins would be ventilated to enhance air quality for passengers.

The design intent and structural strategy for the stations and towers also provides an efficiency of materials. The steel plate tower forms have been designed as "Monocoque" structures, where structure, form, and finish are unified. Materials for the stations, junction, and towers would be locally sourced where possible, and would include recycled content where possible. Light-toned finish materials will also serve to minimize heat island concerns.

The proposed Project would be designed to comply with all applicable state and local codes, including the City of Los Angeles Green Building and Low-Impact Development (LID) Ordinances.

A comprehensive list of the proposed Project's sustainability features would include the following, which was compiled from features included in the 2019 California Green Building Standards Code, United States Green Building Council Leadership in Energy and Environmental Design (LEED) for New Construction, and The Institute for Sustainable Infrastructure's Envision Rating System.[21,22,23]

(1) Location/Transportation/Quality of Life

- Encourage use of alternative modes of transportation.
- Provide transit connection from the regional transit system accessible at LAUS to Dodger Stadium.
- Provide opportunity to improve transit to underserved neighborhoods and uses along the alignment, including Chinatown, Mission Junction, Elysian Park, Echo Park, and Solano Canyon.
- Provide opportunity to improve access to parks and green space.
- Reduce vehicle trips to Dodger Stadium, Elysian Park, and the Los Angeles State Historic Park.

[21] *2019 California Green Building Standards Code, available at: https://calgreenenergyservices.com/wp/wp-content/uploads/2019_california_green_code.pdf.*

[22] *United States Green Building Council Leadership in Energy and Environmental Design for New Construction v4.1, available at: https://www.usgbc.org/leed/v41.*

[23] *The Institute for Sustainable Infrastructure's Envision Rating System, available at: https://sustainableinfrastructure.org/envision/use-envision/.*

- Reduce transportation related pollution and GHG emissions as a result of reduced vehicular congestion in and around Dodger Stadium, on neighborhood streets, arterial roadways, and freeways during game and special event days.
- Provide a mobility hub at Chinatown/State Park Station and a potential mobility hub at the Dodger Stadium property to support mobility connectivity with the State Park and Elysian Park and surrounding communities, respectively.
- Utilize 3S gondola system to minimize noise and vibration.

(2) Sustainable Sites

- Generally located the proposed Project within public ROW, publicly owned property or on previously developed sites.
- Avoid utilization of greenfield sites and destruction of prime habitat, thereby avoiding destruction of biodiversity.
- Site, design, and construct stations, the junction, and towers to minimize impacts to historic and archaeological resources, and to preserve viewsheds and local character.
- Provide opportunity to enhance open space and green space at the Los Angeles State Historic Park and along the pedestrian pathway connecting Dodger Stadium Station and Dodger Stadium.
- Design proposed Project to comply with the City's LID Ordinance, when applicable.
- Select landscape planting palettes and species to be climate appropriate (drought tolerant), non-invasive, and to not require excessive pesticides and fertilizers.
- Design site development on slopes (Stadium Tower and Dodger Stadium Station) to avoid excessive erosion and landslides.
- Select station, junction, and towers and hardscape materials to reduce Solar Reflective Index values to minimize heat island effect.
- Select lighting to comply with applicable requirements of the Los Angeles Municipal Code, CALGreen, and the California Motor Vehicle Code, so the proposed Project would not create a new source of light trespass or glare.

(3) Water Efficiency

- Design landscape planting to utilize drought tolerant plant palettes and low water use irrigation strategies.
- Utilize municipal reclaimed water sources for irrigation where available and practical.
- Utilize low flow plumbing fixtures and metered faucets in restrooms.

(4) Energy Conservation

- Design open-air station boarding platforms with natural shading and ventilation; air conditioned spaces occur only at cabins, maintenance support spaces, and restrooms.
- Provide energy efficient LED or low voltage lighting fixtures.
- Include energy efficient glazing, where it occurs.
- Utilize Los Angeles Department of Water and Power green power sources.
- Provide backup power by battery storage as opposed to diesel generators.

(5) Materials and Resources

- Sell and/or reuse or recycle more than 62,600 cubic yards of approximately 78,500 cubic yards of construction waste for backfill.
- Utilize a waste management policy for system construction and operations to reduce volume of waste to landfills.
- Use materials that are renewable, locally sourced, and/or have recycled content where practical for system construction and operations.

(6) Indoor Environmental Quality

- Design open air station boarding platforms, allowing for natural ventilation and natural daylighting.
- Design mechanically ventilated spaces to comply with ANSI/ASHRAE 62.1 recognized standard for ventilation and indoor air quality and Title-24 residential ventilation requirements standards.
- Utilize enhanced ventilation rates to improve occupant comfort and health.
- Prohibit smoking inside common areas of buildings, and within 25 feet of building entries.
- Specify low VOC products for all finishes.
- Implement an indoor air quality management plan for enclosed spaces during construction.
- Install new filtration media in the HVAC system and perform building flush-out prior to occupation of enclosed spaces.
- Provide individual lighting controls for enclosed spaces where practical.

2.8 Construction

Construction of the proposed Project is anticipated to begin as early as 2024 and take approximately 25 months, including construction, cable installation, and system testing. The detailed construction procedures informing the environmental impact analyses are included in *Construction Assumptions* (Appendix B) to this EIR. A summary of the construction activities is provided below. Construction of the Project components may partially overlap in schedule, especially since construction would occur at several physically separated sites.

Utility relocations would occur prior to construction of the proposed Project components and would be coordinated directly with the utility providers. Following utility relocations, construction would commence. Detailed information on utilities relocations is included in *Construction Assumptions* (Appendix B) to this EIR.

During construction, some parking spaces at Dodger Stadium would be temporarily closed for construction of the Dodger Stadium Station and for overall Project construction trailers, laydown and staging areas, and construction worker parking.

Construction of more than one Project component would occur at the same time, with consideration of available materials, work crew availability, and coordination of roadway closures. Table 2-4 below includes the estimated duration to complete construction of each of the proposed Project components, the maximum depths of drilled piles, the maximum depth of excavation, the amount of excavation, and the amount of materials (soils and demolition debris) to be exported for each component of the proposed Project.

Table 2-4: Proposed Project Construction Details

Component	Construction Duration	Maximum Construction Area	Maximum Depth of Drilled Piles	Maximum Depth of Excavation	Amount of Excavation	Amount of Materials Exported
Alameda Station	17 months	55,600 sq. ft.	125 feet	10 feet	2,728 cubic yards	2,295 cubic yards
Alameda Tower	12 months	40,600 sq. ft.	120 feet	10 feet	2,850 cubic yards	2,292 cubic yards
Alpine Tower	11 months	38,700 sq. ft.	120 feet	10 feet	3,606 cubic yards	2,887 cubic yards
Chinatown/ State Park Station	19 months	69,000 sq. ft.	80 feet	10 feet	6,267 cubic yards	4,567 cubic yards
Broadway Junction	19 months	65,000 sq. ft.	120 feet	7 feet	6,407 cubic yards	5,379 cubic yards
Stadium Tower	12 months	23,500 sq. ft.	120 feet	7 feet	1,286 cubic yards	1,202 cubic yards
Dodger Stadium Station	20 months	142,600 sq. ft.	55 feet	42 feet	44,313 cubic yards	44,001 cubic yards

Following completion of construction, the gondola cables would be installed, followed by system testing and inspections.

Working hours would vary to meet special circumstances and restrictions, but are anticipated to be consistent with the City's allowable construction hours of Monday through Friday between 7:00 a.m. to 9:00 p.m. and Saturdays and National Holidays between 8:00 a.m. to 6:00 p.m. While not anticipated, approval would be required from the City of Los Angeles Board of Police Commissioners for any extended construction hours and possible construction on Sundays.

Anticipated closures would include lane closures in which lanes would be closed 24-hours a day during certain phases of construction, or alternating closures during certain phases of construction, in which closures would occur during construction hours for approximately 10 hours a day, and roads would reopen during non construction hours for approximately 14 hours a day. For alternating closures, during non-construction hours, steel plates would be placed over construction sites to the extent feasible in order to allow for vehicular and pedestrian circulation. The closures and hours would vary between location and phase of construction. The proposed Project would implement a Construction Traffic Management Plan that would include detours and ensure that emergency access is maintained throughout all construction activities.

2.9 Project Buildout

Once constructed, the proposed Project would result in permanent changes to roadways at some locations due to the installation of the stations, junction, and towers within the public ROW. Circulation in the areas around the stations and towers is described below. Figures 2-26 through 2-32 depict the proposed Project after buildout.

2.9.1 Alameda Station

Following construction of Alameda Station, circulation on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street would be similar to existing conditions with the exception of a new raised median introduced within the left-turn pocket on Alameda Street, as shown in Figure 2-26. The station columns and vertical circulation elements within City ROW would have a footprint of 800 square feet, and the station canopy would have an overhang of 17,180 square feet over City ROW. The escalators and queueing area for the station would be located to the east within an existing LAUS parking lot, and to the west north of the Placita de Dolores of El Pueblo de Los Angeles. The placement of the escalators and queueing on the east side of the station would be designed to accommodate the future development of the planned LAUS Forecourt and Esplanade Improvements Project. The vertical circulation would have a footprint of 1,180 square feet within the planned Forecourt, and the station canopy would have an overhang of 2,040 square feet over the planned Forecourt.

In terms of roadway configuration, and in consideration of the planned Alameda Esplanade project occurring along Alameda Street, Alameda Street would maintain two northbound through lanes, two southbound through lanes, one northbound through-right turn lane, one northbound left turn lane, and one southbound left turn lane.

2.9.2 Alameda Tower

Following construction of Alameda Tower, Alameda Street between North Main Street and Alhambra Avenue would be similar to existing conditions with the exception of a new curb extension introduced along the eastern edge of Alameda Street in the vicinity of the tower, which would reduce existing parallel parking by six spaces, as shown in Figure 2-27. The tower would have a footprint of 900 square feet within Alameda Triangle, a City ROW.

In terms of roadway configuration, Alameda Street would maintain two northbound through lanes, three southbound through lanes, and one northbound left turn lane.

2.9.3 Alpine Tower

Following construction of Alpine Tower, Alameda Street at its intersection with Alpine Street would be similar to existing conditions, as shown in Figure 2-28. The tower would have a footprint of 1,030 square feet within a City-owned parcel.

In terms of roadway configuration, Alameda Street would maintain two northbound through lanes, one southbound left turn lane, two southbound through lanes, one southbound through-right lane, and one northbound left turn lane. Alpine Street would maintain two westbound through lanes, two eastbound through lanes, one westbound left turn lane, and one westbound right turn lane.

2.9.4 Chinatown/State Park Station

Following construction of Chinatown/State Park Station, Spring Street at the southern end of the Los Angeles State Historic Park would be similar to existing conditions, as shown in Figure 2-29. The station would have a footprint of 2,605 square feet, comprised of 410 square feet located on City ROW and 2,195 square feet in the park. The station canopy would have an overhang of 15,030 square feet, comprised of 5,710 square feet over City ROW and 9,320 square feet over the park. The proposed Project’s required aerial clearance width over the Los Angeles State Historic Park would be 53 feet 2 inches wide with an area of approximately 59,470 square feet, plus an Additional Separation Buffer. The aerial clearance would allow the continued use of the park, with certain limitations.

In terms of roadway configuration, Spring Street would maintain two northbound through lanes with a parallel parking lane, two southbound through lanes with a parallel parking lane, and a two-way left turn lane.

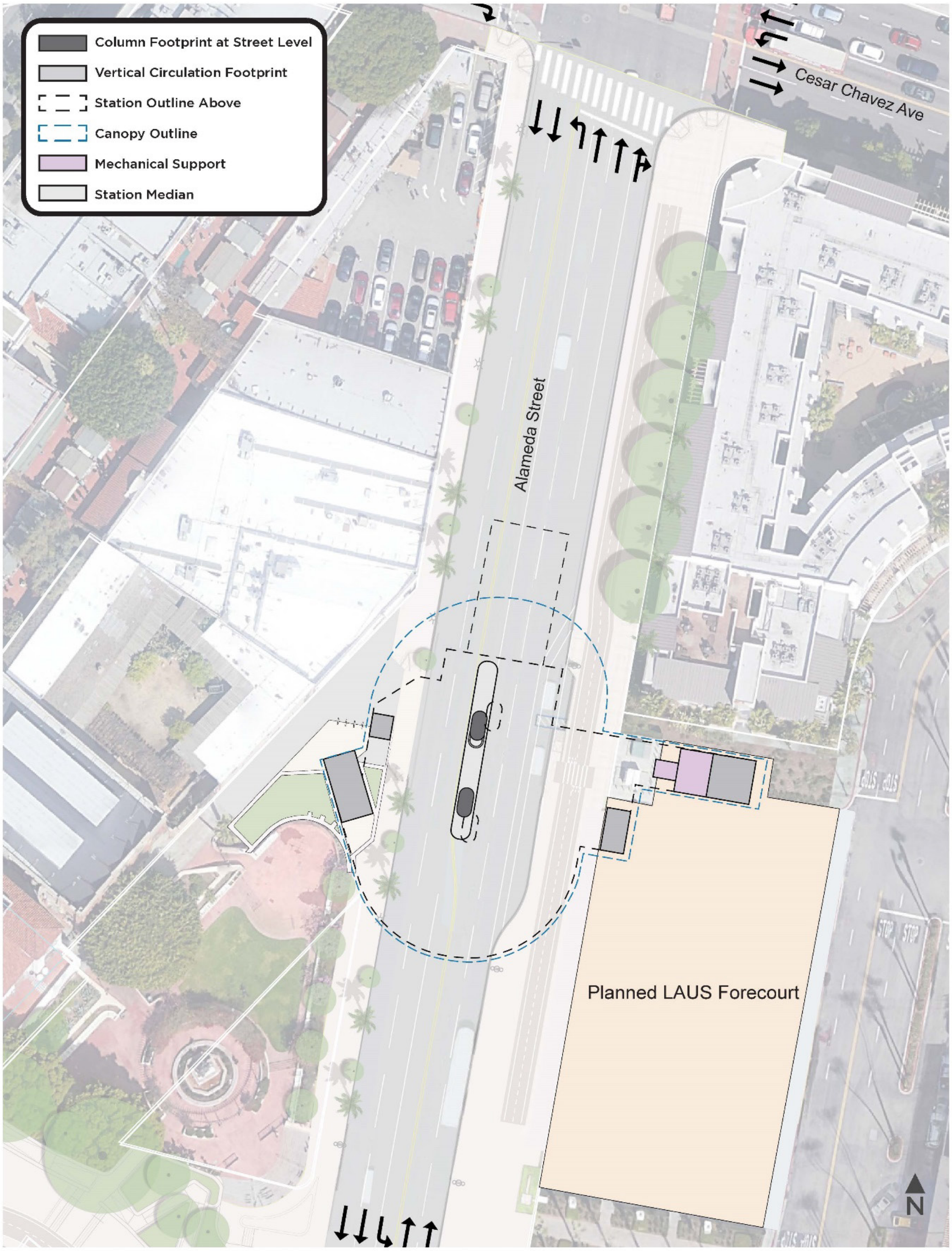


Figure 2-26: Alameda Station Buildout Conditions

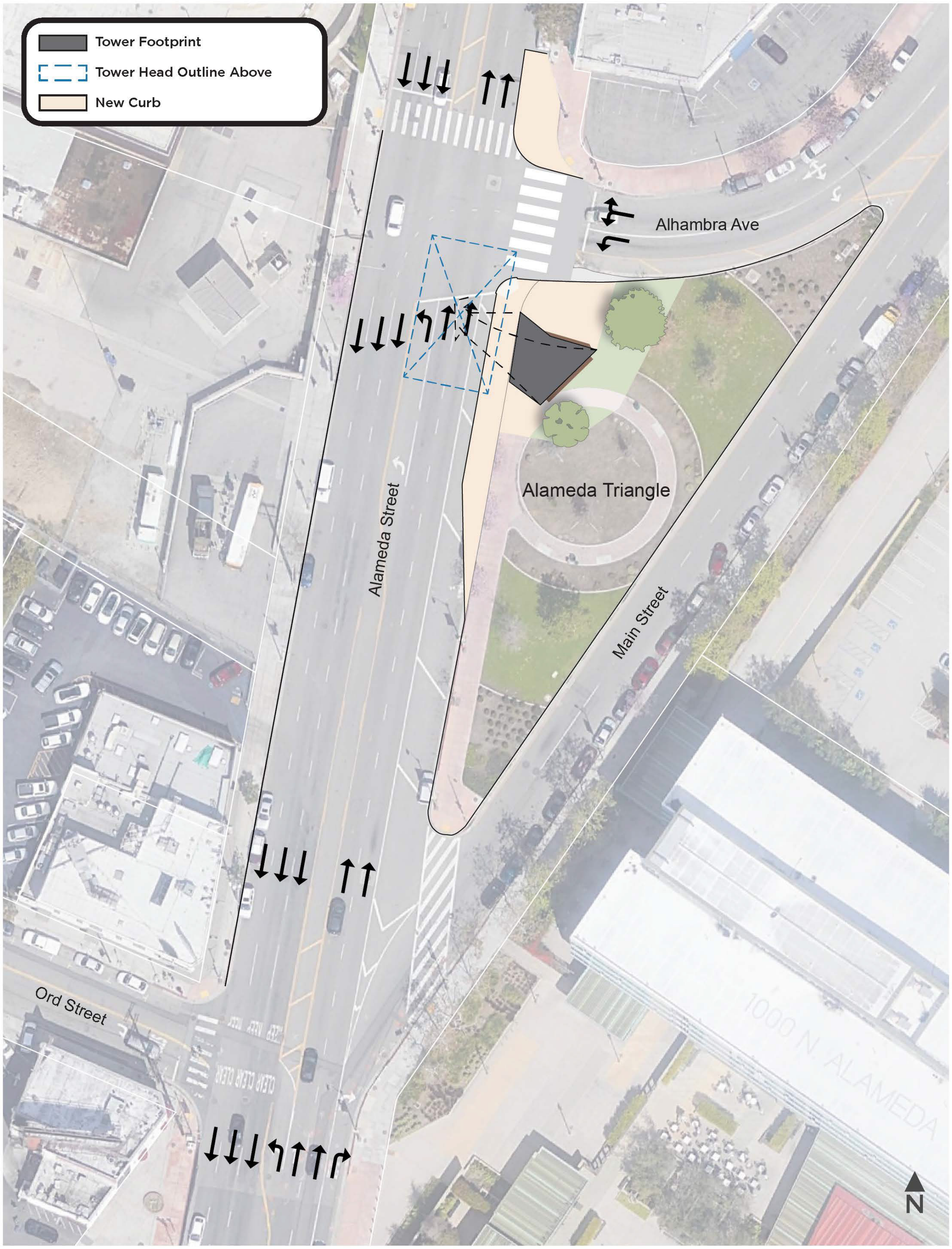


Figure 2-27: Alameda Tower Buildout Conditions

Figure 2-28: Alpine Tower Buildout Conditions

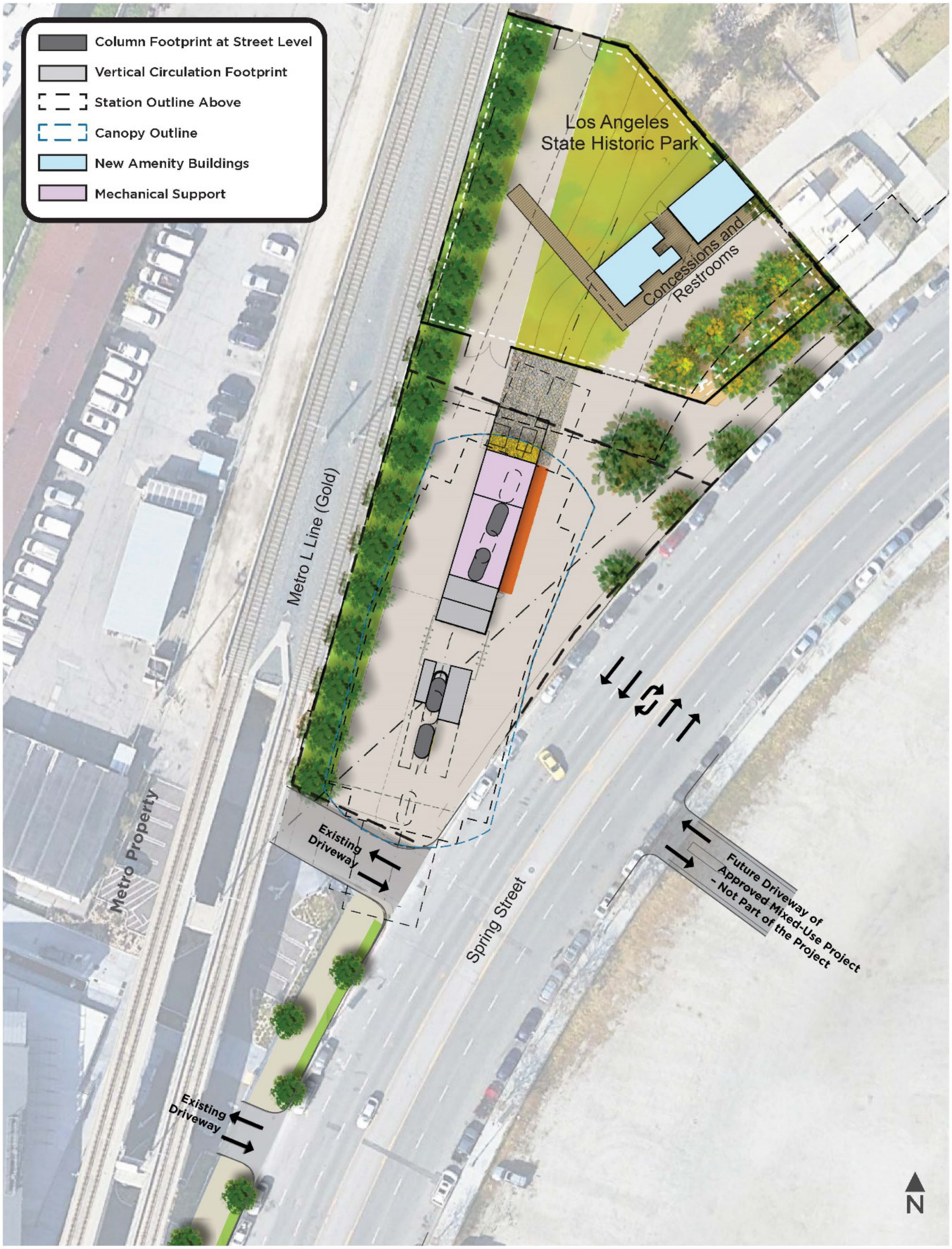


Figure 2-29: Chinatown/State Park Station Buildout Conditions

2.9.5 Broadway Junction

Following construction of Broadway Junction, buildout conditions would be similar to existing conditions except that the junction would be cantilevered over the intersection of North Broadway and Bishops Road, as shown in Figure 2-30. The junction would have a footprint of 1,460 square feet on privately-owned property. The junction canopy would have an overhang of 13,350 square feet.

In terms of roadway configuration, North Broadway would maintain two northbound through lanes, one southbound through lane, one southbound through-right lane, and one northbound left turn lane. Bishops Road would maintain one westbound through lane and one eastbound shared left/right turn lane.

2.9.6 Stadium Tower

Following construction, Stadium Tower would be located completely within the hillside area near Dodger Stadium, as shown in Figure 2-31. The tower would have a footprint of 870 square feet within a privately-owned property. No changes to roadway configurations would occur.

2.9.7 Dodger Stadium Station

Minor changes would occur in the parking lot where Dodger Stadium Station would be located, as shown in Figure 2-32. After completion of construction, the stadium perimeter road would be slightly realigned around Dodger Stadium Station. Approximately 194 existing parking spaces would be removed to accommodate the station, the realigned perimeter road, and the pedestrian pathway connecting the station and Dodger Stadium. Additionally, a new access driveway would be constructed into the hillside from the existing access road below to provide direct access to the basement level of the station for maintenance personnel. The station would have a footprint of 27,770 square feet, of which the station canopy would have an overhang of 16,020 square feet.

2.10 Required Permits and Approvals

The Project EIR will provide environmental clearance as needed for all of the potential discretionary entitlements, reviews, and approvals required for implementation of the proposed Project including, but not necessarily limited to, the following:

California Department of Transportation (Caltrans)

1. Pursuant to the California Streets and Highways Code section 660, approval from Caltrans through an encroachment permit and/or other agreement, form of permission, or approval(s) to access, construct, and/or operate the Project within/over the State transportation system right of way.

Figure 2-30: Broadway Junction Buildout Conditions

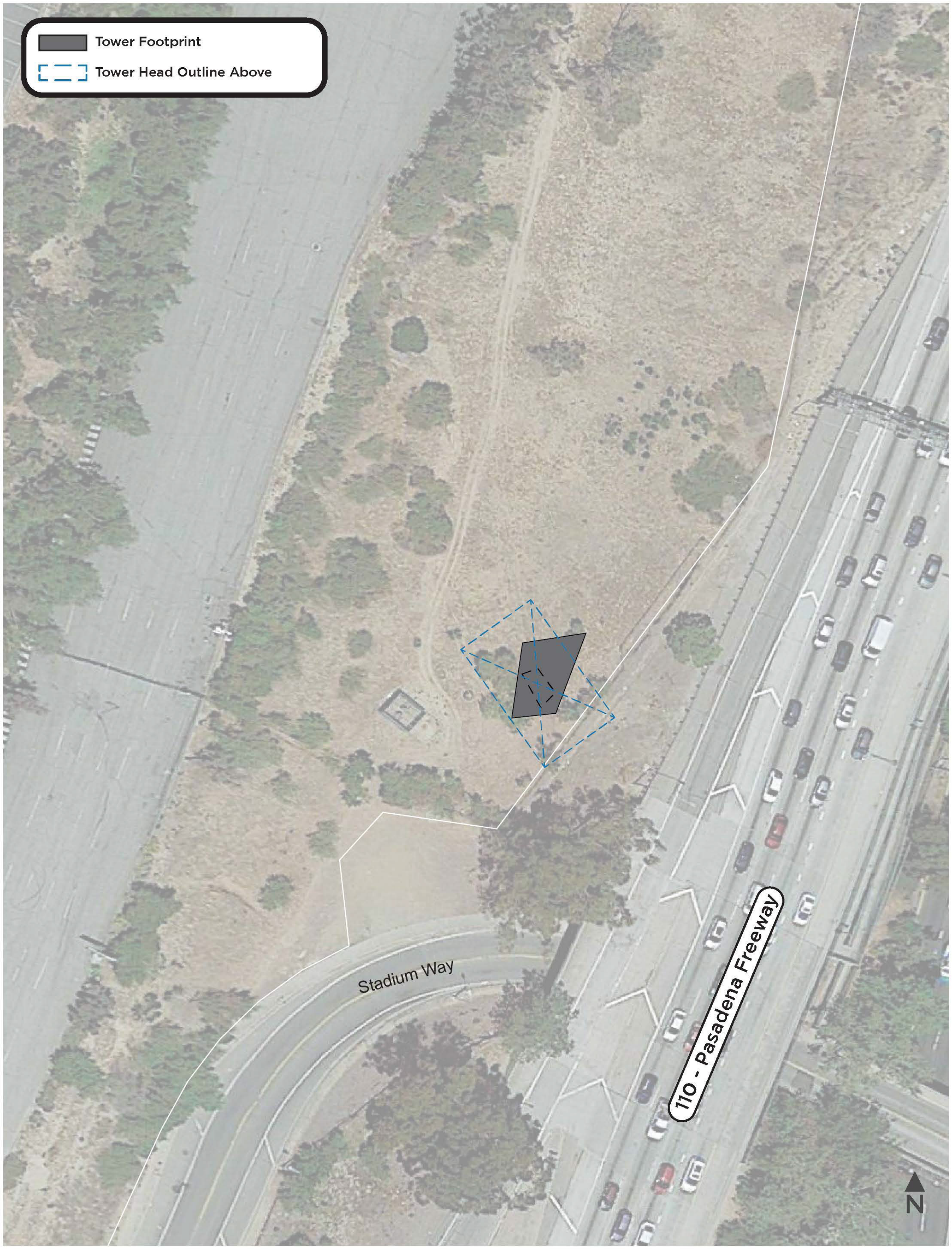


Figure 2-31: Stadium Tower Buildout Condition

Figure 2-32: Dodger Stadium Station Buildout Conditions

California State Parks

2. Approvals determined necessary by the California Department of Parks and Recreation for the Project could include, but not necessarily be limited to:

    a. Pursuant to Government Code section 14666, an easement and/or aerial easement, to construct and operate the Project within/over the Los Angeles State Historic Park.

    b. Pursuant to Public Resources Code section 5003.17, a lease or other agreement, to construct and operate the Project within/over the Los Angeles State Historic Park.

    c. Pursuant to Public Resources Code Section 5003 and Government Code Section 14666, a right of entry, to construct the Project within/over the Los Angeles State Historic Park.

    d. Pursuant to Public Resources Code section 5002.2, an amendment to the Los Angeles State Historic Park General Plan.

California Division of Occupational Safety and Health (Cal/OSHA)

3. Pursuant to Title 8, California Code of Regulations sections 3150 through 3191, approvals from the Amusement Ride & Tramway Division, including a Certificate of Construction.

Los Angeles County Metropolitan Transportation Agency (Metro)

4. Approvals determined necessary by Metro for the Project, could include, but not necessarily be limited to, the following:

    a. Pursuant to Public Utilities Code section 130252, submittal, review, and approval of proposed plans for design, construction, and implementation of the Project.

    b. Pursuant to Public Utilities Code section 130521 and Civil Code section 801, an easement or other agreement or approval to authorize the construction and operation of the Project within a portion of Los Angeles Union Station.

    c. Pursuant to Public Utilities Code section 130521, an encroachment permit or other agreement or approval to authorize construction and operation of the Project within any Metro L Line (Gold) right-of-way.

City of Los Angeles

5. Approvals determined necessary by the City for the Project, could include, but not necessarily be limited to, the following:

    a. Pursuant to Charter section 390 and Los Angeles Administrative Code section 13.4, to the extent applicable, to be processed by the Department of Public Works, Bureau of Engineering and the Department of Transportation, a franchise agreement to operate "upon, over, under, or along any street, highway or other place in the City of Los Angeles."

b. Pursuant to Los Angeles Administrative Code section 22.109, to the extent applicable, approval of the design from the Cultural Affairs Commission for the Project components located within the public right-of-way.

c. Approvals, to the extent applicable, to be processed by the Department of City Planning, could include, but not necessarily be limited to, the following:

   i. Pursuant to LAMC section 11.5.7 the creation of a Specific Plan to provide for consistent application of Project design standards, limitations, and operational measures.

   ii. Pursuant to LAMC sections 13.11 and 12.32.S, a "SN" Sign District for a comprehensive set of sign regulations on the Project site to permit signage consistent with applicable City requirements.

   iii. Pursuant to LAMC section 12.24.M, a Plan Approval under the existing 1960 Dodger Stadium Conditional Use Permit ("CUP") to allow Stadium Tower and Dodger Stadium Station. CUP Condition 4 provides for collaboration "in devising mass transportation service to the Stadium site which will be sufficiently efficient to encourage patronage thereof and thus reduce the number of private automobiles driven to the Stadium events."

   iv. Relief from the River Implementation Overlay District, to allow for Alameda Station, Alameda Tower, and Alpine Tower.

   v. Relief from the Cornfield Arroyo Seco Specific Plan to allow for Chinatown/State Park Station.

d. Pursuant to Government Code sections 65864 through 65869.5, a Development Agreement between the Project Sponsor and the City of Los Angeles for 20 years.

Other discretionary and ministerial permits, approvals, consultations, and coordination will or may be required, including, but not limited to, temporary street closure permits, demolition permits, grading permits, excavation permits, archaeological permits, encroachment permits, building permits, dewatering permits, stormwater permits, noise variances, work hour variances, haul routes, sign permits, any operational agreements, consultation with the State Historic Preservation Officer and other agencies, and any applicable permits or clearances related to water and/or energy infrastructure or emergency access.

3.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

The following sections of the Draft EIR examine the potential environmental effects associated with implementation of the proposed Project by issue area. The discussion in this chapter is organized into 20 environmental issue areas with detailed analyses, as follows:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Each environmental issue area is discussed in the following manner.

Regulatory Setting identifies the applicable federal, State, and/or local regulations, plans, and policies that are applicable to the proposed Project.

Environmental Setting describes, from a local and regional perspective, the physical environmental conditions in the vicinity of the proposed Project, and along the proposed Project alignment at the time of publication of the Notice of Preparation (NOP) to compare and establish the type and extent of the potential environmental effects of the proposed Project. The environmental setting establishes the “baseline conditions” used by the Los Angeles County Metropolitan Transportation Authority (Metro) to determine whether specific Project-related impacts would be significant. The baseline conditions are tailored specifically for the resource area discussed in each section.

Methodology describes the sources or methods used in the preparation of the impact analysis for each resource topic. This section includes the Thresholds of Significance criteria, which identifies the standards by which Metro determines the level of impact.

Environmental Impacts presents evidence that is based—to the extent possible—on scientific and factual data, about the cause and effect relationship between the Project and potential changes in the environment. The exact magnitude, duration, extent, frequency, range, or other parameters of a potential impact are ascertained to the extent possible to provide facts in support of finding whether the impacts of the proposed Project would meet or exceed the established significance criteria. In determining whether impacts may be significant, all the potential effects, including direct effects and reasonably foreseeable indirect effects, are considered.

Mitigation Measures identify measures that can reduce or avoid the potentially significant impact identified in the analysis. Standard existing regulations, requirements, and procedures applicable to the proposed Project are considered a part of the existing regulatory environment, and are not considered or included in mitigation. Mitigation measures are those feasible, project-specific measures that are required, in addition to compliance with existing regulations and requirements, to reduce significant impacts. In addition to measures that the lead agency has sole authority to implement, mitigation can also include measures that are the responsibility and jurisdiction of another public agency (California Environmental Quality Act [CEQA] Guidelines Section 15091[a][2]).

Level of Significance after Mitigation indicates what effects remain after the implementation of mitigation measures, and whether the remaining effects are considered significant. When impacts, even with the inclusion of mitigation measures, cannot be mitigated to a less than significant level, they are identified as “unavoidable significant impacts.” To approve a project with unavoidable significant impacts, the lead agency must adopt a Statement of Overriding Considerations at the time of EIR certification. In adopting such a statement, the lead agency must find that it has reviewed the EIR, balanced the benefits of the project against its significant effects, and concluded that the benefits of the project outweigh the unavoidable adverse environmental effects, and therefore, the adverse environmental effects may be considered “acceptable” (CEQA Guidelines Section 15093 [a]).

3.1 AESTHETICS

This section evaluates the potential impacts of the proposed Project on aesthetics and visual resources. The analysis describes the existing physical conditions of the Project area and the regulatory setting as it relates to aesthetics and visual resources. The analysis of aesthetics considers the visual quality of the area immediately surrounding the proposed Project alignment and the impacts of the proposed Project with respect to the existing aesthetic environment. The analysis considers the physical aspects of the Project and its associated design features, as well as an evaluation of visual simulations showing existing and future conditions at representative locations. The proposed Project would impact aesthetics and visual resources if its implementation would result in a substantial adverse effect on scenic vistas and resources, visual character, light and glare, or shading within the Project area. The analysis in this section is summarized from the *Visual Impact Assessment for the Los Angeles Aerial Rapid Transit Project* prepared for the proposed Project, which is included as Appendix C of this Draft EIR, and the *Los Angeles Aerial Rapid Transit Lighting Study* prepared for the proposed Project, which is included as Appendix C of this Draft EIR.

3.1.1 Regulatory Setting

State

Los Angeles State Historic Park General Plan

The Los Angeles State Historic Park General Plan serves as a long-range management tool that provides guidelines for achieving the vision and purpose of the park. According to the Los Angeles State Historic Park General Plan, the purpose of the Park is "to provide the public with a place to learn and celebrate the ethnically diverse history and cultural heritage of Los Angeles." As articulated by the Los Angeles State Historic Park General Plan, the goals of the Park include (1) promoting a "touchstone" landscape for reflecting on Los Angeles's natural and cultural heritage; and (2) emphasizing the importance of the historic site to Los Angeles, California, and the world.

The General Plan states that the Park is identified and recorded as an archaeological site and is listed as a designated Historic-Cultural Monument by the City of Los Angeles. The General Plan acknowledges the Park has archaeological sensitivities and, as such, recommends continued study of existing and potential resources as well as the need to constantly update and expand the knowledge of historic activities at the Park. As for the cultural resources associated with the Park, the General Plan states that the Park should "[i]dentify, document, evaluate, and interpret cultural resources at the Park," and "[p]rotect, stabilize, and preserve significant cultural resources within the Park." Guideline 8 of the Los Angeles State Historic Park General Plan also establishes that protocols be put in place "for periodic assessments of known archaeological and historic resources. This regular inventory and monitoring should consist of updating recordation documentation, site condition assessments, and treatment recommendations."[1]

1 California Department of Parks and Recreation. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf, accessed August 2022.

Goals and guidelines included in the Los Angeles State Historic Park General Plan pertaining to aesthetic resources and visual resources, as well as site-specific features that may impact aesthetics and visual resources, such as landscaping and park facilities, are listed in Table 3.1-1.

Table 3.1-1: Los Angeles State Historic Park General Plan Goals and Guidelines

Topic	Goal or Guideline
Access and Circulation	• Goal: Establish a pattern of circulation and access for all visitors, to include integrated and efficient multi-modal transportation, that allows clear choices for visitor arrival, departure, and travel throughout the Park, while creating a sense of place. ▪ Guideline 1: Create a sense of entry and arrival at the Park. Provide easily accessible orientation and information that will permit visitors to choose from a range of available park experiences.
Natural Resources	• Goal: Vegetation management should establish the Park as an important natural open space in the Los Angeles urban area. ▪ Guideline 2: Incorporate public, law enforcement, maintenance staff and park professionals in the design of facilities and landscape to achieve the safest environment possible. Consider the use of such things as visual surveillance, lighting, security systems, patrol and vehicle accessibility, fencing, gates, location and visibility of park facilities, and landscape design to enhance safety. Encourage the California Highway Patrol to provide a safety consideration review for facilities. ▪ Guideline 5: Parkwide vegetation management should establish a native vegetation framework that enables it to become part of the regional Los Angeles River natural open space network and supports the Park's connectivity goals. The framework should use naturalistic native plant associations that will emulate the historic landscape of the Los Angeles Basin and provide a visual identity to the Park. This framework should allow specific landscape treatments for specific areas of the Park that would be compatible with the overall vegetation concept.
Aesthetic Resources	• Goal: Protect and enhance scenic viewsheds and features and preserve the visitor's experience of the surrounding landscape by minimizing adverse impacts to aesthetic resources. ▪ Guideline 1: Landscaping, structures, and other facilities should be sited to be sensitive to scenic views from and through the Park. Facilities should be sited to minimize the impact on views from key viewpoints and to protect and/or emphasize positive scenic views (e.g. views toward the downtown skyline, Broadway Bridge, Elysian Park). ▪ Guideline 2: State Parks should work with adjoining jurisdictions regarding land use and development within the Park viewshed that might affect the site and its aesthetic resources. For example, State Parks should coordinate with the City of Los Angeles with the planning and development of the proposed North Spring Street improvements. • Goal: Integrate the Park's vision into the design of park facilities and programs. ▪ Guideline 3: Create design guidelines that establish an architectural vocabulary that can be used for facilities throughout the Park. The intent is to establish a cohesive design theme through the use of similar styles and/or materials. The design of pedestrian bridges, fencing, lighting, trails, signage, and other park infrastructure should be consistent with the overall design guidelines and with the Park's vision and educational, recreational, and environmental objectives. ▪ Guideline 4: Establish access points into the Park and develop design standards for these "gateway" areas that will create a sense of arrival and establish an

Table 3.1-1: Los Angeles State Historic Park General Plan Goals and Guidelines

Topic	Goal or Guideline
	initial identity and sense of place for the Park. Design standards and guidelines for access points should distinguish primary and secondary gateways. ▪ Guideline 5: Create a variety of visitor experiences by providing visitors with positive natural fragrances and sounds, such as the scent of landscape plantings and the sounds of birds and water. Consider buffering traffic and transit line noise with appropriate materials and techniques (for example, the sound of cascading water masking unwanted traffic noise).
Education and Interpretation	• Strive to achieve park management goals through interpretation, including public safety, land use, critical resources, human impacts, resource management strategies, and other issues.
Park Development	• Goal: Strive toward distinctive and high-quality facilities that represent the integrity of California State Parks. Design and maintenance of park facilities should embody forward-thinking design theories and produce meaningful places and spaces worthy of preservation by future generations and accessible to all. ▪ Guideline 1: Provide visitor use facilities that offer the opportunity for diverse visitor experiences. Facilities will be placed to maximize visitor and staff use while minimizing negative effects on viewsheds, cultural or natural resources, or user conflicts. ▪ Guideline 3: Park design should evolve from a collaborative and visual process, led by a design professional, and involve the users, District staff, resource professionals, interpretive planners, and other stakeholders.
Maintenance	• Goal: Maintain park facilities to meet visitor needs. ▪ Guideline 3: Maintain roads, parking, and trails to the degree appropriate for the intended use, and in such a manner that they are clearly delineated to the user while not detracting from the visual aesthetics of the area in which they are located.
Concessions	• Goal: Consider appropriate concessions to expand and enhance visitor services. Possible concessions may include retail sales, refreshments, and cultural arts and crafts. ▪ Guideline 1: Develop a Concessions Plan that recommends potential concession opportunities in the Park. These concession opportunities should enhance the recreational and/or educational experience at the Park and be compatible with the Park’s vision, purpose, classification and guidance for aesthetics and resource values.
Safety	• Goal: Ensure that the Park and all facilities and structures provide a safe environment. ▪ Guideline 2: Incorporate public, law enforcement, maintenance staff and park professionals in the design of facilities and landscape to achieve the safest environment possible. Consider the use of such things as visual surveillance, lighting, security systems, patrol and vehicle accessibility, fencing, gates, location and visibility of park facilities, and landscape design to enhance safety. Encourage the California Highway Patrol to provide a safety consideration review for facilities. ▪ Guideline 11: Include considerations for creating a safe park environment when planning specific locations and configurations of park plan elements. Park development arrangements that promote optimum park safety considerations include (but are not limited to) general visual surveillance, location and visibility

Table 3.1-1: Los Angeles State Historic Park General Plan Goals and Guidelines

Topic	Goal or Guideline
	of development areas, lighting, patrol and emergency vehicle accessibility, fencing and boundary treatments, access control, and landscape design.
Sustainable Design Construction and Maintenance	• Goal: Use sustainable concepts in the design, siting, construction, and maintenance of Park facilities (including buildings, parking lots, day use areas, and trails) and in natural and cultural resource programs. ▪ Guideline 1: Promote and incorporate the use of sustainable "green" design for Park buildings and facilities. Design decisions should be sensitive to the contextual nature of the site and designs should be done in such a way as to minimize ongoing utilities and maintenance costs. New technology and materials, innovative strategies for visitor use areas, and more efficient equipment will be embraced. ▪ Guideline 2: Where possible, use natural, renewable, indigenous, and recyclable materials, and simple-to-maintain and energy-efficient design.

Source: California State Parks. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.laparksalliance.org/wp-content/uploads/2021/02/lashp-general-plan-eir.pdf. Accessed April 2022.

Local

City of Los Angeles General Plan Framework Element

The City of Los Angeles General Plan is a guide for all local land use decisions for the City of Los Angeles and shapes the physical development of the city. The Framework Element of the City of Los Angeles General Plan is a strategy for long-term growth that sets a citywide context to guide the update of the community plan and citywide elements. The following goals, objectives and policies from Chapter 5, Urban Form and Neighborhood Design, and Chapter 6, Open Space and Conservation, of the Framework Element are applicable to the proposed Project as shown in Table 3.1-2.

Table 3.1-2: City of Los Angeles General Plan Framework Element Goals, Objectives, and Policies

Chapter	Goals	Objectives and Policies
Urban Form and Neighborhood Design	**Goal 5A**: A livable City for existing and future residents and one that is attractive to future investment. A City of interconnected, diverse neighborhoods that builds on the strengths of those neighborhoods and functions at both the neighborhood and citywide scales.	• **Objective 5.4:** Encourage the development of community facilities and improvements that are based on need within the centers and reinforce or define those centers and the neighborhoods they serve. ▪ Policy 5.4.4: Encourage the use of community facilities for nighttime activity through the use of appropriate roadway and pedestrian area lighting. • **Objective 5.5:** Enhance the liveability of all neighborhoods by upgrading the quality of development and improving the quality of the public realm. ▪ Policy 5.5.4: Determine the appropriate urban design elements at the neighborhood level, such as sidewalk width and materials, street lights and trees, bus shelters and benches, and other street furniture.

Table 3.1-2: City of Los Angeles General Plan Framework Element Goals, Objectives, and Policies

Chapter	Goals	Objectives and Policies
		• **Objective 5.8:** Reinforce or encourage the establishment of a strong pedestrian orientation in designated neighborhood districts, community centers, and pedestrian-oriented subareas within regional centers, so that these districts and centers can serve as a focus of activity for the surrounding community and a focus for investment in the community. ▪ Policy 5.8.2: The primary commercial streets within pedestrian-oriented districts and centers should have the following characteristics: o 5.8.2.d. Pedestrian amenities (e.g., benches, pedestrian-scale lighting, special paving, window boxes and planters). ▪ Policy 5.8.4: Encourage that signage be designed to be integrated with the architectural character of the buildings and convey a visually attractive character. • **Objective 5.9:** Encourage proper design and effective use of the built environment to help increase personal safety at all times of the day. ▪ Policy 5.9.1: Facilitate observation and natural surveillance through improved development standards which provide for common areas, adequate lighting, clear definition of outdoor spaces, attractive fencing, use of landscaping as a natural barrier, secure storage areas, good visual connections between residential, commercial, or public environments and grouping activity functions such as child care or recreation areas.
Open Space and Conservation	**Goal 6A:** An integrated citywide/regional public and private open space system that serves and is accessible by the City's population and is unthreatened by encroachment from other land uses.	• **Objective 6.1:** Protect the City's natural settings from the encroachment of urban development, allowing for the development, use, management, and maintenance of each component of the City's natural resources to contribute to the sustainability of the region. ▪ Policy 6.1.2: Coordinate City operations and development policies for the protection and conservation of open space resources, by: o 6.1.2.c: Preserving natural viewsheds, whenever possible, in hillside and coastal areas.

City of Los Angeles General Plan – Mobility Plan 2035

The Mobility Element (Mobility Plan 2035) of the City of Los Angeles General Plan outlines a policy foundation for achieving a transportation system that balances the needs of all road users. Priorities include safety, access, infrastructure, collaboration, and healthy communities. The following goals, objectives and policies from the Mobility Plan 2035 are applicable to the proposed Project as shown in Table 3.1-3.

Table 3.1-3: City of Los Angeles General Plan Mobility Plan 2035 Policies

Chapter	Policies
World Class Infrastructure	• 2.3 Pedestrian Infrastructure: Recognize walking as a component of every trip, and ensure high quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment. • 2.11 Transit Right-of-Way Design: Set high standards in designing public transit rights-of-way that considers user experience and supports active transportation infrastructure.
Access for All Angelenos	• 3.1 Access for All: Recognize all modes of travel, including pedestrian, bicycle, transit, and vehicular modes - including goods movement - as integral components of the City's transportation system. • 3.2 People with Disabilities: Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way. • 3.4 Transit Services: Provide all residents, workers and visitors with affordable, efficient, convenient, and attractive transit services.
Collaboration, Communication & Informed Choices	• 4.2 Dynamic Transportation Information: Support a comprehensive, integrated transportation database and digital platform that manages existing assets and dynamically updates users with new information. • 4.4 Community Collaboration: Continue to support the role of community engagement in the design outcomes and implementation of mobility projects. • 4.14 Wayfinding: Provide widespread, user-friendly information about mobility options and local destinations, delivered through a variety of channels including traditional signage and digital platforms.

City of Los Angeles Community Plans

Portions of the proposed Project alignment would be located within the boundaries of the Central City North Community Plan area, the Central City Community Plan area, and the Silver Lake-Echo Park-Elysian Park Community Plan area. The City of Los Angeles is currently working on an update to the Downtown Community Plan, known as DTLA 2040, which would consolidate the Central City Community Plan and Central City North Community Plan areas. Because it is unknown when the new community plan would be adopted and its EIR certified, the analysis in this section is based on the current applicable land use and zoning designations.

Elements of the proposed Project would be subject to the goals, objectives, and policies identified in the applicable community plans, as shown in Table 3.1-4 below.

Table 3.1-4: City of Los Angeles Community Plans' Goals, Objectives, and Policies

Plan	Goals, Objectives, and Policies
Central City Community Plan	**Objective 4.2:** To maximize the use of the City's existing and envisioned open space network and recreation facilities by providing connections to the open space • Policy 4.2.1: To foster physical and visual links between a variety of open spaces and public spaces Downtown. ○ Program: Implement the Civic Center Shared Facilities and Enhancement Plan.

Table 3.1-4: City of Los Angeles Community Plans' Goals, Objectives, and Policies

Plan	Goals, Objectives, and Policies
	○ Program: Implement the Metropolitan Transit Authority's Angel's Walk Pedestrian Master Plan.
	Objective 4.4: To encourage traditional and non-traditional sources of open space by recognizing and capitalizing on linkages with transit, parking, historic resources, cultural facilities, and social services program. • Policy 4.4.1: Improve Downtown's pedestrian environment in recognition of its important role in the efficiency of Downtown's transportation and circulation systems and in the quality of life for its residents, workers, and visitors. ○ Program: Develop and adopt "non-standard" alternatives to City requirements related to placement of street lights, street trees, sidewalk and other paving material, street furniture, bus shelters, and other features that enhance the pedestrian environment as their primary standard.
	Objective 11-3: To provide an internal circulation system with a focus of connecting specific pairs of activity centers to a system that provides greater geographic coverage of Downtown, thus giving the Downtown traveler more choices and more flexibility. • Policy: Provide for the efficient circulation into and within Downtown.
Central City North Community Plan	**Goal 2:** A strong and competitive commercial sector which best serves the needs of the community through maximum efficiency and accessibility while preserving the historic commercial and cultural character of the district. • **Objective 2-4:** To enhance the appearance of commercial districts. ▪ Policy 2.4.3: Improve safety and aesthetics of parking areas in commercial areas.
	Goal 5: A community with sufficient open space in balance with development to serve the recreational, environmental and health needs of the community and to protect environmental and aesthetic resources. • **Objective 5.1:** To preserve existing open space resources and where possible develop new open space. ▪ Policy 5.1.1: Encourage the retention of passive and visual open space which provides a balance to the urban development of the Plan Area. ○ Program: The Plan Map designates areas for open space and protects vast open space areas such as Elysian Park from development.
Silver Lake–Echo Park–Elysian Valley Community Plan	• Install on-site lighting along all pedestrian walkways and vehicular access ways. • Retail shops shall have well-lit entries with directly accessible pedestrian access from the sidewalk, located at frequent intervals, with well-lit exterior frontage. • Shield and direct on-site lighting down onto driveways and walkways, away from adjacent residential uses. • Provide color, lighting, and surface texture accents and complementary building materials to building walls and facades, consistent with architectural themes of the neighborhood. • Re-pave existing sidewalks in pedestrian-oriented areas, with brick pavers, concrete, or other safe, non-slip materials to create a distinctive pedestrian environment.

Cornfield Arroyo Seco Specific Plan

The Cornfield-Arroyo Seco Specific Plan (CASP) establishes planning and zoning provisions for a portion of the Central City North, Northeast, and Silver Lake-Echo Park Community Plans, across approximately 660 acres of land including, and surrounding, the Los Angeles State Historic Park.[2] The CASP was adopted in 2013 with the general purpose of facilitating the transformation of the area from primary vehicle-oriented and industrial uses, to a mixed-use pedestrian-oriented community that would accommodate residential, light industrial, and commercial uses. The CASP was developed to meet the several key purposes, including:

- Transform an underserved and neglected vehicular-oriented industrial and public facility area into a cluster of mixed-use, pedestrian-oriented and aesthetically pleasing neighborhoods.
- Increase access to open space.
- Re-connect historical communities.
- Facilitate pedestrian mobility, encourage bicycle use, provide access to a variety of transit options including frequent light rail and bus connections, shared vehicles and bicycles, and taxis.
- Respect historically significant buildings, including massing and scale, while at the same time encouraging innovative architectural design that expresses the identity of contemporary urban Los Angeles.

Amongst other zoning regulations, the zoning regulations applicable to the proposed Project related to aesthetics include the following general requirements for exterior lighting:

a. Light levels shall be measured with a photoelectric photometer, following the standard spectral luminous efficiency curve adopted by the International Commission on Illumination.

b. The outdoor lighting for all projects in the Urban Center, Innovation, and Village Districts shall be designed such that it produces a maximum initial illuminance value no greater than 0.20 horizontal and vertical foot candles when measured at the site boundary and no greater than 0.01 horizontal foot candles when measured 15 feet from the site. No more than 5.0 percent of the total initial lumens shall be emitted at an angle of 90 degrees or higher from nadir (straight down).

c. The outdoor lighting for all projects in the Greenway District[3] shall be designed such that it produces a maximum initial illuminance value no greater than 0.01 horizontal and vertical foot candles when measured at the site boundary. None of the total initial lumens shall be emitted at an angle of 90 degrees or higher from nadir (straight down).

d. Lighting shall be provided along all vehicular access ways and pedestrian walkways.

2 National Park Service (NPS). 2022. California: Arroyo Seco Parkway. Available at: https://www.nps.gov/places/arroyo-seco-parkway.htm. Accessed May 2022.

3 The Los Angeles State Historic Park is designated as Open Space and is located in the Greenway Zoning District under the CASP, which allows for the development of recreation and open space uses.

e. All low pressure sodium, high pressure sodium, metal halide, fluorescent, quartz, 60 watts or greater incandescent, mercury vapor, and halogen fixtures shall be fully shielded in such a manner as to preclude light pollution or light trespass on any of the following: an abutting residential use district; a lot zoned for residential use; the public right of way, a park, or open space.

f. Lighting (exterior building and landscape) shall be directed away from properties and roadways, and shielded as necessary. In particular, no lighting shall be directed at the window of a residential unit located either within or adjacent to a project.

Certain outdoor lighting fixtures and activities are exempt from the above general requirements, including internally illuminated signs, architectural lighting whether it is freestanding or attached to a building, provided the lighting does not exceed an intensity of 60 watts, and pedestrian lighting that does not have an intensity greater than 60 watts.

The Los Angeles City Planning Department is currently evaluating and amending the CASP in order to strengthen the original vision and intent of the plan. City Planning is looking to make targeted revisions to the plan, including its incentive zoning system, and identify additional areas that may allow for affordable or mixed income housing development.[4]

Los Angeles River Improvement Overlay District

The Los Angeles River Improvement Overlay (RIO) District is a special use district established by Ordinance Nos. 183144 and 183145[5] to support implementation of the Los Angeles River Revitalization Plan and provides design guidelines related to landscaping; screening/fencing of parking facilities, mechanical equipment, and trash enclosures; exterior site lighting; and administrative review procedures for new development projects within the RIO District. The RIO District Ordinance also provides guidelines for new “complete” streets and includes a mobility strategy to ensure that the needs of pedestrians, bicyclists, transit riders, and vehicle drivers are considered when major projects or street improvements are undertaken. The RIO does not impose any limits on the size, use, height and/or setbacks of a building beyond what is restricted by the prevailing zoning and building codes. The RIO District Ordinance includes all of the neighborhoods within the City that are adjacent to the Los Angeles River. The RIO District’s boundaries generally extend for one-half mile on either side of the river, creating an area approximately 32 miles long and one mile wide of the Los Angeles River that flows within the City’s boundaries. Additionally, projects located within the Inner Core--areas adjacent to and abutting either side of the Los Angeles River--are also subject to design regulations on landscape buffers, fences, and river access. All of the parcels to the east of the Project alignment from Alameda Station to College Street are within the boundaries of the RIO District, but are not considered part of the Inner Core. The purpose of the RIO District is to:[6]

- Support the goals of the Los Angeles River Revitalization Master Plan;
- Contribute to the environmental and ecological health of the City's watersheds;

[4] Cornfield Arroyo Seco Specific Plan (CASP) Update. Los Angeles City Planning. Available at: https://planning.lacity.org/plans-policies/casp-update#about. Accessed May 2022.

[5] Los Angeles Department of City Planning. 2015. Zoning Information No. 2358. River Improvement Overlay District: Ordinance Nos. 183144 and 183145. Available at: http://zimas.lacity.org/documents/zoneinfo/ZI2358.pdf. Accessed May 2022.

[6] LAMC. Section 13.17.

- Establish a positive interface between river adjacent property and river parks and/or greenways;
- Promote pedestrian, bicycle and other multi-modal connection between the river and its surrounding neighborhoods;
- Provide native habitat and support local species;
- Provide an aesthetically pleasing environment for pedestrians and bicyclists accessing the river area;
- Provide safe, convenient access to and circulation along the river;
- Promote the river identity of river adjacent communities; and
- Support the Low Impact Development Ordinance, the City's Irrigation Guidelines, and the Standard Urban Stormwater Maintenance Program.

Los Angeles County Metropolitan Transportation Authority (Metro)

Metro Design Criteria

Metro adopted design guidelines that provide a uniform basis for the design of rail projects, and with suitable modification, for other future technology rail projects.[7] These policies and procedures pertain to design criteria for all construction over, under, or adjacent to a Metro facility or structure and would be implemented, as appropriate.

Metro Public Art Policy

Metro adopted an art program which mandates that the inclusion of art in the design of public spaces creates a more inviting environment, enlivens a functional world, and contributes to a positive experience for the system’s future riders. This policy consists of guidelines pertaining to community involvement, artist collaboration, and certain components of rail, including station design, trees and other landscaping, signage, street and pedestrian lighting, and public art.

Metro Adjacent Development Review

Published in February 2021, Metro has developed an adjacent development review process which guides developers, utility companies, and other third parties to consult with Metro for development, construction, and maintenance activities occurring within 100 feet from Metro right-of-way (ROW) and other real estate assets. The process ensures safety and aims to avoid conflicts to Metro transit services and operations.

3.1.2 Environmental Setting

This section discusses the existing visual conditions of the Project area, especially for the area of potential impact. Visual and aesthetics resources were identified including, but not limited to, structures of historic significance or visual prominence; open space and recreational areas;

[7] Los Angeles County Metropolitan Transportation Authority (Metro). 2018. Adjacent Construction Design Manual, Volume III, MTA Design Criteria and Standards.

distant views of the horizon from public locations; and landscaped areas. The following describes key terminology used in the discussion of aesthetics and visual resources.

Landscape Units and Key Observation Points

The Project alignment was subdivided into a series of landscape units (LUs) to capture the overall characteristics of different LUs along the alignment. LUs are typically defined by the limits of a particular viewshed or the distinct transition in the aesthetic setting that corresponds primarily to changes in land use. Key Observation Points (KOPs) (also known as key views) critical or representative of the visual character of the area were identified within each LU. These views may include the presence or absence of landscaping, the predominant land uses, the scale of buildings, or the scenic vistas, scenic resources, and substantive visual elements that are available, such as open space resources, street trees, and building frontages.

Visual Resources

Visual or aesthetic resources are defined and identified by assessing visual character and visual quality. As described below, the assessment of visual resources was made based on the cohesion or variation in form, the level of up-keep or deterioration of the built environment and the level of landscaping and visual attractiveness for each LU.

Visual Character

Visual character may include the following defined attributes, and is used to describe, not evaluate.

- **Form**: visual mass and shape
- **Line**: edges or linear definition
- **Color**: reflective brightness (i.e., light and dark) and hue (i.e., red, green)
- **Texture**: surface coarseness
- **Dominance**: position, size, or contrast
- **Scale**: apparent size as it relates to the surroundings
- **Diversity**: a variety of visual patterns
- **Continuity**: uninterrupted flow of form, line, color, or textural pattern

Visual Quality

Visual quality refers to the aesthetics of the landscape, which is based in part on the viewer's values and notions about what constitutes a quality setting. To establish an objective framework, the Federal Highway Administration (FHWA) concludes that vividness, intactness, and unity are valid and reliable criteria for evaluative appraisals of visual quality. Each criteria was assigned a qualitative ranking (low, moderate, and high) for each LU. The combined result of all three criteria indicates the degree of visual quality.

- **Vividness** is the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements. For example, high vividness represents dramatic background views toward the San Gabriel Mountains.

- **Intactness** is the integrity of visual features in the landscape, and the extent to which the landscape is free from non-typical visual intrusions. For example, high intactness embodies a consistent image of well-maintained homes or multi-family structures and street edge treatment.

- **Unity** is the extent to which visual elements combine to form a coherent, harmonious visual pattern. For example, high unity attests to the careful design and organization of buildings, structures, railroads, and streets.

Viewers and Viewer Response

Viewers are people whose views of the landscape may be altered by the proposed Project—either because the landscape itself has changed or their perception of the landscape has changed. Viewer groups were identified by observing the land uses and circulation patterns throughout the Project area.

Viewer response is a prediction of the viewer's reaction to changes in the visual or aesthetic environment and has two dimensions—viewer exposure and viewer sensitivity. As shown in Table 3.1-5 (Viewer Groups) below, viewer exposure is a measure of the viewer's ability to see a particular object. High viewer exposure helps predict that viewers will have a response to a visual change. Viewer sensitivity is a measure of the viewer's recognition of a particular object. High viewer sensitivity helps predict that viewers will have a high concern for any visual change. Local values may confer visual significance on landscape components and areas.

Table 3.1-5: Viewer Groups

Viewers	Description	Viewer Response	
		Viewer Exposure	**Viewer Sensitivity**
Pedestrians	People walking to or from land uses (e.g., business patrons, employees, students, transit users, retail shoppers, restaurant-goers, and civic building users)	High due to long duration of views and walking at a leisurely pace.	Moderate due to primary focus in other activities or engaged in observing their surroundings.
Recreationalists (including Tourists)	Users of parks, open space and trails (e.g., bicyclists, hikers).	Moderate due to somewhat long duration of views and riding or generally traveling at a slower speed.	High due to specifically seeking a pleasant visual setting or experience.
Motorists	Commuters, local residents, bus drivers and commercial truck drivers traveling to and from land uses.	Low due to short duration of views and high travel speeds.	Low due to task or demand of paying careful attention to the road ahead.

Source: Federal Highway Administration (FHWA). 2015. Guidelines for the Visual Impact Assessment of Highway Projects, Publication No. FHWA-HEP-15-029.

Moderate and highly sensitive viewers generally include pedestrians and recreationalists, respectively. Less sensitive viewers include motorists or commuters.

Under the L.A. California Environmental Quality Act (CEQA) Thresholds Guide, visual impacts are assessed based on changes to views from publicly accessible locations or public views.

Commercial and office tenants within buildings are not considered a viewer group in the analysis because their views are private views. As such, commercial and office tenants are not considered a viewer group. Similarly, residents within residential buildings are not considered a viewer group in the analysis. Any references to and analysis of residential views and resident viewer groups, which are assumed to be associated with private residential properties, are provided only for informational purposes, as the L.A. CEQA Thresholds Guide does not protect private views from residential properties.[8]

Area of Potential Impact

The geographic area of project visibility is referred to as the area of potential impact (API). It is determined by the physical constraints of the environment—landform (i.e., topography); land cover (i.e., vegetation and structures); and temporary presence of typical atmospheric conditions (i.e., smoke, dust, fog, and precipitation). In addition, the extent to which a project is visible is constrained by the physiological limits of human sight—location, proximity, and lighting. A review of the Project alignment was conducted to fully understand the viewsheds and its context. This included field visits, and review of existing Project area photographs, aerial photography, recent street views readily available online, and consideration of variations in Project area topography. As a result, it was determined that viewshed distances would vary along and adjacent to the Project alignment. Viewsheds would vary from approximately 0.25-mile up to approximately 0.68-mile from the Project alignment, which is appropriate to define the API (Figure 3.1-1).

3.1.2.1 Regional Setting

The regional visual setting is characterized by a primarily urban environment featuring a variety of commercial, industrial, and residential development types, including passive open space areas and transit/transportation uses, and varied topographic conditions. The Project area has several visual resources, including views of the downtown Los Angeles skyline, Los Angeles Union Station (LAUS), El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains. The Project area can be characterized as relatively flat with minor changes in elevation. The Elysian Hills is the only feature in the Project area that has a moderate to highly rugged topography. The development pattern within the Project area is generally medium-intensity residential, commercial, and industrial land uses, and the area is of an urban character.

3.1.2.2 Scenic Vistas

The term “scenic vista” generally refers to visual access to, or the visibility of, a particular sight from a given vantage point or corridor.[9] The City notes the value of preserving sightlines to designated scenic resources or areas of visual interest from public vantage points. The subjects of valued or recognized views may be focal (meaning of specific individual resources), or panoramic (meaning broad geographic area). Panoramic views are typically associated with scenic vistas that provide a sweeping geographic orientation. Examples of panoramic views include urban skylines, valleys, mountain ranges, or large bodies of water. Examples of focal views include public art/signs and notable buildings and structures. The nature of a view may be unique, such as a view from an elevated vantage point or particular angle.

8 City of Los Angeles, CEQA Thresholds Guide, 2006.
9 City of Los Angeles, CEQA Thresholds Guide, 2006.

Figure 3.1-1: Area of Potential Impact

Planning documents applicable to the Project area were reviewed to determine whether the Project would affect scenic vistas. Specific to the proposed Project, views of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains, are taken into consideration. Other areas of visual interest from public vantage points were also considered. Specifically, the Los Angeles State Historic Park is a large open space that is in stark contrast to the dramatic skyline of downtown Los Angeles. Sometimes referred to as the “front porch” of the City, there are no other sites that capture this welcoming view of downtown Los Angeles[10]. As such, the Los Angeles State Historic Park is considered to be visually memorable.

Existing views across the API and surrounding area, as discussed below, are based on field observations from surrounding public streets, freeways, and plazas. Although views from representative vantage points are discussed for informational purposes, the degree of impact relative to the threshold applies to views from public vantage points. Under the L.A. CEQA Thresholds Guide, an office building or private residence would not be considered a viewing location since views of broad horizons, aesthetic structures, and other scenic resources would not be available to the public.[11]

3.1.2.3 Scenic Resources

Scenic resources refer to natural or manmade features of high aesthetic quality. Views of these resources from public and private areas contribute to the overall attractiveness of the City and the quality of life enjoyed by its residents, visitors, and workforce. Such features can include landscaping, heritage trees, or natural vegetation and landforms, as well as buildings and other structures with aesthetic value. Pursuant to CEQA Guidelines Appendix G, this area of consideration includes specific mention of such natural or manmade features that are located within the view field of a State scenic highway.

No State- or County-designated scenic highways or eligible State scenic highways are located in the Project area. The closest officially designated State scenic highway is State Route 2 (SR-2) located approximately 11 miles north of the Project alignment.[12]

The Arroyo Seco Parkway/SR-110, which runs northeasterly from its interchange with U.S. 101 to East Glenarm Street in Pasadena, is also located within the Project area.[13] While the Arroyo Seco Parkway/SR-110 is a National Scenic Byway and a California Historic Parkway, the SR-110 is not an officially designated State scenic highway, as determined by California Department of Transportation (Caltrans) *Scenic Highways – Scenic Highway System List.*[14] Refer to the *Visual Impact Assessment for the Los Angeles Aerial Rapid Transit Project* in Appendix C of this Draft

10 California State Parks. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.laparksalliance.org/wp-content/uploads/2021/02/lashp-general-plan-eir.pdf. Accessed August 2022.

11 City of Los Angeles, CEQA Thresholds Guide, 2006.

12 Caltrans. 2022. *Scenic Highways – Scenic Highway System Lists*. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed April 2022.

13 NPS. 2022. *California: Arroyo Seco Parkway*, Available at: https://www.nps.gov/places/arroyo-seco-parkway.htm. Accessed May 2022.

14 Caltrans. 2022. *Scenic Highways – Scenic Highway System Lists*. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed April 2022.

EIR for information on the definitions of and criteria for National Scenic Byways and California Historic Parkways.

3.1.2.4 Light and Glare

The Project area is a developed, urban area with a high amount of existing ambient lighting. The high levels of ambient lighting exist due to vehicular and pedestrian street lighting, building security lighting, outdoor landscaping lighting, and lighting along and adjacent to the various dedicated transit guideways traveling to Union Station, such as the elevated Metro L Line (Gold). In addition, high levels of ambient lighting are exhibited from vehicle and truck headlights traveling on streets and the SR-110. Cathedral High School currently has high-poled sports field lighting visible from North Broadway, Los Angeles State Historic Park, and area residents when in use. Dodger Stadium has extensive television quality sport field lighting in use during games and special events. Large special events which occasionally occur at the Los Angeles State Historic Park can also generate high levels of lighting.

3.1.2.5 Shading

Shadows are cast in a clockwise direction from west/northwest to east/northeast, from the morning to afternoon hours, during the Spring, Summer, Autumn, and Winter seasons of the year. Generally, the shortest shadows are cast during the Summer and grow increasingly longer until the Winter. During the Winter, the sun is lower in the sky and shadows are at their maximum coverage lengths. Shadow-sensitive uses generally include routinely useable outdoor spaces associated with residential, recreational, or institutional land uses; commercial uses, such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas; nurseries; and existing solar collectors/panels. Due to the relatively dense arrangement of existing buildings and structures in the Project area, a large amount of existing shadow coverage likely currently exists.

3.1.2.6 Local Setting

The following describes the existing visual and aesthetic conditions in the immediate vicinity of the Project alignment. The proposed Project commences adjacent to El Pueblo and the planned LAUS Forecourt and terminates at Dodger Stadium. From the Alameda Station, the proposed Project alignment would generally follow Alameda Street and Spring Street in a northeast direction through the community of Chinatown, flying over the Los Angeles State Historic Park to Bishops Road and then flying over the SR-110 and terminating at Dodger Stadium, located in the community of Elysian Park.

Six generalized LUs were defined along the proposed Project alignment and are described below. The LUs encompass the location of the proposed Project alignment and adjacent area, divided into LUs beginning in the southern portion of the Project alignment and ending in the north. The existing visual character and quality, as well as the primary viewers, are described below for each LU. In addition, each LU includes a rating of the existing vividness, intactness, unity, and visual quality as described above. Table 3.1-6 lists and describes each LU, the corresponding 30 KOPs (or key views), and the viewer groups potentially affected by the Project. Figure 3.1-2 illustrates the boundaries of the LUs and locations of the KOPs. Further details on these KOPs which were utilized for before and after photorealistic and true to scale visual simulations and locations of sensitive viewers that potentially would be visually impacted by the Project are discussed in Appendix C.

Table 3.1-6: Landscape Units/LUs and KOPs

Landscape Unit	Extent	KOPs Included	Viewer Groups
1	Arcadia Street to Cesar E. Chavez Avenue	KOP 1 through KOP 7	Motorist, Union Station patron, pedestrian, El Pueblo tourist
2	Cesar E. Chavez Avenue to Alpine Street	KOP 8 through KOP 10	Motorist, pedestrian
3	Alpine Street to Southwestern Corner of Los Angeles State Historic Park	KOP 11 through KOP 15	Motorist, transit commuter, pedestrian
4	Southwestern Corner of Los Angeles State Historic Park to North Broadway	KOP 16 through KOP 19	Motorist, transit commuter, pedestrian, recreationalist
5	North Broadway to SR-110 (Arroyo Seco Parkway)	KOP 20 through KOP 25	Motorist, pedestrian, patrons of nearby school
6	SR-110 (Arroyo Seco Parkway) to Dodger Stadium	KOP 26 through KOP 30	Motorist, pedestrian, Dodger Stadium patron

Landscape Unit 1 – Arcadia Street to Cesar E. Chavez Avenue

Landscape Unit 1 (LU-1) begins at the intersection of Alameda Street and Arcadia Street, directly north of U.S. 101, and continues north along Alameda Street to Cesar E. Chavez Avenue. A detailed discussion of LU-1 is provided in Section 4.2.1 of the Visual Impact Assessment (Appendix C). In addition, existing and with Project visual simulations within LU-1 are provided in Figure 5-1 through Figure 5-8 (Appendix C). LU-1 is characterized by historic landmarks that are visually memorable. The historic Los Angeles Union Station Passenger Terminal is located on the east side of Alameda Street, directly across from the El Pueblo de Los Angeles (El Pueblo) historic landmark and the Placita de Dolores located on the west side of Alameda Street. LAUS includes several lines of tall palm trees and other landscaping along the vehicular and pedestrian entrance/exit from Alameda Street (Figure 3.1-3). Originally constructed in 1939, LAUS includes a combination of Spanish Colonial Revival and Art Deco architectural styles, which result in the building and grounds as being one of the most identifiable landmarks in the City.[15]

[15] Los Angeles Conservancy. 2022. Los Angeles Union Station: Overview. Available at: https://www.laconservancy.org/locations/los-angeles-union-station. Accessed May 2022.

Figure 3.1-2: Map of Landscape Units

Figure 3.1-3: Existing View of LAUS Looking South along Alameda Street

El Pueblo is near the site of the early Los Angeles pueblo or town where settlers established a farming community in 1781 and is considered to be the historic and symbolic heart of the City.[16] The attractions, museums, and other uses located within El Pueblo in LU-1 include Los Angeles Plaza Park (Father Serra Park), Placita de Dolores, Avila Adobe, Olvera Street marketplace, Plaza Substation, Old Winery, El Pueblo Gallery, and surface Parking Lot 3. Parking Lot 5 within El Pueblo is currently being utilized as the site of a temporary homeless shelter operated by the City of Los Angeles. El Pueblo includes a mix of adobe buildings, large Victorian commercial blocks, and Spanish Revival style buildings.[17] The low- and mid-rise buildings along Olvera Street face inward, toward each other, rather than outward toward Alameda Street and the proposed station location.

Other visible uses within this LU include the El Monte Busway entrance, the three-story First 5 LA office building, surface parking associated with LAUS, and the Mozaic Apartments complex. The Mozaic Apartments are located adjacent and north of LAUS, on the south side of Cesar E. Chavez Avenue. The five-story complex includes residential apartment windows that face Alameda Street.

The primary viewers within LU-1 consist of motorists, pedestrians, residents, Union Station patrons, and El Pueblo tourists. Under the L.A. CEQA Thresholds Guide, visual impacts are

16 El Pueblo de Los Angeles Historical Monument. 2022. About Us. Available at: https://elpueblo.lacity.org/about-us. Accessed May 2022.

17 El Pueblo de Los Angeles Historical Monument. 2022. Educational Resources. Available at: https://elpueblo.lacity.org/educational-resources. Accessed May 2022.

assessed based on changes to views from publicly accessible locations or public views. As such, any references to and analysis of residential views and resident viewer groups, which are assumed to be associated with private residential properties, are provided only for informational purposes, as the L.A. CEQA Thresholds Guide does not protect private views from residential properties.

Alameda Street has six travel lanes, and trees located along the public sidewalk adjacent to a majority of El Pueblo on the west side of Alameda Street. In addition, landscaping provided within the Mozaic Apartments, El Pueblo, and LAUS properties are visible. A mix of typical roadway lighting and decorative pedestrian-level lighting is provided. There are south-facing views of some downtown Los Angeles multi-story buildings, including City Hall, as well as east/southeast-facing views of multi-story buildings, including the Metro Headquarters Building (One Gateway Plaza). There is a distant north-facing view of the Elysian Hills. The most prominent views are of LAUS and El Pueblo. The existing visual quality of LU-1 is moderately high due to the presence of these two historic landmarks.

Landscape Unit 2 – Cesar E. Chavez Avenue to Alpine Street

Landscape Unit 2 (LU-2) begins on the north side of Cesar E. Chavez Avenue and continues north along Alameda Street to the south side of Alpine Street. In addition, existing and with Project visual simulations within LU-1 are provided in Figure 5-1 through Figure 5-8 (Appendix C). In addition, existing and with Project visual simulations within LU-2 are provided in Figure 5-9 through Figure 5-11 (Appendix C). LU-2 is characterized by a mix of commercial, institutional, open space, and other uses. The United States Post Office Terminal Annex building is located on the northeast corner of Cesar E. Chavez Avenue approximately 185 feet east of Alameda Street. Constructed in 1938, it is a historic landmark due to its architecture, urban design impact on the surrounding area, and its lobby murals. The architectural style includes an eclectic mix of Mission and Spanish Colonial Revival, with elements of Pueblo and Islamic.[18] Tall palm trees frame both sides of the main building entrance on the western façade, which faces Alameda Street.

Philippe the Original is located at the northwest corner of Alameda and Ord Streets, and was constructed in 1925. Previously a machine shop with a hotel on the second floor, the building has served as the longtime location of Philippe the Original, or Philippe’s restaurant, since 1951. Philippe the Original is a historical resource and was identified as eligible for listing in national, state, and local registers in a historic resources survey.

Other visible uses within this LU include a gas station, the four-story Metro Plaza Hotel, The California Endowment complex of modern buildings of one to four stories, small-scale and older commercial businesses and restaurants, Alameda Triangle, a City ROW that contains landscaping and hardscaping (Figure 3.1-4), a large industrial complex of up to three stories that houses auto repair and fleet services, and undeveloped land.

[18] NPS. 1985. National Register of Historic Places Inventory – Nomination Form (U.S. Post Office-Los Angeles Terminal Annex Post Office). Available at: https://npgallery.nps.gov/NRHP/GetAsset/NRHP/85000131_text. Accessed May 2022.

Figure 3.1-4: Existing View of Alameda Triangle Looking North from Alameda Street

The primary viewers within LU-2 consist of motorists and pedestrians. Alameda Street has five to six travel lanes in this LU, with small to mature trees located along the public sidewalk on both sides of the street from Main Street (just south of Alameda Triangle) north to Alpine Street. Additional trees and landscaping are visible adjacent to the Alameda Street public ROW on the properties of the United States Post Office Terminal Annex, The California Endowment, and the Alameda Triangle. A mix of typical roadway lighting, decorative roadway lighting, and decorative pedestrian-level lighting is provided. There is a south-facing view of some downtown Los Angeles multi-story buildings, including City Hall. There are interrupted and distant north-facing views of the Elysian Hills, as well as the San Gabriel Mountains to the northeast (specifically when viewing northeast along Main Street from Alameda Street). In addition, the elevated Metro L Line (Gold) structure and the multi-story Metro at Chinatown Senior Lofts building located at the northwest corner of Alameda Street and Alpine Street are visible from the northern portion of LU-2. Overhead power transmission lines and poles are located along portions of the west side of Alameda Street within this LU.

The most prominent views are of the modern buildings and aesthetically pleasing landscaping visible as part of The California Endowment, and secondarily the historic United States Post Office Terminal Annex building accentuated by palm trees. However, there are also elements within this LU that have an older visual impression. Therefore, the existing visual quality of LU-2 is moderately low.

Landscape Unit 3 – Alpine Street to Southwestern Corner of Los Angeles State Historic Park

Landscape Unit 3 (LU-3) begins on the north side of Alpine Street and continues north along Alameda Street to the southwestern corner of Los Angeles State Historic Park, approximately 535 feet north of College Street. A detailed discussion of LU-3 is provided in Section 4.2.3 of the Visual Impact Assessment (Appendix C). In addition, existing and with Project visual simulations within LU-3 are provided in Figure 5-12 through Figure 5-17 (Appendix C). Starting on the north side of College Street, Alameda Street becomes Spring Street. LU-3 is characterized by a mix of multi-family residential, commercial, industrial, parking, and transit uses, as well as undeveloped land.

Visible uses within this LU include the 7- to 10-story Metro at Chinatown Senior Lofts building (Figure 3.1-5), an older three-story mixed use building including commercial/restaurant on the ground floor and multi-family residential above, two-story Homeboy Bakery/Homegirl Café, a large area of school bus parking, the elevated Metro L Line (Gold) Chinatown Station and tracks, five- to six-story Blossom Plaza multi-family residential complex, historic Capitol Milling Company Building which has recently been adapted into office and restaurant spaces, and a large vacant parcel. The elevated Metro L Line (Gold) Chinatown Station includes architecture and roof features consistent with traditional Chinese architecture found in the adjacent Chinatown community. The elevated Metro L Line (Gold) light rail guideway crosses over Alameda Street just north of Alpine Street, and then travels along the west side of Alameda Street/Spring Street. A large concrete column, which supports the existing elevated guideway, is located in the center of the roadway approximately 200 feet north of Alpine Street.

The primary viewers within LU-3 consist of motorists, residents, pedestrians, and transit commuters. As previously mentioned, visual impacts under the L.A. CEQA Thresholds Guide are assessed based on changes to public views. As such, analysis of resident viewer groups is provided only for informational purposes, as the L.A. CEQA Thresholds Guide does not protect private views from residential properties.

Alameda Street/Spring Street provides five to six travel lanes in this LU, with small trees located along the public sidewalk on both sides of the street throughout the LU, except for the sidewalk adjacent to the Metro L Line (Gold) Chinatown Station. Additional small trees and shrubs are occasionally visible adjacent to the Alameda Street/Spring Street public ROW on the private properties. A mix of typical roadway lighting, decorative roadway lighting, and decorative pedestrian-level lighting is provided. In addition, security lighting is provided at the elevated Metro L Line (Gold) Chinatown Station and tracks. There is a south-facing view of some downtown Los Angeles multi-story buildings, including the Metro Headquarters Building (One Gateway Plaza). There are interrupted and distant north-facing views of the Elysian Hills and a small portion of the San Gabriel Mountains. In addition, the elevated Metro L Line (Gold) tracks and landscaping associated with the Los Angeles State Historic Park are visible from the northern portion of LU-3. Overhead power transmission lines and poles located along North Broadway to the west, and along Main Street to the east, are visible from portions of this LU. In addition, the overhead catenary wire system associated with the operation of the Metro L Line (Gold) are visible on the elevated structure.

The most prominent views are of the elevated Metro L Line (Gold) Chinatown Station and tracks. The existing visual quality of LU-3 is low due to the lack of visual resources and the interruption of views due to the elevated Metro L Line (Gold) Station and structure above portions of Alameda Street/Spring Street.

Figure 3.1-5: Existing View of Metro L Line (Gold) Chinatown Station Looking North along Alameda Street

Landscape Unit 4 – Southwestern Corner of Los Angeles State Historic Park to North Broadway

Landscape Unit 4 (LU-4) begins at the southwestern corner of Los Angeles State Historic Park, approximately 535 feet north of College Street, northwest to North Broadway. A detailed discussion of LU-4 is provided in Section 4.2.4 of the Visual Impact Assessment (Appendix C). In addition, existing and with Project visual simulations within LU-4 are provided in Figure 5-18 through Figure 5-22 (Appendix C). This LU also includes Spring Street from the southwestern corner of Los Angeles State Historic Park to the northern portion of the park adjacent to North Broadway. Other than the Los Angeles State Historic Park, LU-4 is characterized by a mix of commercial/office, industrial, institutional, and transit uses, as well as undeveloped land. LU-4 is also characterized by park/open space, including the Los Angeles State Historic Park (Figure 3.1-6), which is a 32-acre State of California Park that includes the site of the historic River Station Area operated by the Southern Pacific Railroad in the 1890s.[19] Visual features of the park within LU-4 include an exposed area of the brick-encased Zanja Madre, which is the historic earthen-walled ditch that originally carried water from the Los Angeles River to El Pueblo.[20] Currently, a 14-foot wide elevated walkway with observation deck, known as the Roundhouse, traces the

19 Los Angeles State Historic Park (LASHP). 2022. History at LA State Historic Park. Available at: https://lastatehistoricpark.org/history/. Accessed May 2022.

20 LASHP. 2022. Our History. Available at: https://lastatehistoricpark.org/history/. Accessed May 2022.

perimeter of the historic River Station Roundhouse site. In addition, visible features of the park also includes numerous walkways, mature trees, unique hardscape features, the “Cargo Snack Shack”, the flagpole, and a welcome/visitor’s center. More distant views of the Elysian Hills to the west/northwest, the San Gabriel Mountains to the north, and downtown Los Angeles to the southwest are available in LU-4.

Figure 3.1-6: Existing View of Los Angeles State Historic Park Looking North from the Southern Entrance along Spring Street

Other visible uses within this LU includes one- to two-story commercial/office and industrial uses located on the southeastern side of Spring Street, across Spring Street and to the southeast of Los Angeles State Historic Park. The Metro L Line (Gold) light rail tracks are located at-grade adjacent and north/northwest of Los Angeles State Historic Park. North Broadway is elevated and directly north/northwest of the Metro L Line (Gold) tracks and Los Angeles State Historic Park. A slope separates the Metro L Line (Gold) tracks from North Broadway and consists of a vacant strip of land that is lightly vegetated and contains two billboards.

The primary viewers within LU-4 consist of motorists, residents, pedestrians, transit commuters, and recreationalists. As previously mentioned, visual impacts under the L.A. CEQA Thresholds Guide are assessed based on changes to public views. As such, description of resident viewer groups is provided only for informational purposes, as the L.A. CEQA Thresholds Guide does not protect private views from residential properties.

Spring Street provides four to five travel lanes in this LU, with small trees located periodically along the public sidewalk on the southeast side of the street throughout the LU. Numerous additional small and medium sized trees and shrubs, and grassy areas, are visible adjacent to Spring Street public ROW within the Los Angeles State Historic Park. A mix of typical roadway lighting and decorative roadway lighting is provided. In addition, security lighting is provided at Los Angeles State Historic Park, as well as the other private properties in the LU. There is a south-facing view of some downtown Los Angeles multi-story buildings, including the Metro Headquarters Building (One Gateway Plaza) and the downtown skyline, as well as the elevated Metro L Line (Gold) Chinatown Station. There are northwest-looking views of the Elysian Hills and the existing buildings located along the elevated North Broadway. A small portion of the San Gabriel Mountains is visible viewing to the north. Overhead power transmission lines and poles located along the southeast side of Spring Street are visible from portions of this LU. A tall tower is visible to the northwest, which is on top of Elysian Park Radio Hill within the Elysian Hills. The tower includes an antenna clearly visible in the area. In addition, the overhead catenary wire system associated with the operation of the Metro L Line (Gold) are visible transitioning from elevated to at-grade.

The most prominent views are of the Los Angeles State Historic Park and associated landscaping and hardscaping features, as well as the views of downtown Los Angeles looking south from Los Angeles State Historic Park. Secondary in prominence is the view from the park and Spring Street of Elysian Hills and the buildings/uses located along North Broadway, which is elevated above the grade of the park. Although noticeable, the features in this view are inconsistent visually and the view is somewhat cluttered. However, views from the Los Angeles State Historic Park towards the surrounding existing urban landscape exhibit various visual values. The existing visual quality of LU-4 is moderately low because although the park landscaping and view of downtown are aesthetically pleasing, and presents a broad view of the historical development of downtown Los Angeles, the area outside of the park lacks visual quality and is inconsistent with the features of the park.

Landscape Unit 5 – North Broadway to SR-110

Landscape Unit 5 (LU-5) begins on the southeast side of North Broadway, which is located at a slightly higher elevation than the Metro L Line (Gold) tracks and Los Angeles State Historic Park located directly to the southeast. A detailed discussion of LU-5 is provided in Section 4.2.5 of the Visual Impact Assessment (Appendix C). In addition, existing and with Project visual simulations within LU-5 are provided in Figure 5-23 through Figure 5-28 (Appendix C). LU-5 is characterized by a mix of commercial/office, institutional, single- and multi-family residential, open space uses, as well as undeveloped land, that are not visually memorable.

North Broadway includes commercial, office, and some residential uses, as well as overhead power transmission lines and poles and visible billboards. Other visible uses within this LU include Cathedral High School, which includes one- to two-story brick buildings, modern and industrial looking office space (one-story) (Figure 3.1-7), older one- to two-story single- and multi-family residential buildings, Radio Hill Gardens and Elysian Park open space, and the eastern boundary of SR-110. Some of the buildings are well-kept and have historic features, such as the buildings on the west side of Bishops Road as part of Cathedral High School, as well as St. Peter's Italian Catholic Church on the north side of North Broadway just northeast of Cottage Home Street. Other buildings are older, such as certain residential structures located along Savoy Street. However, there are two historic residential structures also located along Savoy Street (437 and 451 East Savoy Street).

Figure 3.1-7: Existing View Looking Northwest Towards Bishops Road from North Broadway

The primary viewers within LU-5 consist of motorists, residents, pedestrians, and patrons of the nearby school. As previously mentioned, visual impacts under the L.A. CEQA Thresholds Guide are assessed based on changes to public views. As such, analysis of resident viewer groups is provided only for informational purposes, as the L.A. CEQA Thresholds Guide does not protect private views from residential properties.

North Broadway has four travel lanes in this LU, with small trees located periodically along the public sidewalk on the northwest side of the street throughout the LU. Bishops Road provides two travel lanes and does not provide trees within the public sidewalk. Trees and other landscaping are visible periodically within private properties. Along Bishops Road, there are several mature trees, shrubs, and other landscaping visible on the school property adjacent to the public sidewalk on the west side of the street. From the northern portion of Bishops Road, where the street transitions to Cottage Home Street adjacent to SR-110, views to the northeast include the open space area of Radio Hill Gardens, which includes numerous mature trees, grass, and other vegetation. A tall tower is visible within Radio Hill Gardens, which is on top of Elysian Park Radio Hill within the Elysian Hills. The tower includes an antenna clearly visible in the area.

A mix of typical roadway lighting and decorative pedestrian-level lighting is provided along North Broadway. Only typical roadway lighting is provided on Bishops Road and Savoy Street. High-poled sport field lighting is visible on the Cathedral High School campus, particularly when viewing the campus from North Broadway. In addition, security lighting is provided at Cathedral High School on the buildings that front onto Bishops Road. There is an interrupted south/ southwest-facing view of the downtown Los Angeles skyline, including the Metro Headquarters Building (One Gateway Plaza) and City Hall from North Broadway. Also, from North Broadway, there is a south/southeast-facing view of the Los Angeles State Historic Park and Roundhouse, which are located down-slope from North Broadway. Views from North Broadway to the north include the Elysian Hills, and to the west also include Elysian Hills and the top of the Dodger Stadium high-poled sports field lighting. Overhead power transmission lines and poles are located along the northwest side of North Broadway and on the east side of Bishops Road. Billboards and other signage is also visible along the south side of North Broadway. Further along Bishops Road to the north, the Arroyo Seco Parkway/SR-110 on- and off-ramps are also visible.

The most prominent views are of the downtown Los Angeles skyline from along North Broadway. Secondary in prominence are views from North Broadway looking down into Los Angeles State Historic Park and the associated elevated Roundhouse. Although these views are aesthetically pleasing, the existing visual quality of LU-5 is moderately low because it includes numerous visual interruptions, as well as intervening development, billboards, and overhead power lines/poles which impact the quality of the downtown views.

Landscape Unit 6 – SR-110 to Dodger Stadium

Landscape Unit 6 (LU-6) begins on the eastern boundary of the northbound SR-110/Arroyo Seco Parkway. A detailed discussion of LU-6 is provided in Section 4.2.6 of the Visual Impact Assessment (Appendix C). In addition, existing and with Project visual simulations within LU-6 are provided in Figure 5-29 through Figure 5-34 (Appendix C). The northbound Arroyo Seco Parkway in this area is located slightly upslope as compared to the area in LU-5 discussed above. The southbound side of the freeway (to the west) is separated and upslope from the northbound side. Dodger Stadium is located at a higher elevation than the freeway and is atop the Elysian Hills in an area locally known as Chavez Ravine. The community of Solano Canyon, an area of single- and multi-family residences, is located in a canyon primarily along Solano Avenue within the Elysian Hills, which is traversed by SR-110. LU-6 is characterized by transportation/public facility uses, residential and open space uses.

The Arroyo Seco Parkway and Dodger Stadium in this LU are visually memorable. As previously discussed, the Arroyo Seco Parkway in the Project area is a designated National Scenic Byway and California Historic Parkway. The freeway was constructed in phases and was considered both a scenic parkway, as well as a high-speed, limited-access freeway.[21] The freeway has four travel lanes in each direction and is known for its views of the downtown Los Angeles skyline from the southbound direction. Dodger Stadium was completed in 1962 and is considered to have a Mid-Century Modern architectural style.[22]

The primary viewers within LU-6 consist of motorists, residents, pedestrians, and patrons of Dodger Stadium. As previously mentioned, visual impacts under the L.A. CEQA Thresholds Guide are assessed based on changes to public views. As such, analysis of resident viewer groups is provided only for informational purposes, as the L.A. CEQA Thresholds Guide does not protect private views from residential properties.

21 NPS. 2022. California: Arroyo Seco Parkway. Available at: https://www.nps.gov/places/arroyo-seco-parkway.htm. Accessed September 2022.

22 Los Angeles Conservancy. 2022. Dodger Stadium: Overview. Available at: https://www.laconservancy.org/locations/dodger-stadium. Accessed May 2022.

Trees and other vegetation are visible adjacent to the southbound and northbound Arroyo Seco Parkway, as well as in the area surrounding the large Dodger Stadium parking areas that are on all sides of the stadium (Figure 3.1-8). There are south/southeast-facing views of the downtown Los Angeles skyline from the southbound Arroyo Seco Parkway. The north-facing view along the northbound Arroyo Seco Parkway includes mature trees on both sides of the freeway, as well as the tall antenna tower located atop Elysian Park Radio Hill within the Elysian Hills. Due to the topography of Elysian Hills, views from within the community of Solano Canyon are primarily blocked.

A mix of typical roadway lighting and decorative roadway lighting is provided on both sides of the Arroyo Seco Parkway. Dodger Stadium includes a large amount of standard parking lot lighting in the vast parking areas adjacent to the stadium. The stadium includes high-poled sports field lighting that are specified to be bright enough for sports television filming standards. Some graffiti is visible on walls bordering the Arroyo Seco Parkway.

The most prominent views are of the downtown Los Angeles skyline from the southbound Arroyo Seco Parkway. The existing visual quality of LU-6 is moderate due to the interruption of views, including the view of downtown, as well as the memorable quality of Dodger Stadium.

Figure 3.1-8: Existing View of Dodger Stadium Parking Lot

Summary of Existing Visual Quality of Landscape Units

Although the Project alignment is not a designated or proposed scenic corridor, it offers motorists, pedestrians, and recreationalists (including tourists) fleeting and periodic views of the San Gabriel Mountains to the north/northeast, downtown Los Angeles skyline to the south/southeast, and Elysian Hills to the west/northwest. The historic Los Angeles Union Station Passenger Terminal and El Pueblo both provide memorable views of these landmarks to all viewer groups. The LAUS, El Pueblo, U.S. Post Office Annex building, The California Endowment complex, Capital Milling Company building facades, Los Angeles State Historic Park, Cathedral High School buildings, and St. Peter's Italian Catholic Church are noticeable from a visual and landscape perspective. However, views of landmarks and visually noticeable features throughout a large portion of the Project alignment are interrupted or obscured by transmission and power lines, billboards, and intervening development. Most of the elements along the Project alignment are typical of an urban environment, which results in an overall visual quality classification of moderate when combining all three visual quality criteria. Table 3.1-7 summarizes the existing visual quality of the LUs, using a low, moderate, or high ranking based on the FHWA's three visual assessment components (vividness, intactness, and unity). Overall, vividness along the Project alignment is characterized by the memorable views of the LAUS, El Pueblo, and United States Post Office Terminal Annex building historic landmarks, along with the Los Angeles State Historic Park and scenic Arroyo Seco Parkway. Intactness along the Project alignment is exhibited in the street lighting fixtures along Alameda Street near LAUS and El Pueblo, which complement the historic features in the area, along with the well-maintained landscaped edge of the Los Angeles State Historic Park along Spring Street. In addition, unity along the Project alignment is evident in the design and arrangement of buildings associated with Cathedral High School along Bishops Road, as well as at The California Endowment complex and LAUS.

3.1.3 Methodology

The methodology approach presented herein generally follows the guidance outlined in the Guidelines for the Visual Impact Assessment of Highway Projects (2015) published by the FHWA.[23] Despite assessment guidance, it is acknowledged that the findings of an analysis of existing visual or aesthetic resources and potential visual or aesthetic impacts can be highly subjective, dependent upon the background of the assessor and the opinions of viewers. The qualities that create an aesthetically pleasing setting or that result in the perception of a visual element as aesthetically positive or negative vary from person to person. Different viewers may consider a change in the visual environment as either beneficial or adverse.

The analysis of aesthetics considers the visual quality of the area immediately surrounding the proposed Project alignment and the impacts of the proposed Project with respect to the existing aesthetic environment. The analysis considers the physical aspects of the Project and its associated design features, as well as an evaluation of visual simulations showing existing and future conditions at representative locations. The following steps were followed to assess the existing aesthetic setting and potential aesthetic impacts with implementation of the proposed Project:

[23] FHWA. 2015. Guidelines for Visual Impact Assessment of Highway Projects, Publication No. FHWA-HEP-15-029. Available at: https://www.environment.fhwa.dot.gov/env_topics/other_topics/VIA_Guidelines_for_Highway_Projects.pdf. Accessed September 2022.

Table 3.1-7: Summary of Visual Quality of the Project Alignment

Landscape Unit	Visual Features	Vividness	Intactness	Unity	Visual Quality
LU-1	Landmarks LAUS and El Pueblo (including Olvera Street, Father Serra Park, Placita de Dolores, and Avila Adobe)	High	Moderate	Moderate	Moderately High
LU-2	Landmark United States Post Office Terminal Annex building, as well as The California Endowment landscaping and Alameda Triangle; overhead power lines and poles, undeveloped land	Moderate	Low	Low	Moderately Low
LU-3	Capitol Milling Company building, elevated Metro L Line (Gold) Chinatown Station and tracks, as well as concrete support column in the center of street; overhead power lines and poles, undeveloped land	Low	Low	Low	Low
LU-4	Los Angeles State Historic Park landscaping and views of downtown Los Angeles skyline, view of Elysian Hills and North Broadway buildings, overhead power lines, undeveloped land	Moderate	Low	Low	Moderately Low
LU-5	Los Angeles State Historic Park landscaping and elevated Roundhouse, views of downtown Los Angeles skyline, Radio Hill Gardens tower and antenna, overhead power lines	Moderate	Low	Low	Moderately Low
LU-6	Scenic Arroyo Seco Parkway (SR-110), Dodger Stadium, numerous trees and other vegetation, graffiti	Moderate	Low	Moderate	Moderate

1. Identify the area of potential impact including the geographic area of project visibility.
2. Identify landscape units, which includes the limits of a particular viewshed or the distinct transition in the aesthetic setting that correspond primarily to changes in land use.
3. Identify key observation points/key views which include views critical or representative of the visual character of the area.
4. Describe existing aesthetic resources (visual character and visual quality).
5. Describe potential viewers and predict viewer response including exposure and sensitivity.
6. Describe the massing and scale of proposed Project. Consider other factors such as open space, which may be anticipated on the basis of the proposed Project’s design features.

7. Depict the visual appearance of the Project components and assess their aesthetic impacts through before and after visual simulations.

8. Identify visual impacts for each LU, with as much objectivity as is practical given the subjective nature of aesthetic perceptions, by assessing changes to the visual resources (i.e., visual character and visual quality) and predicting viewer response to those changes.

Visual or aesthetic impacts may include the loss of scenic resources, obstruction of scenic views, and the introduction of new project-related features that may influence the significance, scale, or character of the existing visual environment. Project-related features associated with the proposed Project consist of cables, three passenger stations, a non-passenger junction, towers, gondola cabins, cables, signage, and lighting.

The extent of visual impacts is determined for each LU, with as much objectivity as is practical given the subjective nature of aesthetic perceptions, by assessing changes to the visual resources (i.e., visual character and visual quality) and predicting viewer response to those changes.

Changes in visual character is evaluated by identifying how visually compatible a project would be with the existing visual condition. If the visual character of the project would be similar to the existing visual character, visual compatibility would be high. If the visual character of the project contrasts strongly with the existing visual character, the visual compatibility would be low. Similarly, to evaluate the change in visual quality, the existing visual quality ratings are compared to the overall ratings for post-project conditions. In terms of viewer response, a minor change to the existing visual resource would have a low viewer response to change; a moderate change with moderate viewer response; and a high level of change with high viewer response. Architectural renderings and photo-realistic visual simulations were created and used to illustrate where visual changes would be most noticeable after implementation of the proposed Project. These renderings are conceptual and do not represent the final design of the Project at this time.

Based on the assessment framework described above, the overall visual impacts were qualitatively categorized or ranked as low, moderate, or high, as described in Table 3.1-8.

Table 3.1-8: Visual Impacts

Visual Impact	Change in Visual Resources	Change in KOPs	Level of Viewer Response
Low	Slight change; new project features would be built in a manner generally compatible with the existing environment	No change	Little or no response to change because it is barely noticeable
Moderate	Moderate change	Moderate or negligible change	Moderate or sensible response
High	Extensive change; new visual elements would be incompatible with the existing environment	Prevalent change; new views would be incompatible with the existing environment	High due to visual dominance

Source: FHWA. 2015. Guidelines for the Visual Impact Assessment of Highway Projects, Publication No. FHWA-HEP-15-029.

Thresholds of Significance

State CEQA Guidelines

For the purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on aesthetics and visual resources if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, the project would conflict with applicable zoning and other regulations governing scenic quality; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Los Angeles CEQA Thresholds Guide

In the context of the above questions from Appendix G of the CEQA Guidelines, the City of Los Angeles CEQA Thresholds Guide (L.A CEQA Thresholds Guide) (2006) for visual resources and aesthetics states that a determination of significance shall be made on a case-by-case basis, considering the following factors.[24]

Aesthetics

- The amount or relative proportion of existing features or elements that substantially contribute to the valued visual character or image of a neighborhood, community, or localized area, which would be removed, altered, or demolished.
- The amount of natural open space to be graded or developed.
- The degree to which proposed structures in natural open space areas would be effectively integrated into the aesthetics of the site, through appropriate design, etc.
- The degree of contrast between proposed features and existing features that represent the area's valued aesthetic image.
- The degree to which a proposed zone change would result in buildings that would detract from the existing style or image of the area due to density, height, bulk, setbacks, signage, or other physical elements.
- The degree to which the project would contribute to the area's aesthetic value.

[24] City of Los Angeles, CEQA Thresholds Guide, 2006.

- Applicable guidelines and regulations.

Based on these factors, the Project would have potentially significant impacts if it were to substantially alter, degrade, or eliminate the existing visual character of an area, including valued existing features or resources; or if the Project were to introduce an element that substantially detracts from the visual character of an area.

Obstruction of Views

- The nature and quality of recognized or valued views (such as natural topography, settings, man-made or natural features of visual interest, and resources such as mountains or the ocean).

- Whether the project affects views from a designated scenic highway, corridor, or parkway.

- The extent of obstruction (e.g., total blockage, partial interruption, or minor diminishment).

- The extent to which the project affects recognized views available from a length of a public roadway, bike path, or trail, as opposed to a single, fixed vantage point.

Based on these factors, the Project would have potentially significant impacts with respect to views if its development were to obstruct an existing view of a valued visual resource.

Nighttime Illumination

A project impact associated with nighttime illumination would be considered significant based on substantial changes in ambient illumination levels as a result of project sources and the extent to which project lighting would spill out of the project site and affect adjacent light-sensitive areas.

Shading

A project impact would normally be considered significant if shadow-sensitive uses would be shaded by project-related structures for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October).

3.1.4 Environmental Impacts

AES-1: *Would the Project have a substantial adverse effect on a scenic vista?*

Construction Impacts

Less Than Significant Impact. The API is characterized by a primarily urban environment featuring a variety of commercial, industrial, and residential development, including passive open space areas and transit/transportation uses. There are no designated scenic vistas present in the API. However, the Project area provides views that are considered scenic to certain viewers, including views of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains. The Project area can be characterized as relatively flat with minor changes in elevation. The Elysian Hills is the only feature in the Project area that has a moderate to highly rugged topography.

Construction activities would require equipment such as construction barriers and sound walls, cranes, and other appurtenances that would be visible during much of the approximately 25 month construction period, which could begin as early as 2024. Construction timing could vary for each site and could potentially overlap (per Chapter 2, Project Description, of this Draft EIR). Construction activities would include similar equipment to other construction projects in the City, such as high-rise buildings in Chinatown and the CASP. The construction barriers and sound walls would include a privacy screen. In addition, the designated construction areas along the alignment would experience additional truck traffic compared to existing conditions, with trucks moving materials on- and off-site, and work crews and construction equipment moving around the sites and between the Project components.

Changes to views during the construction phase would be noticeable by motorists, pedestrians, and recreationalists in the Project area. These may include views of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains, which could be considered scenic to certain viewers although not officially designated as such.

Motorists would primarily experience views fleeting of construction activities while driving along the roadways along and adjacent to the proposed Project alignment. Motorists would experience changes to views of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, and Arroyo Seco Parkway. However, because of the continuous movement of traffic, views from public roadways are not considered an important view location for scenic views across the urban environment. In addition, passing drivers are considered to have a low sensitivity to any visual changes as they are likely passing through the API to reach their destinations and do not necessarily have a personal investment in these views.

In addition, pedestrians would primarily experience views of construction activities while walking along public sidewalks, within transit stations, and near businesses adjacent to the proposed Project alignment. Pedestrians would experience changes to views of the downtown Los Angeles skyline, LAUS, El Pueblo, and Los Angeles State Historic Park. Recreationalists would similarly experience views of construction while bicycling or visiting parks or recreational facilities such as Los Angeles State Historic Park, Los Angeles Plaza Park (Father Serra Park), Placita de Dolores, Elysian Park, and Radio Hill Gardens along or nearby the Project alignment. Views from recreationalists within Elysian Park may experience minor changes to views of Dodger Stadium but this would be only minimally noticeable because of the distant aspect of that view and the presence of vegetation. In addition, public and panoramic views of broader visual resources, such as the Transverse Ranges, including the San Gabriel and San Bernardino Mountains and downtown Los Angeles skyline, would continue to be available to pedestrians and recreationalists through street corridors and would not be impacted by construction activities. Further, because construction activities are temporary in nature, construction activities would not result in a substantial adverse effect on a scenic vista. Therefore, construction of the proposed Project would not substantially affect designated scenic vistas or views of other prominent visual resources, and impacts would be less than significant.

Operational Impacts

Less Than Significant Impact. Operation of the proposed Project would represent a change in views compared to existing conditions. As discussed above, the Project alignment was subdivided into a series of six LUs to capture the overall characteristics of existing views and future simulated views along the Project alignment. Over 30 KOPs were identified, including the locations of sensitive viewers that have the potential to be visually impacted by the Project. A detailed discussion of the LUs and KOPs are provided in Appendix C of this Draft EIR.

As discussed above, the API is characterized by a primarily urban environment featuring a variety of commercial, industrial, and residential development, including passive open space areas and transit/transportation uses. In addition, no designated scenic vistas are present in the API. However, views of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains, could be considered scenic to certain viewers although not officially designated as such. While the Project would include tall visual elements, views of other scenic or panoramic views would continue to be visible from more prominent view locations, such as park areas, or other sections along local streets. In addition, the Project would comprise a very small portion of the broad urban view field. As such, the Project as viewed from public areas in each LU would not block prominent views of notable visual features.

Overall, the proposed Project would not significantly block scenic or panoramic views, such as views of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains. The simulated views of the proposed Project as shown in the KOPs for each of the six LUs illustrate that views considered to be scenic locally would not be substantially impacted. In addition, views from the Los Angeles State Historic Park toward the surrounding existing urban landscape exhibit various visual values, and the proposed Project would not substantially impact these views as shown in the simulated views. Therefore, the Project would not block any designated scenic views, alter a designated scenic area, or block panoramic views. As such, operation of the proposed Project would not substantially affect scenic vistas or other panoramic views, and impacts would be less than significant.

AES-2: *Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

Construction Impacts

No Impact. As discussed in Section 3.1.2.2, no State- or County-designated scenic highways or eligible State scenic highways are located in the Project area. The closest officially designated State scenic highway is SR-2, which is located approximately 11 miles north of the Project alignment. Because no State scenic highways are located in the Project area, the proposed Project would have no impact to scenic resources within a State scenic highway. However, the analysis of scenic resources below is provided only for informational purposes.

The Arroyo Seco Parkway/SR-110, which runs northeasterly from its interchange with U.S. 101 to East Glenarm Street in Pasadena, is located within the Project area. The Arroyo Seco

Parkway/SR-110 is a National Scenic Byway[25] and a California Historic Parkway.[26] While views of the proposed Project would be available from the Arroyo Seco Parkway/SR-110, the Arroyo Seco Parkway/SR-110 is not a State scenic highway, as determined by Caltrans *Scenic Highways – Scenic Highway System List.*[27] Therefore, construction of the proposed Project would not substantially damage scenic resources within a State scenic highway, and no impact would occur.

Operational Impacts

No Impact. As discussed above, no State- or County-designated scenic highways or eligible State scenic highways are located in the Project area. As such, the analysis of scenic resources below is provided only for informational purposes. The Arroyo Seco Parkway/SR-110, which runs northeasterly from its interchange with U.S. 101 to East Glenarm Street in Pasadena, is located within the Project area. As discussed above, the Arroyo Seco Parkway/SR-110 is a National Scenic Byway and a California Historic Parkway. However, the Arroyo Seco Parkway/SR-110 is not a State scenic highway.

The proposed Stadium Tower, as well as cables and cabins, would be visible to motorists on Arroyo Seco Parkway/SR-110 both on the northbound and southbound sides. However, the proposed Project would not damage any scenic resources within a State scenic highway, as the Arroyo Seco Parkway/SR-110 is not a designated State scenic highway. As such, operation of the proposed Project would not substantially damage scenic resources within a State scenic highway, and no impact would occur.

AES-3: *In non-urbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?*

Since the Project is in an urbanized area, the Project was analyzed for its potential to conflict with applicable zoning and other regulations governing scenic quality, in accordance with State CEQA Guidelines Appendix G.

---

25 The National Scenic Byways Program was established as part of the Intermodal Surface Transportation Efficiency Act of 1991 as a means to maintain the scenic, historic, recreational, cultural, archeological, and natural qualities of scenic byways. The National Scenic Byways Program provides procedures for state designation of National Scenic Byways, in cooperation with local jurisdictions, as well as the designation of All-American Roads and Federal Agency Scenic Byways. Federal Agency Scenic Byways are roads or highways located on lands under Federal ownership which have been officially designated by the responsible federal agency as a scenic byway.

26 The California Historic Parkway System includes those portions of the state highway system that (1) were constructed prior to 1945; (2) have been recognized by Caltrans or the Office of Historic Preservation in the Department of Parks and Recreation as having historical significance, including notable landmarks, historical sites, or natural or human achievements that exist or that occurred during the original construction of the parkway or in the immediately adjacent land area through which the parkway currently passes; (3) are bounded on one or both sides by federal, state, or local parkland, Native American lands or monuments, or other open space, greenbelt areas, natural habitat or wildlife preserves, or similar acreage used for or dedicated to historical or recreational uses; and (4) are traversed, at the time of designation and by the department's best count or estimate using existing information, by not less than 40,000 vehicles per day on an annual daily average basis (California Streets and Highways Code, Section 280).

27 Caltrans. 2022. *Scenic Highways – Scenic Highway System Lists*. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed April 2022.

Construction Impacts

Less Than Significant Impact. The proposed Project alignment consists of a portion of the public ROW, including roadway and sidewalks, as well as City-owned, State-owned, and private properties. Trees also exist within the public ROW of Alameda Street, Spring Street, North Broadway, and other streets located adjacent to the proposed Project alignment. During the construction phase, the visual character of the alignment would change temporarily from existing conditions. Construction activities would require equipment such as construction barriers and sound walls, cranes, and other appurtenances that would be visible during much of the approximately 25-month construction period, which could begin as early as 2024. Construction activities would include similar equipment to other construction projects in the City, such as high-rise buildings in Chinatown and the CASP. Certain areas may be fenced off with construction barriers and sound walls, resulting in a contrast and change in visual character from the existing conditions. The construction barriers and sound walls would include a privacy screen. In addition, the designated construction areas along the alignment would experience additional truck traffic compared to existing conditions, with trucks moving materials on and off site, and work crews and construction equipment moving around the sites and between the Project components.

Some residents may have private views of the Project construction from their windows. While residents would be highly sensitive to visual changes and would have a higher degree of personal investment in the Project, as previously mentioned, visual impacts under the L.A. CEQA Thresholds Guide are assessed based on changes to public views. As such, analysis of resident viewer groups is provided only for informational purposes, as the L.A. CEQA Thresholds Guide does not protect private views from residential properties.

Motorists would primarily experience views of construction activities while driving along the roadways along and adjacent to the proposed Project alignment. In addition, drivers would have prolonged views while idling at the various traffic signals surrounding the alignment. The change in the visual character of the alignment during the construction phase would be noticeable by passing drivers. However, drivers are considered to have a low sensitivity to any visual changes as they are likely passing through the API to reach their destinations and do not necessarily have a personal investment in the visual character or quality of the API.

In addition, pedestrians would primarily experience views of construction activities while walking along public sidewalks, within transit stations, and near businesses adjacent to the proposed Project alignment, and would have prolonged views while walking or standing near the Project alignment. The change in the visual character of the alignment during the construction phase would be noticeable by these viewers. In addition, pedestrians are considered to have a moderate sensitivity to visual changes as they may be engaged in observing their surroundings.

Recreationalists would similarly experience views of construction while bicycling or visiting parks or recreation facilities along the Project alignment. Recreationalists are considered to have high sensitivity to visual changes. Certain southwest-facing views of the downtown Los Angeles skyline from the Los Angeles Historic Park would be partially interrupted during construction. In addition, construction of the proposed Chinatown/State Park Station, Broadway Junction, cables, and cabins would represent new visual elements for recreationalists who seek to enjoy the large open space area and views of the downtown Los Angeles skyline. The cables have similar characteristics to the overhead power lines that are prevalent in views in this area. As such, the proposed cables would not significantly impact views in this area.

The following best management practices would be implemented during construction whenever feasible so as to reduce visual impacts, as required by the City's Public Works Department:

Erosion-control devices, such as silt fences, would be removed as soon as the area is stabilized; stockpile areas would be neatly organized and covered depending on weather events; and stockpiled areas would be located in less visibly sensitive areas. As such, erosion-control devices would be visually inobtrusive. Details regarding the implementation of best management practices for the Project are discussed further in Section 3.10, Hydrology and Water Quality.

Views that could be considered scenic to certain viewers--such as those of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, or the San Gabriel and San Bernardino Mountains--may temporarily change due to the presence of construction activities. In addition, no State- or County-designated scenic highways or eligible State scenic highways are located in the Project area. As such, scenic resources would not be impacted during construction.

The proposed Project includes entitlements and approvals to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards throughout the Project alignment. The development standards would recognize the Project's unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system. The design standards included in the proposed Project's entitlements and approvals would enhance the visual identity and character of the proposed Project and its surrounding communities, and would ensure visual compatibility with adjacent development, as well as the Project area's overall community character. Overall, the Project would not conflict with applicable zoning or other regulations governing scenic quality.

Furthermore, as discussed further below, the proposed Project would be consistent with the goals and objectives within Chapter 5, Urban Form and Neighborhood Design of the Framework Element of the City of Los Angeles General Plan, the Mobility Plan 2035, as well as the applicable policies related to scenic quality within the Central City Community Plan, Central City North Community Plan, and the Silver Lake – Echo Park – Elysian Valley Community Plan. As such, the Project would be consistent with applicable policies related to scenic quality during construction.

Overall, construction would represent a temporary change in the visual quality and character of the API, similar to other construction projects in the city. Project components would potentially stand out as memorable or remarkable features in the landscape due to their scale, which would have a temporary impact on visual character and quality of the API and its surroundings compared to existing conditions. Construction activities would include similar equipment to other construction projects in the City, such as high-rise buildings in Chinatown and the CASP. Impacts from construction activities would be temporary and post construction views of Project-related construction activities, equipment, stockpiles, and fencing would be removed once construction is completed. In addition, the proposed Project would comply with the best management practices noted above, as well as the City's development standards related to scenic quality during construction, which would be verified during the City's permitting process. Therefore, construction impacts with respect to conflicting with regulations that govern scenic quality would be less than significant.

Operational Impacts

Less Than Significant Impact. The six LUs previously described are used to assess the potential visual character and quality impacts associated with introduction and operation of the proposed Project. Conceptual visual simulations of the proposed Project components were conducted for environmental analysis purposes and are contained in the Visual Impact Assessment in Appendix C of this Draft EIR.

Landscape Unit 1 - Arcadia Street to Cesar E. Chavez Avenue

In LU-1, the proposed Alameda Station would be constructed over Alameda Street between Los Angeles Street and Cesar E. Chavez Avenue, adjacent to El Pueblo and the planned LAUS Forecourt. From the Alameda Station to the northern extent of LU-1 at Cesar E. Chavez Avenue, the proposed Project would remain in the public ROW. The Alameda Station would be approximately 173 feet long, 109 feet wide, and 78 feet high at its tallest point, with the passenger loading platform approximately 31 feet above Alameda Street. Queueing would occur in the planned LAUS Forecourt, with ticketing/fare checking located within the station.

As described previously in Table 3.1-7, the existing visual quality for LU-1 is considered to be moderately high. Overall, the operation of the proposed Project within LU-1 would represent a change in views and visual quality and character as compared to existing conditions. However, the proposed Project is in an urban area that currently has a mix of architectural styles, building materials and colors, as well as a mix of primarily traditional and some modern style buildings. No designated State scenic highways or designated scenic vistas are present in LU-1. Further, as with other views in the Project area, while the buildings are visually prominent, they lie within heavily urbanized areas and would not have a substantial adverse effect on prominent views of valued visual resources.

Viewer groups including pedestrians, motorists, LAUS patrons, and El Pueblo patrons would have a low to moderate sensitivity to the visual change, and some may have less of a personal investment in the visual appearance of the proposed Project within LU-1 because they are primarily visiting, do not necessarily reside in the area, and also have fleeting and/or temporary views of the Project components. Others may visit the area to view the unique setting. El Pueblo tourists would have a high sensitivity to visual change, as they are specifically seeking a pleasant visual setting or experience.

Resident viewer groups, including residents of the Mozaic Apartments, may have moderate sensitivity to the visual change, because some residents may have selected to reside adjacent to LAUS, a transportation hub, because they desired to reside near numerous transit options, technologies, and modes. However, other residents may have a high sensitivity to the visual change as they would have direct views of the proposed Alameda Station either from the public sidewalk adjacent to the apartments, or potentially from their private unit. The new station would represent a new and large element in the visual environment for residents. However, as discussed previously, visual impacts under the L.A. CEQA Thresholds Guide are assessed based on changes to public views. As such, analysis of resident viewer groups is provided only for informational purposes, as the L.A. CEQA Thresholds Guide does not protect private views from residential properties.

The proposed Alameda Station would be located within the Alameda Street ROW in between El Pueblo and LAUS, both of which possess historic and unique visual characteristics that make them landmarks. Due to the station’s height and massing, the station would result in a visual contrast within this portion of LU-1. However, the station would be located at a location north of Los Angeles Street on Alameda Street that does not block views from El Pueblo looking directly east to the LAUS entrance (and vice versa). For more information on the axial connection and visual relationship between the Los Angeles Union Station Passenger Terminal and El Pueblo landmarks, see the Historical Resource Technical Report (Appendix G) prepared for the proposed Project.

LU-1 is characterized by historic landmarks that are visually memorable, such as LAUS, and other buildings within El Pueblo. As discussed in Section 2.0, Project Description, the proposed

Project's design goal is to develop a common architectural design that unifies the overall aerial gondola system, while allowing for each major component to contribute to the respective localized urban condition. The Alameda Station's platform and canopy would include a light color scheme and warm tones, which has been designed to complement and reflect the materiality of the existing mix of adobe buildings, large Victorian commercial blocks, and Spanish Revival style buildings within the El Pueblo and Olvera Street area. In addition, the "shell" roof design provides a visual lightness with an integrated perforation pattern motif based upon the arched forms that mark openings and entries to Union Station, Pico House, and other historic buildings within El Pueblo.

The proposed Project would also integrate physical and visual connections between the proposed Alameda Station and existing adjacent development, such as the new pedestrian plaza at El Pueblo. The new pedestrian plaza at El Pueblo would be open to the public and would extend view corridors between the proposed Alameda Station and existing development in a way that creates an observed visual unity.

For a project in an urban area, a significant impact to visual character or quality would occur if the project would conflict with applicable zoning and other regulations governing scenic quality. The proposed Project within LU-1 would primarily be above the public ROW, in which zoning regulations governing scenic quality are not applicable. However, the proposed Project within LU-1 would be consistent with the goals and objectives related to scenic quality within Chapter 5, Urban Form and Neighborhood Design of the Framework Element of the City of Los Angeles General Plan, the Mobility Plan 2035, as well as the applicable policies related to scenic quality within the Central City Community Plan.

With regard to Chapter 5, Urban Form and Neighborhood Design, the proposed Project would improve the quality of the public realm through Project design, which would promote accessibility via improved pedestrian pathways that would be complementary and appropriate to the character of the existing buildings in the surrounding area. As illustrated in Figures 5-1 through 5-8 in Appendix C of this Draft EIR, the proposed Project would be consistent with Objective 4.2 of the Central City Community Plan related to the preservation of visual links to open space areas, as the Project would form a background feature and would not block views of open space areas. The Project design would also provide attractive transit services in compliance with the Mobility Plan 2035.

The proposed Project includes entitlements and approvals to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards throughout the Project alignment. The development standards are in recognition of the Project's unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system. With the proposed Project's entitlements and approvals, which would include design standards to enhance the visual identity and character of the proposed Project and its surrounding communities, there would not be a conflict with applicable zoning or other regulations governing scenic quality.

Overall, the proposed Project would not conflict with applicable zoning or other regulations governing scenic quality. Therefore, the operation of the proposed Project within LU-1 would not substantially degrade the existing visual character or quality of public views of the site and its surroundings, and the impact would be less than significant.

Landscape Unit 2 - Cesar E. Chavez Avenue to Alpine Street

In LU-2, the proposed Project would remain in the public ROW and travel north from the Alameda Station along Alameda Street to the proposed Alameda Tower, which would be constructed within the public ROW on the Alameda Triangle, located between Alameda Street, North Main Street, and Alhambra Street. The proposed Project would continue north along Alameda Street and cross Alpine Street.

As described previously in Table 3.1-7, the existing visual quality for LU-2 is considered to be moderately low. Overall, the operation of the proposed Project within LU-2 would represent a change in views and visual quality and character as compared to existing conditions. However, the proposed Project is in an urban area that currently has a mix of architectural styles, building materials and colors, as well as a mix of primarily traditional and some modern style buildings. No designated State scenic highways or designated scenic vistas are present in LU-2. Further, as with other views in the Project area, while the buildings are visually prominent, they lie within heavily urbanized areas and would not have a substantial adverse effect on prominent views of valued visual resources.

Viewer groups including pedestrians and motorists would have a low to moderate sensitivity to the visual change, and may have less of a personal investment in the visual appearance of the proposed Project within LU-2 because they are primarily visiting and do not necessarily reside in the area, and also would have fleeting and/or temporary views of the Project components. Because of the highly urban characteristics of the area, any pedestrians or motorists that may live within LU-2 have likely chosen to reside along or nearby Alameda Street because they desired to live near numerous transit options, technologies, and modes.

The impact to visual quality and character would not be significant. LU-2 already exhibits some visual clutter from the existing overhead lines, light poles, and traffic signals along a portion of the west side of Alameda Street. Although the views of the Alameda Tower would contrast in terms of height with existing uses, the views would not substantially alter visual character due to the lack of uniform character in this LU.

LU-2 consists of a mix of commercial, institutional, open space, and other uses. The United States Post Office Terminal Annex building is located within this LU, which is a historic landmark due to its architecture, as well as The California Endowment, which is a visually prominent mix of modern buildings. As discussed previously, the proposed Project's design goal is to develop a common architectural design that unifies the overall aerial gondola system, while allowing for each major component to contribute to the respective localized urban condition. The modern architectural style of the Alameda Tower is evident, and would complement the buildings within The California Endowment. In addition, the neutral light-tone gray color scheme of the Alameda Tower was designed for consistency with the surrounding urban environment, and to not distract from visually distinct structures such as the United States Post Office Terminal Annex building.

For a project in an urban area, a significant impact to visual character or quality would occur if the project would conflict with applicable zoning and other regulations governing scenic quality. The proposed Project within LU-2 would primarily be located above the public ROW, in which zoning regulations related to scenic quality do not apply. The proposed tower base for the Alameda Tower within the Alameda Triangle would also be located within the public ROW. The proposed Project would be consistent with the goals and objectives within Chapter 5, Urban Form and Neighborhood Design of the Framework Element of the City of Los Angeles General Plan, the Mobility Plan 2035, as well as the applicable policies related to scenic quality within the Central City North Community Plan.

With regard to Chapter 5, Urban Form and Neighborhood Design, the proposed Project would improve the quality of the public realm through Project design, which would promote accessibility via improved pedestrian pathways that would be complementary and appropriate to the scale and character of the existing buildings in the surrounding area. As illustrated in Figures 5-9 through 5-12 in Appendix C of this Draft EIR, the proposed Project would be consistent with Objective 5.1 of the Central City North Community Plan related to the preservation of visual links to open space areas, as the proposed Project would form a background feature and would not block views of open space areas. The proposed Project would also provide attractive transit services in compliance with the Mobility Plan 2035.

The proposed Project includes entitlements and approvals to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards throughout the Project alignment. The development standards would recognize the Project's unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system. The design standards included in the proposed Project's entitlements and approvals would enhance the visual identity and character of the proposed Project and its surrounding communities, and would ensure visual compatibility with adjacent development, as well as the Project area's overall community character. Overall, the Project would not conflict with applicable zoning or other regulations governing scenic quality. The operation of the proposed Project within LU-2 would not substantially degrade the existing visual character or quality of public views of the site and its surroundings, and impacts would be less than significant.

Landscape Unit 3 - Alpine Street to Southwestern Corner of Los Angeles State Historic Park

In LU-3, the proposed Project would remain in the public ROW and travel north along Alameda Street from Alpine Street to the southwestern corner of the Los Angeles State Historic Park. Also, within LU-3, the proposed Alpine Tower would be located on a City-owned parcel, currently being used as non-public parking storage for City vehicles, at the northeast corner of Alameda Street and Alpine Street, adjacent to the elevated Metro L Line (Gold). The Alpine Tower would be 195 feet tall at its tallest point, with the cable suspended 168 feet above ground at the north approach directly north of the tower. The Chinatown/State Park Station would be located adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park. The southern portion of the station would be located on a City ROW, while the northern portion of the station would be located within the southern boundary of the Los Angeles State Historic Park. The station would be approximately 200 feet long, 80 feet wide, and 98 feet tall at its tallest point. Queueing and ticketing/fare checking would be located within the station.

As described previously in Table 3.1-7, the existing visual quality for LU-3 is considered to be low. Overall, the operation of the proposed Project within LU-3 would represent a change in views and visual quality and character as compared to existing conditions. However, the proposed Project is in an urban area that currently has a mix of architectural styles and building materials and colors, as well as a mix of older and modern style buildings. In addition, this LU includes the existing elevated Metro L Line (Gold) guideway and overhead catenary system, which is a noticeable existing visual element. No designated State scenic highways or designated scenic vistas are present in LU-3. Further, as with other views in the Project area, while the buildings are visually prominent, they lie within heavily urbanized areas and would not have a substantial adverse effect on prominent views of valued visual resources.

Viewer groups including pedestrians, motorists, and transit commuters would have a low to moderate sensitivity to the visual change, and may have less of a personal investment in the visual appearance of the proposed Project within LU-3 because they are primarily passing through en route to other destinations, and also would have fleeting and/or temporary views of the Project components. In addition, the presence of the elevated Metro L Line (Gold) Chinatown Station and structure, and nearby overhead power lines and poles, contribute to the existing visual elements these viewers already experience in existing conditions. Because of the highly urban characteristics of the area, any pedestrians, motorists, or transit commuters that may live within LU-3 have likely chosen to reside along or nearby Alameda Street because they desired to live near numerous transit options, technologies, and modes.

Resident viewer groups (Blossom Plaza apartments) would have moderate sensitivity to the visual change because the Metro L Line (Gold) Chinatown Station and structure are located adjacent to the apartments. Similar to pedestrians, motorists, and transit commuters that may reside in the area as discussed above, some residents within LU-3 may have selected to reside along or near Alameda Street because they desired to reside nearby numerous transit options, technologies, and modes. Also, the proposed Chinatown/State Park Station is a new and large visual element in the landscape, and views from residents would already be altered noticeably. However, a benefit of the Project in this LU would be the Park amenities, potential mobility hub, pedestrian improvements, and installation of hardscaping and landscaping at the southern entrance to the Los Angeles State Historic Park, which currently just includes hardscaping. The park amenities would include approximately 740 square feet of concessions, 770 square feet of restrooms, and a 220 square foot covered breezeway connecting the concessions and restrooms. Pedestrian access enhancements included in the proposed Project would include pedestrian improvements between Metro’s L Line (Gold) Station and the Chinatown/State Park Station, including hardscape and landscape improvements, shade structures, and potential seating. The Chinatown/State Park Station would also include the installation of landscaping and hardscaping at the southern entrance to the park along Spring Street which currently just includes hardscaping.

As previously mentioned, visual impacts under the L.A. CEQA Thresholds Guide are assessed based on changes to public views. As such, analysis of resident viewer groups is provided only for informational purposes, as the L.A. CEQA Thresholds Guide does not protect private views from residential properties.

LU-3 is characterized by a mix of multi-family residential, commercial, industrial, parking, and transit uses, as well as undeveloped land. As discussed in Section 2.0, *Project Description*, the proposed Project’s design goal is to develop a common architectural design that unifies the overall aerial gondola system, while allowing for each major component to contribute to the respective localized urban condition. LU-3 currently has a mix of architectural styles and building materials and colors, including traditional Chinese architecture within the adjacent Chinatown community. Both the Chinatown/State Park Station and Alpine Tower would consist of a neutral light-tone gray color scheme that would provide visual lightness to the form and their design would complement the existing buildings in this area, as well as not distract from the visually distinct Chinese architecture within this area. In addition, the new amenity building intended for use by LA ART riders and park visitors alike was designed to reflect the scale and materiality of the existing visitor amenity buildings located within the Los Angeles State Historic Park.

Further, the pedestrian access enhancements in LU-3 between Metro’s L Line (Gold) Chinatown Station and the Chinatown/State Park Station would acknowledge the visual character of existing park amenities. For example, the hardscape and landscape improvements, shade structures, and potential seating would incorporate design features that would establish a unifying and cohesive design consistent with the overall character of the existing structures within LU-3.

For a project in an urban area, a significant impact to visual character or quality would occur if the project would conflict with applicable zoning and other regulations governing scenic quality. The proposed Project within LU-3 would primarily be located above the public ROW, in which zoning regulations related to scenic quality do not apply. However, the proposed tower base for the Alpine Tower would be located on City-owned property that is currently zoned C2, but does not include zoning regulations governing scenic quality. The southern portion of the Chinatown/State Park Station would be located within the public ROW, which does not include zoning or other regulations governing scenic quality. The northern portion of the Chinatown/State Park Station, which is located within the Los Angeles State Historic Park property, is zoned GW (Greenway) under the CASP, and allows for development of open space and recreational facilities. The proposed Project within LU-3 would be consistent with the CASP goals because the Project would assist in the transition of the area from vehicular-oriented to pedestrian-oriented, and would have an innovative architectural design. The proposed Project within LU-3 would be consistent with Los Angeles State Historic Park General Plan aesthetic resources goals to protect and enhance scenic viewsheds and features, and preserve the visitor's experience of the surrounding landscape by minimizing impacts to aesthetic resources, because of the siting of the Chinatown/State Park Station within the southernmost portion of the park away from the open passive park areas. The Project within LU-3 would also be consistent with access and circulation goals by providing an additional mode of transportation that would provide efficient access to the park, as well as create a sense of entry and arrival at the park. Park development goals would be met by providing a new distinctive and high-quality facility with a forward-thinking design. Goals regarding education and interpretation would be met by the inclusion of an interpretive program that would provide educational and historical information regarding the Park at the base of the Chinatown/State Park Station.

In addition, the proposed Project would be consistent with the goals and objectives within Chapter 5, Urban Form and Neighborhood Design of the Framework Element of the City of Los Angeles General Plan, the Mobility Plan 2035, as well as the applicable policies related to scenic quality within the Central City North Community Plan.

With regard to Chapter 5, Urban Form and Neighborhood Design, the proposed Project would improve the quality of the public realm through Project design, which would promote accessibility via improved pedestrian pathways that would be complementary and appropriate to the scale and character of the existing buildings in the surrounding area. As illustrated in Figures 5-13 through 5-19 in Appendix C of this Draft EIR, the proposed Project would be consistent with Objective 5.1 of the Central City North Community Plan related to the preservation of visual links to open space areas, as the proposed Project would form a background feature and would not block views of open space areas. The proposed Project would also provide attractive transit services in compliance with the Mobility Plan 2035.

The proposed Project includes entitlements and approvals to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards throughout the Project alignment. The development standards would recognize the Project's unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system. The design standards included in the proposed Project's entitlements and approvals would enhance the visual identity and character of the proposed Project and its surrounding communities, and would ensure visual compatibility with adjacent development, as well as the Project area's overall community character. Overall, the Project would not conflict with applicable zoning or other regulations governing scenic quality.

The proposed Project would also enhance the public realm, aesthetic lighting/signage, connections to open space, transit, and community facilities. As such, the operation of the proposed Project within LU-3 would not substantially degrade the existing visual character or quality of public views of the site and its surroundings, and the impact would be less than significant.

Landscape Unit 4 - Southwestern Corner of Los Angeles State Historic Park to North Broadway

In LU-4, the proposed Chinatown/State Park Station would be located partially on City property and partially within the boundaries of the Los Angeles State Historic Park. The station would be approximately 200 feet long, 80 feet wide, and 98 feet tall at its tallest point, with the passenger boarding platform approximately 50 feet above-grade. Queueing and ticketing/fare checking would occur within the station. From the Chinatown/State Park Station, the proposed Project alignment would continue traveling north towards North Broadway, crossing over the westernmost edge of the Los Angeles State Historic Park and the Metro L Line (Gold) tracks.

As described previously in Table 3.1-7, the existing visual quality for LU-4 is considered to be moderately low. Overall, the operation of the proposed Project within LU-4 would represent a change in views and visual quality and character as compared to existing conditions which contain a large amount of open space. However, the proposed Project is in an urban environment that currently has a mix of architectural styles, landscaping concepts, building materials, and colors. Views from the Los Angeles State Historic Park toward the surrounding existing urban landscape exhibit various visual values. In addition, the urban edge of the park is prominent with the Metro L Line (Gold) to the north and west, the Metro L Line (Gold) Chinatown Station to the south, and industrial uses to the south and east. Further, as with other views in the Project area, while the buildings are visually prominent, they lie within heavily urbanized areas and would not have a substantial adverse effect on prominent views of valued visual resources.

Given the urban environment, viewer groups including pedestrians and recreationalists would have a low to moderate sensitivity to the visual change, and some may have less of a personal investment in the visual appearance of the proposed Project within LU-4 because they are primarily visiting and do not necessarily reside in the adjacent area, and also would have fleeting and/or temporary views of the Project components. Others may have longer views, particularly those visiting the Los Angeles State Historic Park for leisure enjoyment. In addition, Los Angeles State Historic Park is a park located in a highly urbanized area north of downtown Los Angeles. Recreationalists that may reside in the area are assumed to be accustomed to the urban edge of the park of which the proposed Project would become a part.

In addition, certain southwest-facing views of the downtown Los Angeles skyline from Los Angeles State Historic Park, particularly views close to the proposed Chinatown/State Park Station, would be partially interrupted due to the Project. However, the view from most locations in the park would remain where the view would be uninterrupted by the proposed Project. These views include looking towards downtown from the southwestern corner and from the Roundhouse platform and walkway within the park. In addition, existing views of downtown from other areas within the park are already interrupted under existing conditions by trees and intervening development. Also, the location of the proposed cables and cabins would be adjacent to the existing Metro L Line (Gold) and the associated overhead catenary system. The cabins would be constantly moving in and out of view, and the cables have similar characteristics to the overhead power lines that are prevalent in views in this area. As such, the proposed cables and cabins would not significantly impact views in this area.

LU-4 is characterized by a mix of commercial/office, industrial, institutional, and transit uses, as well as undeveloped land. LU-4 is also characterized by park/open space, including the Los Angeles State Historic Park. Views from the Los Angeles State Historic Park towards the surrounding existing urban landscape exhibit various visual values. As discussed in Section 2.0, *Project Description*, the proposed Project's design goal is to develop a common architectural design that unifies the overall aerial gondola system, while allowing for each major component to contribute to the respective localized urban condition.

As discussed previously, the Chinatown/State Park Station, which can be viewed from LU-4, would consist of a neutral light-tone gray color scheme that would provide visual lightness to the form, and their design would complement the existing buildings in this area as well as not distract from the visually distinct Chinese architecture. The Broadway Junction, which can also be viewed in LU-4, was designed to create a pattern evocative of layered bamboo canes, while still achieving a transparency that brings lightness to the form. In addition, the canopy of the Broadway Junction was designed to reflect warm tones and detailing that is complementary to the existing structures and the residential fabric in the surrounding urban environment within LU-4, and to not distract from visually distinct structures or open spaces areas, such as Los Angeles State Historic Park.

A visual benefit of the Project near the Los Angeles State Historic Park would also be the Park amenities, potential mobility hub, pedestrian improvements, and installation of hardscaping and landscaping at the southern entrance to the Los Angeles State Historic Park, which currently just includes hardscaping. The park amenities would include approximately 740 square feet of concessions, 770 square feet of restrooms, and a 220 square foot covered breezeway connecting the concessions and restrooms. Pedestrian access enhancements included in the proposed Project would include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station, including hardscape and landscape improvements, shade structures, and potential seating. The Chinatown/State Park Station would also include the installation of landscaping and hardscaping at the southern entrance to the park along Spring Street which currently just includes hardscaping. In addition, the new amenity building intended for use by LA ART riders and park visitors alike was designed to reflect the scale and materiality of the existing visitor amenity buildings located within the Los Angeles State Historic Park. The activities associated with the new station such as queueing, ticketing, and patrons in transit would be visible; however, these activities involve constant movement and, as such, views would be fleeting.

The impact to visual quality and character is minimized for LU-4 because the visual changes of the proposed Project are minimized somewhat by the location of the Chinatown/State Park Station, which is south of the majority of the approximately 32-acre park space. For a project in an urban area, a significant impact to visual character or quality would occur if the project would conflict with applicable zoning and other regulations governing scenic quality. The proposed Project within LU-4 would be consistent with Los Angeles State Historic Park General Plan aesthetic resources goals to protect and enhance scenic viewsheds and features, and preserve the visitor's experience of the surrounding landscape by minimizing impacts to aesthetic resources because of the siting of the Chinatown/State Park Station within the southernmost portion of the park away from the open passive park areas. The Project within LU-4 would also be consistent with access and circulation goals by providing an additional mode of transportation that would provide efficient access to the park, as well as create a sense of entry and arrival at the park. Park development goals would be met by providing a new distinctive and high-quality facility with a forward-thinking design.

In addition, the proposed Project would be consistent with the goals and objectives within Chapter 5, Urban Form and Neighborhood Design of the Framework Element of the City of Los Angeles General Plan, the Mobility Plan 2035, as well as the applicable policies related to scenic quality within the Central City North Community Plan.

With regard to Chapter 5, Urban Form and Neighborhood Design, the proposed Project would improve the quality of the public realm through Project design, which would promote accessibility via improved pedestrian pathways that would be complementary and appropriate to the scale and character of the existing buildings in the surrounding area. As illustrated in Figures 5-21 through 5-23 in Appendix C of this Draft EIR, the proposed Project would be consistent with Objective 5.1 of the Central City North Community Plan pertaining to the preservation of visual links to open space areas, as the proposed Project would form a background feature and would not block views of open space areas. The proposed Project would also provide attractive transit services in compliance with the Mobility Plan 2035.

The proposed Project includes entitlements and approvals to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards throughout the Project alignment. The development standards would recognize the Project's unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system. The design standards included in the proposed Project's entitlements and approvals would enhance the visual identity and character of the proposed Project and its surrounding communities, and would ensure visual compatibility with adjacent development, as well as the Project area's overall community character. Overall, the Project would not conflict with applicable zoning or other regulations governing scenic quality.

As such, the operation of the proposed Project within LU-4, would not substantially degrade the existing visual character or quality of public views of the site and its surroundings, and the impact would be less than significant.

Landscape Unit 5 – North Broadway to SR-110

LU-5 starts at the North Broadway ROW. The proposed Broadway Junction would be located at the northern corner of the intersection of North Broadway and Bishops Road. From the Broadway Junction, the proposed Project alignment would travel northwest primarily along Bishops Road, towards SR-110 (Arroyo Seco Parkway). The Broadway Junction is a non-passenger junction that would primarily be located on privately-owned property with a portion of the junction and overhead cable infrastructure cantilevered and elevated above the public ROW. The existing building located at 1201 N. Broadway would be demolished. The Broadway Junction would be approximately 227 feet long, 60 feet wide, and 98 feet high at its tallest point, with the platform approximately 50 feet above the ground.

As described previously in Table 3.1-7, the existing visual quality for LU-5 is considered to be moderately low. Overall, the operation of the proposed Project within LU-5 would represent a change in views and visual quality and character as compared to existing conditions. However, the proposed Project is in an urban area that currently has a mix of architectural styles, landscaping concepts, building materials, and colors. Many of the residential and commercial buildings in this LU are older, while there are several small office buildings that have been updated or are adaptive re-use spaces. Further, as with other views in the Project area, while the buildings are visually prominent, they lie within heavily urbanized areas and would not have a substantial adverse effect on prominent views of valued visual resources.

In addition, views of Elysian Park and Radio Hill Gardens are currently interrupted by existing development and overhead power transmission poles and lines. As such, the proposed Project would not result in a substantial adverse effect on views of these open spaces.

The viewer group of pedestrians, including pedestrians originating from Cathedral High School, would have a low to moderate sensitivity to the visual change, and may have less of a personal investment in the visual appearance of the proposed Project within LU-5 because they are primarily visiting and do not necessarily reside in the area, and also would have fleeting and/or temporary views of the proposed Project.

Resident viewer groups, including residents of single- and multi-family residences on the northwest side of North Broadway and Savoy Street, may have moderate to high sensitivity to the visual change, particularly due to the location of the proposed Broadway Junction, as some along Bishops Road and Savoy Street would have direct views of the proposed junction either from the public sidewalk adjacent to the residences, from front or rear yard areas, or potentially from inside their residences. The new junction would represent a new and large element in the visual environment for residents due to the contrast in the mass and height of the junction compared to adjacent small-scale residential structures. However, new trees and landscaping are provided below the junction along both Savoy Street and Bishops Road to replace the existing opaque fencing. This would provide a visual buffer and would represent a visual improvement.

As discussed previously, visual impacts under the L.A. CEQA Thresholds Guide are assessed based on changes to public views. As such, analysis of resident viewer groups is provided only for informational purposes, as the L.A. CEQA Thresholds Guide does not protect private views from residential properties.

LU-5 is characterized by commercial, office, and some residential uses, as well as overhead power transmission lines and poles and visible billboards. As discussed in Section 2.0, *Project Description*, the proposed Project's design goal is to develop a common architectural design that unifies the overall aerial gondola system, while allowing for each major component to contribute to the respective localized urban condition. As discussed previously, the Broadway Junction was designed to create a pattern evocative of layered bamboo canes, while still achieving a transparency that brings lightness to the form. In addition, the canopy of the Broadway Junction was designed to reflect warm tones and detailing that is complementary to the existing structures and the residential fabric in the surrounding urban environment within LU-5.

The proposed Project within LU-5 would also introduce new visually interesting landscaping, and trees would replace the fencing currently facing residents on Savoy Street; and, although the Broadway Junction would represent a new tall visual element, the junction would be comparable in height to future development approved to be constructed in the area, and would not block any scenic views or alter a designated scenic area. In addition, cabins would be constantly moving in and out of view, and the cables have similar characteristics to the overhead power lines that are prevalent in views in this area. As such, the proposed cables and cabins would not significantly impact views in this area.

The changes to visual quality and character would be noticeable related to the proposed Broadway Junction due to its contrast in scale with the existing residential buildings located adjacent. However, for a project in an urban area, a significant impact to visual character or quality would occur if the project would conflict with applicable zoning and other regulations governing scenic quality. The proposed Project within LU-5 would primarily be located above the public ROW with portions above private property, in which zoning regulations related to scenic quality do not apply. However, the proposed foundation for the Broadway Junction would be located on private properties that are currently zoned C2 (commercial) and R3 (multi-family dwelling), but do not include zoning regulations governing scenic quality.

The proposed Project would also be consistent with the goals and objectives within Chapter 5, Urban Form and Neighborhood Design of the Framework Element of the City of Los Angeles General Plan, the Mobility Plan 2035, as well as the applicable policies related to scenic quality within the Central City Community Plan. With regard to Chapter 5, Urban Form and Neighborhood Design, the proposed Project would improve the quality of the public realm through Project design, which would promote accessibility via improved pedestrian pathways that would be complementary and appropriate to the scale and character of the existing buildings in the surrounding area. As illustrated in Figures 5-24 through 5-29, the proposed Project would not conflict with Objective 5.1 of the Central City North Community Plan pertaining to the preservation of visual links to open space areas, as the Project would form a background feature but would not block views of open space areas. The Project would also provide attractive transit services in compliance with the Mobility Plan 2035.

The proposed Project includes entitlements and approvals to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards throughout the Project alignment. The development standards are in recognition of the Project's unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system. The design standards included in the proposed Project's entitlements and approvals would enhance the visual identity and character of the proposed Project and its surrounding communities, and would ensure visual compatibility with adjacent development, as well as the Project area's overall community character. Overall, the Project would not conflict with applicable zoning or other regulations governing scenic quality.

As such, the operation of the proposed Project within LU-5 would not substantially degrade the existing visual character or quality of public views of the site and its surroundings, and the impact would be less than significant.

Landscape Unit 6 - SR-110 to Dodger Stadium

LU-6 begins at the SR-110 (Arroyo Seco Parkway) as the Project alignment travels northwest above the freeway towards Dodger Stadium. The proposed Stadium Tower would be located on hillside private property north of Stadium Way between the Downtown Gate entrance road to Dodger Stadium and SR-110. The northern terminus of the system would be located in a parking lot at the Dodger Stadium property, where the proposed Dodger Stadium Station would be constructed. The Stadium Tower would stand 179 feet tall with the cable suspended approximately 145 feet and 152 feet above-ground at the southern and northern approaches, respectively. The Dodger Stadium Station would be approximately 194 feet long, 80 feet wide, and 74 feet high at its tallest point. Queueing and ticketing/fare checking would be located adjacent to the station.

As described previously in Table 3.1-7, the existing visual quality for LU-6 is considered to be moderate. Overall, the operation of the proposed Project within LU-6 would represent a change in views and visual quality and character as compared to existing conditions. However, the proposed Project is in an urban area that currently has a mix of architectural styles and building materials and colors, including Dodger Stadium and Arroyo Seco Parkway. Partial views of the downtown Los Angeles skyline are available from certain vantage points and would change as a result of the proposed Stadium Tower and associated cables and cabins. However, as with other views in the Project area, while the buildings are visually prominent, they lie within heavily urbanized areas and would not have a substantial adverse effect on prominent views of valued visual resources.

In addition, views of Elysian Park are currently interrupted by existing development and overhead power transmission poles and lines. As such, the proposed Project would not result in a substantial adverse effect on views of these open spaces.

Motorist, pedestrian, and Dodger Stadium patron viewer groups would have a low to moderate sensitivity to the visual change, and may have less of a personal investment in the visual appearance of the proposed Project within LU-6 because they are primarily visiting and do not necessarily reside in the area, or are traveling on SR-110 and would have fleeting and/or temporary views of the Project components. Because of the highly urban characteristics of the area, any motorists, pedestrians, or Dodger Stadium patrons that may live within LU-6, are accustomed to living in close proximity to numerous transit options, technologies, and modes, as well as in an area with convenient access to freeways and downtown Los Angeles.

In addition, the implementation of the proposed Dodger Stadium Station would not alter the aesthetics or structure of Dodger Stadium. The proposed Stadium Tower, cables, and cabins would be visible to motorists on Arroyo Seco Parkway/SR-110 both on the northbound and southbound sides. However, although noticeable there are numerous mature trees that assist in softening the view. The visual change may nonetheless result in perceived visual intrusion to these viewers. The tower would interrupt the partial view of the downtown Los Angeles skyline for southbound Arroyo Seco Parkway/SR-110 motorists from certain angles; however, the view would be fleeting and the vehicles would travel past the tower relatively quickly and the view of the skyline would be uninterrupted. In addition, cabins would be constantly moving in and out of view, and the cables have similar characteristics to the overhead power lines that are prevalent in views in this area. As such, the proposed cables and cabins would not significantly impact views in this area.

Resident viewer groups located along Stadium Way, over 1,200 feet southwest of the proposed Stadium Tower, would have moderate sensitivity to the visual change. The new tower would represent a new element in the visual environment for residents when viewing north. However, their view of the new tower would be highly interrupted by existing overhead power transmission poles and lines, trees and vegetation, and the lower portion of the hill on which Dodger Stadium is located. The visual change would not result in perceived visual intrusion to these viewers. In addition, resident viewer groups along Solano Avenue and Amador Place would not experience visual change as the proposed Project would be blocked from view due to the existing hilly topography.

As previously mentioned, visual impacts under the L.A. CEQA Thresholds Guide are assessed based on changes to public views. As such, analysis of resident viewer groups is provided only for informational purposes, as the L.A. CEQA Thresholds Guide does not protect private views from residential properties.

The change to visual quality and character would be noticeable related to the proposed Stadium Tower. However, for a project in an urban area, a significant impact to visual character or quality would occur if the project would conflict with applicable zoning and other regulations governing scenic quality. The proposed base for the Stadium Tower would be located on private property that is currently zoned A1 (Agriculture). The proposed Dodger Stadium Station would be located on the private Dodger Stadium property, which is also currently zoned A1. The Stadium Tower and Dodger Stadium Station sites are subject to a Conditional Use Permit related to the operation of Dodger Stadium, which allows the development of ancillary structures and uses, including “mass transportation service”. An existing Conditional Use Permit in place related to the operation of Dodger Stadium would allow for the construction of the Stadium Tower and Dodger Stadium Station at their respective proposed locations. There are no applicable zoning regulations governing scenic quality for these sites.

LU-6 is characterized by a variety of transportation/public facility uses, residential, and open space uses with varying architectural styles. In addition, this area also contains visually distinct structures, such as the Arroyo Seco Parkway/SR-110 and Dodger Stadium. As discussed previously, the proposed Project’s design goal is to develop a common architectural design that unifies the overall aerial gondola system, while allowing for each major component to contribute to the respective localized urban condition. The Dodger Stadium Station and Stadium Tower would consist of an architectural design that provides visual lightness to the form to complement the existing buildings in this area. In addition, the neutral light-tone gray colors and material finishes of the Dodger Stadium Station and Stadium Tower were selected to complement the surrounding urban environment in LU-6, and to not distract from existing visually distinct structures, such as Dodger Stadium.

The Stadium Tower would interrupt views of the downtown skyline for only a limited period of time for motorists traveling southbound on Arroyo Seco Parkway/SR-110. Also, the Dodger Stadium Station would not interrupt views of Dodger Stadium. As such, the operation of the proposed Project within LU-6 would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. The proposed Project would be consistent with the goals and objectives within Chapter 5, Urban Form and Neighborhood Design of the Framework Element of the City of Los Angeles General Plan, the Mobility Plan 2035, as well as the applicable policies related to scenic quality within the Silver Lake–Echo Park–Elysian Valley Community Plan (see Section 3.1 above).

With regard to Chapter 5, Urban Form and Neighborhood Design, the proposed Project would improve the quality of the public realm through Project design, which would promote accessibility via improved pedestrian pathways that would be complementary and appropriate to the scale and character of the existing buildings in the surrounding area. As illustrated in Figures 5-30 through 5-35 of Appendix C of this Draft EIR, the proposed Project would provide color, lighting, and surface texture accents and complementary building materials to building walls and facades, consistent with architectural themes of the neighborhood for consistency with the Silver Lake–Echo Park–Elysian Valley Community Plan.

The proposed Project includes entitlements and approvals to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards. The development standards would recognize the Project’s unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system. The design standards included in the proposed Project’s entitlements and approvals would enhance the visual identity and character of the proposed Project and its surrounding communities, and would ensure visual compatibility with adjacent development, as well as the Project area’s overall community character. Overall, the Project would not conflict with applicable zoning or other regulations governing scenic quality.

Based on the above discussion, operation of the proposed Project within the API would represent an overall change in views and visual quality and character as compared to existing conditions. However, the proposed Project is in an urban area that currently has a mix of architectural styles and building materials and colors. Although viewer groups may have varying sensitivities to the visual change associated with the proposed Project for each of the LUs, the Project would be consistent with applicable zoning and other regulations governing scenic quality. As a result, the operation of the proposed Project would have less than significant impacts related to visual character and quality.

AES-4: *Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Construction Impacts

Less Than Significant Impact.

Light and Glare

Construction activities would primarily occur during daytime hours. Some activities may require work outside of daytime hours (e.g., concrete pours, activities to close street lanes). If limited construction activities occur outside of daytime hours, lighting would be directed toward the construction areas and minimal spillover lighting is anticipated. Construction would result in additional lighting at staging and station, junction, and tower construction areas. This would require sufficient lighting for construction crews; however, the lighting equipment would be hooded and shielded to minimize spillover effects and glare. Construction would not significantly increase the ambient light levels in the vicinity because construction duration would be short and temporary, would be confined to localized sites, and would not constitute a substantial source of light or glare. Construction impacts related to light and glare would be less than significant.

Shading

Construction has the potential to temporarily alter shading in the API because construction activities would introduce heavy equipment (i.e. cranes, bulldozers, scrapers, and trucks). With the exception of cranes, construction equipment, trucks, and related elements visible during the construction phase would only temporarily cast minimal shadows because a majority of this equipment does not have significant height and mass. Overall, any shading that would occur as a result of construction activities would be temporary and intermittent for an approximately 25-month period. Thus, the potential for construction activities to result in shading and shadows would be minimal; impacts from construction would be less than significant.

Operational Impacts

Light and Glare

Less Than Significant Impact.

The Project area is urbanized and has a high level of existing ambient lighting. Project lighting would include low-level lighting for security and wayfinding purposes adjacent to and within the stations, junction, and towers, within cabins, at the vertical circulation, and areas for ticketing, fare checking, and queueing. In addition, low-level lighting to accent signage, architectural features, landscaping, adjacent pedestrian plazas, and potential mobility hubs would be installed at the stations, junction, and towers. Lighting would also be provided underneath the elevated stations and junction.

A Lighting Study (Appendix C) was conducted to determine the proposed Project's potential environmental impacts resulting from the Project's lighting and illuminated signage program. The Lighting Study evaluated the Project with respect to light trespass and glare. For light trespass, the Lighting Study analyzed the Project for compliance with the Los Angeles Municipal Code (LAMC), CALGreen, the CASP, and the RIO.

The Lighting Study concluded that the proposed Project's lighting and illuminated signage would comply with the LAMC light trespass illuminance requirements and that the Project's lighting would comply with CALGreen. The Project's sign lighting is exempt from CALGreen. In addition, the proposed Project's lighting and signage would comply with the CASP requirements where they apply at the Chinatown/State Park Station because the Project's light fixtures and signage are exempt from the CASP exterior lighting requirements.

The Lighting Study determined that while the Project's lighting exceeds the RIO threshold in certain locations, there is no light trespass impact since the existing lighting at the areas adjacent to the proposed Project within the RIO are urban with existing lighting that is greater than the RIO threshold. Furthermore, the portions of the Project's lighting that exceed the RIO are more than 2,600 feet from the LA River and therefore have no direct influence on the lighting within or adjacent to the LA River. In addition, as discussed in Chapter 2.0, Project Description within Subsection 2.11, Required Permits and Approvals, the Project Sponsor is seeking to create a Specific Plan pursuant to LAMC Section 11.5.7, to provide for consistent application of Project design standards, limitations, and operational measures in recognition of the proposed Project's unique characteristics, including unique opportunities for public benefits and unique aspects of an aerial rapid transit system. With approval of the Specific Plan, which would include its own lighting standards, there would be no conflict with the RIO. The RIO's requirements do not apply to sign lighting. Accordingly, the Project's impacts with respect to light trespass would be less than significant.

Glare impacts would not be anticipated related to low-level lighting and the other lighting proposed with the Project, as glare typically occurs when a sensitive use has a direct line-of-sight to a bright light source. The Lighting Study concluded that the Project's lighting would be less than high contrast existing conditions, and would not create glare at residential, sensitive sites, or roadway sites. In addition, Project signage would be less than high contrast existing conditions, and would not create glare at residential, sensitive sites, or roadway sites. The Lighting Study also concluded that the proposed Project would not create a new source of glare to drivers on adjacent streets and freeways.

The Project would also incorporate project design features related to lighting, as discussed in AES-PDF-A below. As such, the proposed Project would not create a substantial source of light or glare that would result in adverse effects to day/nighttime views of the area, and would comply with applicable City regulations related to light and glare. Therefore, impacts would be less than significant.

Shading

Less Than Significant Impact.

Shading is not a required analysis area in the CEQA Guidelines; however, a shadow analysis was conducted as part of the Visual Impact Assessment per recommendations in the L.A. CEQA Thresholds Guide. Shadows are cast in a clockwise direction from west/northwest to east/northeast, from the morning to afternoon hours, during the Winter, Spring, Summer, and Fall seasons of the year. During the Winter, the sun is lower in the sky and shadows are at their maximum coverage lengths. Generally, the shortest shadows are cast during the Summer and grow increasingly longer until the Winter. Typically, shadow coverage is a concern when a large structure is placed adjacent and west of a shade-sensitive use. According to the L.A. CEQA Thresholds Guide, shade-sensitive uses include routinely useable outdoor spaces associated with residential, recreational, or institutional (e.g., schools, convalescent homes) land uses; commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas; nurseries; and existing solar collectors.

A project impact would normally be considered significant if shadow-sensitive uses would be shaded by project-related structures for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October).

A summary of the shadow analysis is provided below for each of the vertical elements included as part of the proposed Project. A detailed description of the shadow analysis and shadow diagrams for each vertical element (except Dodger Stadium Station) within each of the four seasons are provided in Appendix C of this Draft EIR.

Alameda Station

The proposed Alameda Station would result in the shading of a shade-sensitive use for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April). During Winter, a small useable outdoor space, including eating tables and umbrellas, which is located on the rooftop of the Mozaic Apartments on the east side of Alameda Street, would be partially and then fully shaded from 12:00 p.m. to 3:00 p.m., for a total of three hours. However, this small outdoor space has some existing shading from the adjacent rooftop areas of the apartment building, and the entire space would not be fully shaded by the station for the entire three hours. The proposed Alameda Station would not result in the shading of shade-sensitive uses for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). As such, shadow impacts from the Alameda Station would be less than significant.

Alameda Tower

The proposed Alameda Tower would not result in the shading of shade-sensitive uses for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). A small portion of the Alameda Triangle directly below the proposed tower in the northwest corner and northern portion of the property would be shaded all day in each season of the year. However, a majority of the Alameda Triangle would not be shaded throughout the day in each season. Moreover, the Alameda Triangle is public right-of-way and is not considered to be a shade-sensitive use. As such, shadow impacts from the Alameda Tower would be less than significant.

Alpine Tower

The proposed Alpine Tower would not result in the shading of shade-sensitive uses for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). As such, shadow impacts from the Alpine Tower would be less than significant.

Chinatown/State Park Station

The proposed Chinatown/State Park Station would result in the shading of shade-sensitive uses for more than three hours between the hours of 9:00 a.m. and 4:00 p.m. Pacific Standard Time (between late October and early April) in the Winter. Small portions of the eastern and western walkways and park green space near the southern entrance of the park would be shaded by the proposed Chinatown/State Park Station in the Winter. These park-related areas would be directly adjacent to the proposed station and are also considered to be a part of the proposed Project site. The Los Angeles State Historic Park is an urban park in a highly developed area and includes a total of approximately 32 acres of passive recreation including expansive additional areas of walkways and open green space for patrons to use. The relatively small areas of park walkways and green spaces that would receive shading from the proposed station are considered to be elements of the southern entrance to the park, but not routinely useable outdoor spaces. In addition, the outdoor seating area associated with the Cargo Snack Shack, which would receive shading for only two hours, currently includes an overhead shade canopy, so the proposed Project would not shade an uncovered outdoor seating area. As such, these impacts are not considered to be significant for these reasons. Also, the proposed Chinatown/State Park Station would not result in the shading of shade-sensitive uses for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). As such, shadow impacts from the Chinatown/State Park Station would be less than significant.

Broadway Junction

The proposed Broadway Junction would not result in the shading of shade-sensitive uses for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). As such, shadow impacts from the Broadway Junction would be less than significant.

Stadium Tower

The proposed Stadium Tower would not result in the shading of shade-sensitive uses for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). As such, shadow impacts from the Stadium Tower would be less than significant.

Dodger Stadium Station

The Dodger Stadium Station has been screened out of requiring shadow diagrams and a shadow analysis in accordance with the L.A. CEQA Thresholds Guide. The document states that if a project element would include light-blocking structures in excess of 60 feet in height above the ground elevation that would be located within a distance of three times the height of the proposed structure to a shadow-sensitive use on the north, northwest or northeast, then shadow diagrams and associated analysis should be conducted. No shade-sensitive uses are currently located within this radius from the proposed location of the Dodger Stadium Station. As such, detailed shadow diagrams and analysis were not required for the Dodger Stadium Station.

Based on the above discussions, the Alameda Tower, Alpine Tower, Broadway Junction, Stadium Tower, and Dodger Stadium Station structures would not result in the shading of shade-sensitive uses for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard

Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October).

However, the Alameda Station and Chinatown/State Park Station would result in the shading of shade-sensitive uses for more than three hours between the hours of 9:00 a.m. and 4:00 p.m. Pacific Standard Time (between late October and early April) in the Winter. As discussed above, at the Alameda Station, the small useable outdoor space located on the rooftop of the Mozaic Apartments would be partially and then fully shaded for a total of three hours. However, this outdoor space has existing shading from the apartment roof structure located adjacent, and the entire space would not be fully shaded by the station for the entire three hours. The proposed Alameda Station would not result in the shading of shade-sensitive uses for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). As such, shadow impacts from the Alameda Station would be less than significant.

Additionally, at the proposed Chinatown/State Park Station, small portions of the eastern and western walkways and park green space near the southern entrance to the Los Angeles State Historic Park would be shaded. These park-related areas would be directly adjacent to the proposed station and are also considered to be a part of the proposed Project site. The relatively small areas of park walkways and green spaces that would receive shading from the proposed station are considered to be elements of the southern entrance to the park, but not routinely useable outdoor spaces. In addition, the outdoor seating area associated with the Cargo Snack Shack, which would receive shading for only two hours, currently includes an overhead shade canopy, so the proposed Project would not shade an uncovered outdoor seating area. As such, these impacts are not considered to be significant for these reasons. Also, the proposed Chinatown/State Park Station would not result in the shading of shade-sensitive uses for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). As such, shadow impacts from the Chinatown/State Park Station would be less than significant.

Therefore, the proposed Alameda Tower, Alpine Tower, Broadway Junction, Stadium Tower, and Dodger Stadium Station structures would not result in the shading of shade-sensitive uses for longer periods than the hours set forth in the L.A. CEQA Thresholds. The proposed Alameda Station and Chinatown/State Park Station would result in the shading of shade-sensitive uses for longer periods than the hours set forth in the L.A. CEQA Thresholds. However, as discussed in the analysis above, the outdoor space at the Mozaic apartments adjacent to the Alameda Station has existing shading from the apartment roof structure, and the entire outdoor space would not result in shading of shade-sensitive uses for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October).

Additionally, as discussed in the analysis above, the relatively small areas of park walkways and green spaces that would receive shading from the proposed Chinatown/State Park Station are considered to be elements of the southern entrance to the park, but not routinely useable outdoor spaces. In addition, the outdoor seating area associated with the Cargo Snack Shack, which would receive shading for only two hours, currently includes an overhead shade canopy, so the proposed Project would not shade an uncovered outdoor seating area. As such, these impacts are not considered to be significant for these reasons. Also, the proposed Chinatown/State Park Station would not result in the shading of shade-sensitive uses for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). As such, shadow impacts from the Chinatown/State Park Station would be less than significant.

As a result, impacts related to shading would be less than significant.

3.1.5 Mitigation Measures

The proposed Project would result in less than significant impacts to aesthetics and visual resources. No mitigation measures are required.

3.1.6 Project Design Features

AES-PDF-A **Project Lighting.** The Project would also include the following Project Design Features related to lighting:

- Building Lighting will not exceed 60 watts.
- Building Lighting outdoor luminaires will not exceed 6200 initial lumens.
- Sign Lighting luminance will not exceed 10,000 candelas per m2 (cd/m2) during the day from after sunrise until 45 minutes prior to sunset. Sign Lighting will not exceed 300 cd/m2 at night from sunset until 45 minutes prior to sunrise.
- Sign Lighting luminance shall transition smoothly from daytime luminance to nighttime luminance and vice versa.
- Illuminated signs that have the potential to exceed 300 cd/m2 will include an electronic control mechanism to reduce sign luminance to 300 cd/m2 at any time when ambient sunlight is less than 100 footcandles (fc).

3.1.7 Level of Significance After Mitigation

The proposed Project would result in less than significant impacts to aesthetics and visual resources.

This page intentionally left blank.

3.2 AGRICULTURE AND FORESTRY RESOURCES

This section evaluates the potential impacts of the proposed Project on agriculture and forestry resources based upon existing zoning along the Project alignment and surrounding areas, and if the proposed Project would convert important farmland or forest land to other non-agricultural or non-forest land uses.

3.2.1 Regulatory Setting

State

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive reduced property tax assessments because they are based upon actual land use (i.e., farming and open space uses) as opposed to full market value of the property.[1] According to the California Department of Conservation, Division of Land Resource Protection, as of 2018, there are no existing Williamson Act contracts offered in Los Angeles County.[2]

California Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program was established in 1982 and is maintained by the California Department of Conservation with the goal of providing consistent and impartial data to decision makers for use in assessing present status, reviewing trends in land use, and planning for the future of California's agricultural land resources.[3] It is a non-regulatory program that provides an impartial analysis of agricultural land use in the State. However, Important Farmland Maps prepared under the Farmland Mapping and Monitoring Program are utilized to determine the location of agricultural lands throughout California.

The Farmland Mapping and Monitoring Program specifies that land must meet both of the following criteria in order to be mapped as Prime Farmland and Farmland of Statewide Importance:

1. Land Use: The land has been used for irrigated agricultural production at some time during the four years prior to the Important Farmland Map date. Irrigated land use is determined by Farmland Mapping and Monitoring Program staff by analyzing current aerial photos, local comment letters, and related geographic information system data, supplemented with field verification.

2. Soil: The soil must meet the physical and chemical criteria for Prime Farmland or Farmland of Statewide Importance as determined by the United States Department of Agriculture

---

1 State of California Department of Conservation, Division of Land Resource Protection, Williamson Act Program. Available at: https://www.conservation.ca.gov/dlrp/wa. Accessed April 2022.

2 California Department of Conservation, Division of Land Resource Protection. Williamson Act, Reports and Statistics, 2018 Status Report. Available at: https://www.conservation.ca.gov/dlrp/wa/Pages/stats_reports.aspx. Accessed April 2022.

3 State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, Overview. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/Program_Overview.aspx. Accessed April 2022.

Natural Resources Conservation Service, which compiles lists of soils in each survey area that meet the quality criteria.[4]

Fire and Resource Assessment Program

The Fire and Resource Assessment Program is implemented by the California Department of Forestry and Fire Protection pursuant to Public Resources Code (PRC) Section 4789, and mandates periodic assessments of California's forest and rangeland resources.[5] In 2008, the Federal Farm Bill added a provision to federal law that required states to do assessments of forest resources. The Fire and Resource Assessment Program provides a variety of products, including the Assessment, which is a detailed report on California's forests and rangelands. The most recent Assessment was published in August 2018 with the intention of meeting both the State and federal mandates, covering both forest and rangeland resources, on private as well as publicly managed lands.

Forest Legacy Program

The Forest Legacy Program is implemented by the California Department of Forestry and Fire Protection to protect environmentally important forestland threatened with conversion to non-forest uses, such as subdivision for residential or commercial development. It comprises both the Federal Forest Legacy Program and the California Forest Legacy Program and is entirely voluntary. Landowners participating in the program may sell or transfer particular rights, such as the right to develop the property or to allow public access, while retaining ownership of the property and the right to use it consistent with the terms of the easement. Priority is given to eligible properties that can be effectively protected and managed, and that have important scenic, recreational, timber, riparian, fish and wildlife, threatened and endangered species, and other cultural and environmental values.[6]

3.2.2 Environmental Setting

Alameda Station

The Alameda Station would be located on Alameda Street adjacent to the planned LAUS Forecourt and Placita de Dolores between Arcadia Street and Cesar E. Chavez Avenue. On the west, vertical circulation elements (i.e., elevators, escalators, stairs) and queueing areas would be introduced at-grade north of the Placita de Dolores in a proposed new pedestrian plaza in an area currently containing a parking and loading area for El Pueblo and on City ROW. On the east, vertical circulation elements would be introduced at-grade from the planned LAUS Forecourt. At this location, the parcels on the east side of Alameda Street are developed with the LAUS and the Mozaic at Union Station apartments. The parcels to the east of Alameda Street on which the vertical circulation elements and queueing areas would be located are zoned as Alameda District Specific Plan (ADP) and designated as Regional Center Commercial in the City of Los Angeles

---

4 State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, Prime Farmland and Farmland of Statewide Importance. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/prime_farmland_fmmp.aspx. Accessed April 2022.

5 State of California Department of Forestry and Fire Protection, Fire and Resource Protection Program, California's Forests and Rangelands: 2017 Assessment, August 2019. Available at: https://frap.fire.ca.gov/assessment/. Accessed April 2022.

6 State of California Department of Forestry and Fire Protection, Programs, Resource Management, Forestry/Landowner Assistance, Forest Legacy Program. Available at: https://www.fire.ca.gov/grants/forest-legacy/. Accessed April 2022.

General Plan (General Plan).[7] The parcels on the west side of Alameda Street are developed with historic El Pueblo de Los Angeles. The parcels in proximity to the vertical circulation elements and queueing areas are zoned OS (Open Space) and PF (Public Facilities), and are designated for Open Space and Public Facilities under the General Plan.[8]

Alameda Tower

The Alameda Tower would be located on the Alameda Triangle, a City ROW between Alameda Street, North Main Street, and Alhambra Avenue that contains landscaping and hardscaping. The parcels on the west side of Alameda Street are developed with a compressed natural gas (CNG) refueling station associated with an adjacent LA County vehicle fleet management facility. All parcels along Alameda Street at this location are zoned C2 (Commercial) and designated Regional Commercial under the General Plan.[9]

Alpine Tower

The Alpine Tower would be located on a City-owned parcel, currently being used as non-public parking storage for City vehicles, at the northeast corner of Alameda Street and Alpine Street, adjacent to the elevated Metro L Line (Gold). The parcel north of the Alpine Tower site contains Homeboy Industries. The parcel on the west side of Alameda Street and north of Alpine Street contains the Metro Chinatown Senior Lofts apartment building. The parcel on the west side of Alameda Street and south of Alpine Street contains an LA County vehicle fleet management facility. All parcels along Alameda Street at this location are zoned C2 (Commercial) and designated Regional Commercial under the General Plan.[10]

Chinatown/State Park Station

The Chinatown/State Park Station would be located adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park. The southern portion of the station would be located on City ROW, while the northern portion of the station would be integrated into the southern boundary of the Los Angeles State Historic Park. The northern portion of the Chinatown/State Park Station site, which is located within the Los Angeles State Historic Park property, is zoned GW (Greenway) and designated as Greenway under the Cornfield Arroyo Seco Specific Plan (CASP), which allows for the development of recreation and open space uses.[11] At this location, the parcels on the west side of Spring Street contain paved areas adjacent to the Metro L Line (Gold) and are zoned MR2 (Restricted Light Industrial). The parcel on the east side of Spring Street is currently vacant and is zoned CM and designated Commercial Manufacturing, and parcels to the south across Spring Street are zoned C2 (Commercial) under the General Plan.[12]

[7] City of Los Angeles Department of City Planning, Zoning Information and Map Access System (ZIMAS). Interactive map available at: http://zimas.lacity.org/. Accessed April 2022.

[8] City of Los Angeles Department of City Planning, Zoning Information and Map Access System (ZIMAS). Interactive map available at: http://zimas.lacity.org/. Accessed April 2022.

[9] Ibid.

[10] Ibid.

[11] City of Los Angeles Department of City Planning, Cornfield Arroyo Seco Specific Plan, adopted 2013. Available at: https://planning.lacity.org/odocument/9d013e0f-452b-4857-86d5-fcd357b27a4d. Accessed April 2022.

[12] Ibid.

Broadway Junction

The Broadway Junction would be located at the intersection of North Broadway and Bishops Road. The junction would primarily be located on privately-owned property with a portion of the junction and overhead cable infrastructure cantilevered and elevated above the public ROW. The existing building located at 1201 North Broadway would be demolished. The parcels on the south side of the property, fronting North Broadway, are zoned C2 and designated Regional Commercial under the General Plan, while the parcels on the north side of the property, at 448 Savoy Street and 442 Savoy Street, are zoned R3 (Multiple Dwelling) and designated Medium Residential under the General Plan.[13] The parcels on the south side of Savoy adjacent to and northeast of the Broadway Junction site are multi- and single-family residential properties located at 438 Savoy Street, 434 Savoy Street, and 430 Savoy Street. These properties are zoned R3 and designated Medium Residential under the General Plan.[14] North of the Broadway Junction site, on the north side of Savoy, are a multi-family residential building, located at 455 Savoy Street, and a single family residential property located at 451 Savoy Street. Both the 455 Savoy and 451 Savoy properties are zoned R3 and designated Medium Residential under the General Plan.[15] Southwest of the Broadway Junction site, across Bishops Road, is the Cathedral High School campus, which is zoned R3 and designated Medium Residential under the General Plan.[16]

Stadium Tower

The Stadium Tower would be located on hillside private property north of Stadium Way between the Downtown Gate of Dodger Stadium and SR-110. The Stadium Tower site is a vegetated hillside and is currently zoned A1 (Agriculture) and designated Open Space under the General Plan.[17] The Stadium Tower site is subject to a Conditional Use Permit related to operation of Dodger Stadium, which allows the operation of the 56,000 seat-capacity Major League Baseball stadium and various ancillary structures and uses, including “mass transportation service” to the site.[18]

Dodger Stadium Station

The Dodger Stadium Station would be located in the southeast portion of the Dodger Stadium property near the Downtown Gate. The site of the Dodger Stadium Station currently contains a paved surface parking area, a drive aisle, and a landscaped berm. This portion of the Dodger Stadium property is zoned A1 and designated Open Space under the General Plan.[19] The Dodger Stadium property is subject to a Conditional Use Permit, which allows the operation of the 56,000 seat-capacity Major League Baseball stadium and various ancillary structures and uses, including “mass transportation service” to the site.[20]

13 City of Los Angeles Department of City Planning, Zoning Information and Map Access System (ZIMAS). Interactive map available at: http://zimas.lacity.org/. Accessed April 2022.
14 Ibid
15 Ibid.
16 Ibid.
17 Ibid.
18 City of Los Angeles Department of City Planning, Office of Zoning Administrator, Z.A Case No. 15430, Dodger Baseball Stadium Site – Chavez Ravine Area, August 4, 1960.
19 City of Los Angeles Department of City Planning, Zoning Information and Map Access System (ZIMAS). Interactive map available at: http://zimas.lacity.org/. Accessed April 2022.
20 City of Los Angeles Department of City Planning, Office of Zoning Administrator, Z.A Case No. 15430, Dodger Baseball Stadium Site – Chavez Ravine Area, August 4, 1960.

3.2.3 Methodology

The assessment of impacts concerning agriculture and forestry resources is based on data collected from the Farmland Mapping and Monitoring Program, the Forest and Range Assessment Program, and the Forest Legacy Program. These resources were used in correlation with a review of existing zoning and land use designations to assess the level of change the proposed Project may have on agriculture or forestry resources.

Thresholds of Significance

For purposes of this Draft Environmental Impact Report (EIR), the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on agriculture and forestry resources if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;

- Conflict with existing zoning for agricultural use, or a Williamson Act contract;

- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4256), or timberland zoned Timberland Production (as defined by Government Code section 51104[g]);

- Result in the loss of forest land or conversion of forest land to non-forest use; or

- Involve changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

3.2.4 Environmental Impacts

AFR-1: *Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

No Impact. The proposed Project would not convert Farmland to another non-agricultural use. No portion of the proposed Project alignment is designated as Farmland on the "Los Angeles County Important Farmland" map prepared by the California Department of Conservation, Division of Land Resource Protection pursuant to the Farmland Mapping and Monitoring Program.[21] Thus, no portion of the proposed Project alignment would be located on or near Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Additionally, the proposed Project is located in an urbanized area of Downtown Los Angeles, and no portion of the Project alignment is developed for farming or agricultural use. Therefore, construction and operations of

[21] State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, Los Angeles County, *Los Angeles County Important Farmland 2016* map. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/LosAngeles.aspx. Accessed April 2022.

the proposed Project would not convert farmland to a non-agricultural use, and no impact would occur.

AFR-2: *Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

Less Than Significant Impact. The proposed Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. As previously discussed, there are no Williamson Act contracts within Los Angeles County.[22] As such, no impact to such contracts would occur. The only Project component sites zoned for agriculture are the Stadium Tower site and the Dodger Stadium Station site, which are both zoned A1. The A1 Zone allows for, among other uses, development of single-family residences; parks, playgrounds or community centers owned and operated by a government agency; farming, nurseries, aviaries, and apiaries; and the keeping of domestic livestock.[23] Notwithstanding the underlying zoning, the Dodger Stadium property is subject to a Conditional Use Permit, which allows for the operation of a Major League Baseball stadium and various ancillary structures and uses, including "mass transportation service" to the site. Additionally, the Stadium Tower site is located on a vegetated hillside and the Dodger Stadium Station site is developed with a paved surface parking lot and drive aisle. Neither of these sites contain agricultural uses. Therefore, construction and operation of the proposed Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. The impact would be less than significant.

AFR-3: *Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4256), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

No Impact. The proposed Project would not conflict with or cause rezoning of forest land or timberland. The existing zoning on the Project alignment and in the surrounding areas includes zoning for transit, open space, public facilities, commercial, industrial, residential, and agricultural uses. The Project alignment is located in an urbanized area of downtown Los Angeles, and no portion of the alignment is zoned for or developed as forest land or timberland as defined in Public Resources Code Section 12220(g) and Government Code Section 4526, respectively.[24] Therefore, the construction and operation of the proposed Project would not conflict with existing zoning or cause a rezoning of forest land or timberland, and no impact would occur.

AFR-4: *Would the Project result in the loss of forest land or conversion of forest land to non-forest use?*

No Impact. The proposed Project would not result in the loss or conversion of forest land. The Project alignment is located in an urbanized area of downtown Los Angeles, and no portion of the alignment or the surrounding areas are zoned or developed for a forest land use.[25] As previously discussed, the nearest forest lands are approximately 11 miles north of the Project alignment. Therefore, construction and operation of the proposed Project would not result in loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

---

22 California Department of Conservation, Division of Land Resource Protection. Williamson Act, Reports and Statistics, 2018 Status Report. Available at: https://www.conservation.ca.gov/dlrp/wa/Pages/stats_reports.aspx. Accessed April 2022.

23 City of Los Angeles Municipal Code. Section 12.05.

24 ZIMAS. Interactive map available at: http://zimas.lacity.org/. Accessed April 2022.

25 ZIMAS. Interactive map available at: http://zimas.lacity.org/. Accessed April 2022.

AFR-5: *Would the Project involve changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

No Impact. The proposed Project would not result in the conversion of Farmland or forest land to non-agricultural or non-forest uses. No portion of the Project alignment is designated as Farmland.[26] Additionally, the proposed Project alignment is located in an urbanized area of downtown Los Angeles, and no forest lands exist on or adjacent to the Project alignment. Therefore, construction and operation of the proposed Project would not change the existing environment such that Farmland would be converted to a non-agricultural use or forest land converted to non-forest use, and no impact would occur under.

3.2.5 Mitigation Measures

The proposed Project would result in less than significant impacts to agriculture and forestry resources. No mitigation measures are required.

3.2.6 Level of Significance after Mitigation

The proposed Project would result in less than significant impacts to agriculture and forestry resources. No mitigation measures are required.

26 State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, Los Angeles County, *Los Angeles County Important Farmland 2016* map. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/LosAngeles.aspx. Accessed April 2022.

This page intentionally left blank.

3.3 AIR QUALITY

This section evaluates the potential impacts on air quality at the regional and local scales from construction and operation of the proposed Project. Information contained in this section is summarized from the *Los Angeles Aerial Rapid Transit Air Quality/Health Risk Assessment Technical Report* (Appendix D of this Draft EIR). This section also describes the characteristics and effects of air pollutants, the existing air quality conditions in the proposed Project area, and the regulations that have been adopted to govern air quality management. The analysis evaluates potential impacts related to those air quality emissions resulting from implementation of the proposed Project.

3.3.1 Regulatory Setting

Federal

Federal Clean Air Act

The federal Clean Air Act (CAA) requires the adoption of national ambient air quality standards (NAAQS) to protect the public health and welfare from the effects of air pollution. Criteria air pollutants (CAPs) are pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Current federal standards are set for sulfur dioxide (SO_2), carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead (Pb).[1] California has established additional and generally more restrictive standards known as the California Ambient Air Quality Standards (CAAQS), as further described below. The current NAAQS and CAAQS are shown in Table 3.3-1.

Specific geographic areas are classified as either “attainment” or “non-attainment” areas for each pollutant based upon the comparison of data with the NAAQS and CAAQS. Areas designated as “non-attainment” for purposes of NAAQS compliance are required to prepare regional air quality plans to meet federal requirements. These regional air quality plans are included in an overall program referred to as the State Implementation Plan (SIP). If the U.S. Environmental Protection Agency (USEPA) revises a current NAAQS or establishes a new standard, the State and the USEPA must implement specific objectives which involve submitting SIPs in accordance with the NAAQS. The attainment status of Los Angeles County for the pollutants regulated by the NAAQS and CAAQS is shown in Table 3.3-1.

1 National Ambient Air Quality Standards (NAAQS). Available at: https://www.epa.gov/criteria-air-pollutants/naaqs-table, accessed April 2022.

Table 3.3-1: Summary of CAAQS and NAAQS and Attainment Status

Pollutant	Averaging Period	California		Federal	
		Standards (CAAQS)	Attainment Status	Standards (NAAQS)	Attainment Status
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Nonattainment	--	--
	8 Hour	0.070 ppm (137 µg/m^3)	Nonattainment	0.070 ppm (137 µg/m^3)	Extreme Nonattainment
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	Nonattainment	150 µg/m^3	Attainment (Maintenance)
	Annual	20 µg/m^3	Nonattainment	--	--
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	--	--	35 µg/m^3	Serious Nonattainment
	Annual	12 µg/m^3	Nonattainment	12 µg/m^3	Serious Nonattainment
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Attainment (Maintenance)
	8 Hour	9.0 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Attainment (Maintenance)
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/m^3)	Attainment	0.100 ppm (188 µg/m^3)	Attainment (Maintenance)
	Annual	0.030 ppm (57 µg/m^3)	Attainment	0.053 ppm (100 µg/m^3)	Attainment (Maintenance)
Lead (Pb)	30-day Average	1.5 µg/m^3	Attainment	--	--
	Rolling 3-Month Average	--	--	0.15 µg/m^3	Nonattainment (Partial)
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm (655 µg/m^3)	Attainment	0.075 ppm (196 µg/m^3)	Attainment
	24 Hour	0.04 ppm (105 µg/m^3)	--	0.014 ppm (365 µg/m^3)	Attainment
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Unclassified	--	--
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)	No Information Available	--	--
Sulfates	24 Hour	25 µg/m^3	Attainment	--	--

Notes: ppm = parts per million; µg/m^3 = micrograms per cubic meter. Nonattainment for lead only applies to the southern portion of Los Angeles County.

Sources:

SCAQMD. *NAAQS and CAAQS Attainment Status for South Coast Air Basin*. Available at: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf. Accessed April 2022.

CARB. Area Designation Maps/State and National. Available at: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations, accessed April 2022.

USEPA. EPA Region 9 Air Quality Maps. Available at: https://www3.epa.gov/region9/air/maps/, accessed April 2022.

Federal Criteria Air Pollutants

Ozone

Ozone is a colorless gas formed in the atmosphere when volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) react in the presence of ultraviolet sunlight. The primary sources of VOCs and NO_X are automobile exhaust and industrial sources. Meteorology and terrain are involved in O_3 formation, and ideal conditions occur during days in summer and early autumn with a combination of low wind speeds, stagnant air, warm temperatures, and cloudless skies. In Southern California, short term exposures of a few hours to ozone can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

Nitrogen Dioxide

Nitrogen Dioxide is typically formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_X and are major contributors to O_3 formation. The primary sources of NO include automobile exhaust and industrial sources. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere, causing reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis, and some increase in bronchitis in children (2 and 3 years old) has also been observed at concentrations below 0.3 parts per million by volume (ppmv).

Carbon Monoxide

Carbon monoxide is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly, influenced by wind speed, topography, and atmospheric stability. Ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic and can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions. The highest levels of CO typically occur during the colder months of the year when inversion conditions, where a layer of warm air sits atop cool air, are more frequent and can trap pollutants close to the ground. CO competes with oxygen, often replacing it in the blood, thus reducing the blood’s ability to transport oxygen to vital organs. Excess CO exposure can result in dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide

Sulfur dioxide is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits placed on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs, and can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 can also yellow plant leaves and erode iron and steel.

Particulate Matter

Particulate matter (PM) is a mixture of extremely small particles and liquid droplets floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. Fine particulate matter ($PM_{2.5}$) and inhalable or coarse particulate matter (PM_{10}) represent fractions of particulate matter. Fine particulate matter results from fuel combustion (e.g., motor vehicles, power generation, and industrial facilities), residential fireplaces, and woodstoves; and can form in the atmosphere from gases such as sulfur oxides (SO_X), NO_X, and VOCs. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

When inhaled, particulate matter can penetrate and damage the human respiratory system, which may increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility.

Lead

Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline, and the manufacturing of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters. Due to the phase-out of leaded gasoline, there was a dramatic reduction in atmospheric Pb over the past three decades, and secondary lead smelters, battery recycling, and manufacturing facilities have become lead-emission sources of greater concern.

Prolonged exposure to atmospheric lead can cause serious health effects, such as gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Low-level lead exposures during infancy and childhood are of particular concern, as such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

Toxic Air Contaminants

In addition to criteria air pollutants, the United States Environmental Protection Agency (USEPA) regulates hazardous air pollutants, also known as toxic air contaminants (TACs). TACs may result from stationary sources such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources such as automobiles; and area sources such as landfills. TACs are considered toxic because they are associated with adverse health effects including carcinogenic (i.e., cancer-causing) and non-carcinogenic effects. Non-carcinogenic effects typically affect one or more target organ systems and may be experienced either on short-term (acute) or long-term (chronic) exposure to a given TAC.

Federal Vehicle Standards

Federal Vehicle Standards were established in 2010 for additional standards regarding fuel efficiency and greenhouse gas (GHG) reduction, clean fuels, and advanced vehicle infrastructure. In response, the USEPA and National Highway Traffic Safety Administration (NHTSA) proposed and adopted stringent, coordinated federal GHG and fuel economy standards for model year 2017–2025 light-duty vehicles. In 2011, the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018.[2] The standards for CO_2 emissions and fuel consumption were tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. In August 2016, the USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The final standards are expected to lower carbon dioxide emissions by approximately 1.1 billion metric tons (MT) and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.

In 2019, the USEPA and NHTSA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One, which revoked California's authority to set its own GHG standards and set zero emission vehicle mandates in California.[3] The rule froze minimum requirements for new zero emission vehicles sales at model year 2020 levels for year 2021 and beyond and would have likely resulted in a lower number of zero emission vehicles in the future and a corresponding greater number of future gasoline internal combustion engine vehicles. The SAFE Rule was subject to ongoing litigation and on February 8, 2021, the D.C. Circuit Court of Appeals granted the Biden Administration's motion to stay litigation over Part 1 of the SAFE Rule. On April 22 and April 28, 2021, respectively, NHTSA and USEPA formally announced their intent to reconsider the Safe Rule (Part One).[4] [5] In December 2021, after reviewing all the public comments submitted on NHTSA's April 2021 Notice of Proposed Rulemaking, NHTSA finalized the CAFE Preemption rulemaking to withdraw its portions of the SAFE Rule (Part One). [6] Also in December 2021, USEPA finalized revised national GHG emissions standards for passenger cars and light trucks for Model Years 2023- 2026.[7] On March 9, 2022, USEPA reinstated California's authority under

---

2 United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA). 2016. Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium and Heavy-Duty Engines and Vehicles – Phase 2. Available at: https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf, accessed April2022.

3 USEPA and NHTSA. September 2019. Federal Register, Vol. 84. No. 188, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. Available at: https://www.govinfo.gov/content/pkg/FR-2019-09-27/pdf/2019-20672.pdf, accessed April 2022.

4 NHTSA. April 2021. NHTSA Advances Biden-Harris Administration's Climate & Jobs Goals. Available at: https://www.nhtsa.gov/press-releases/nhtsa-advances-biden-harris-administrations-climate-jobs-goals, accessed April 2022.

5 USEPA. April 2021. Notice of Reconsideration of a Previous Withdrawal of a Waiver for California's Advanced Clean Car Program (Light-Duty Vehicle Greenhouse Gas Emission Standards and Zero Emission Vehicle Requirements). Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/notice-reconsideration-previous-withdrawal-waiver, accessed April 2022.

6 USEPA. 2021. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026.* Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed: April 2022.

7 USEPA. 2021. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026.* Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed: April 2022.

the Federal CAA to implement its own GHG emission standards and Zero Emission Vehicle (ZEV) sales mandate and entirely rescinded the SAFE Rule (Part One).

Executive Order 14008

On January 27, 2021, President Biden issued an Executive Order on Tackling the Climate Crisis at Home and Abroad (Executive Order 14008).[8] Part I of the Order highlights placing the climate crisis at the center of United States foreign policy and national security. Addressing the climate crisis will require significant short-term global reductions in GHG emissions and net-zero global emissions by mid-century or sooner. The United States will pursue green recovery efforts and initiatives to advance the clean energy transition.

Part II of the Order relays the government-wide approach to the climate crisis, which involves reducing climate pollution in every sector of the economy, especially through innovation, commercialization, and deployment of clean energy technologies and infrastructure. A National Climate Task Force was established to focus on addressing the climate crisis through key federal actions to reduce climate change impacts. A 100 percent carbon pollution-free electricity sector is targeted by no later than 2035 and a net-zero emissions economy is to be achieved by no later than 2050. Electricity production by offshore wind resources is aimed to be doubled by 2030.

State

California Clean Air Act

The California CAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts authority to implement transportation control measures. The California CAA requires attainment of the CAAQS and designation of attainment and non-attainment areas. The California CAA also requires that air districts expeditiously adopt and prepare an air quality attainment plan (Clean Air Plan) if the district violates State air quality standards for O_3, CO, SO_2, or NO_2. No locally prepared attainment plans are required for areas that violate the State PM_{10} standards; The California Air Resources Board (CARB) is responsible for developing plans and projects that achieve compliance with the State PM_{10} standards.

The California CAA emphasizes the control of indirect and area-wide sources of air pollutant emissions. The California CAA gives local air pollution control districts explicit authority to regulate indirect sources of air pollution and establish Transportation Control Measures (TCMs), which are strategies to reduce vehicle trips, use, miles traveled, idling, or traffic congestion for the purpose of reducing vehicle emissions.

State Criteria Air Pollutants

Sulfates

Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO_2 in the atmosphere. Sulfates can result in respiratory impairment, as well as reduced visibility.

[8] White House Briefing Room. January 2021. Executive Order on Tackling the Climate Crisis at Home and Abroad. Available at: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/, accessed April 2022.

Vinyl Chloride

Vinyl chloride is a colorless gas with a mild, sweet odor. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

Hydrogen Sulfide

Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

Visibility Reducing-Particles

Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Deterioration of visibility is one of the most obvious manifestations of air pollution and plays a major role in the public's perception of air quality. Visibility reduction from air pollution is often due to the presence of sulfur and NO_X, as well as PM.

Toxic Air Contaminants

Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars, and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. CARB classified "particulate emissions from diesel-fueled engines" (17 California Code of Regulations [CCR] 93000) as a TAC in August 1998. According to CARB, DPM exposure may lead to aggravated asthma, chronic bronchitis, respiratory and cardiovascular hospitalizations, and other heart and lung impacts.[9,10]

Health and Safety Code Section 41700

Section 41700 of the California Health and Safety Code states that a person shall not discharge, from any source, quantities of air contaminants or other material that causes injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. This section of the code also applies to sources of objectionable odors.

Air Toxics Program

California's Air Toxics Program, established under Assembly Bill (AB) 1807 (Tanner), identifies more than 700 pollutants, of which carcinogenic and non-carcinogenic toxicity criteria have been

9 CARB. 2016. Overview: Diesel Exhaust and Health. Available at: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health, accessed April2022.

10 CARB. 2008. Fact Sheet: Diesel Particulate Matter Health Risk Assessment Study for the West Oakland Community: Preliminary Summary of Results. Available at: https://ww3.arb.ca.gov/ch/communities/ra/westoakland/documents/factsheet0308.pdf, accessed April2022.

established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) hazardous air pollutants.

The Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588) identifies and evaluates risk from air toxics sources. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized. “High-priority” facilities are required to perform a health risk assessment, and publicize results if specific thresholds are exceeded.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines.[11] The plan was anticipated to result in an 80 percent decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation (i.e., “Truck and Bus Regulation”), the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel-Fueled Fleets Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment Program. There also are several Airborne Toxic Control Measures (ATCMs) that reduce diesel emissions, such as the following:

- Trucks and Bus Regulation (13 CCR 2025): requires diesel trucks and buses to be upgraded to reduce emissions depending on date of manufacture and weight.
- In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449): reduces DPM and NO_X emissions from in-use, off-road heavy-duty diesel vehicles through limits on idling, CARB reporting requirements, restrictions on older vehicles, and exhaust retrofits.
- Diesel-Fueled Commercial Motor Vehicle Idling (13 CCR 2485): limits idling of trucks to a maximum of 5 minutes, except when the vehicle is queuing, for diesel-fueled commercial motor vehicles with gross weights greater than 10,000 pounds.
- Stationary Compression Ignition Engines (17 CCR 93115): establishes emission standards and fuel use requirements to reduce DPM emissions for agricultural and non-agricultural stationary engines.

Pavley Standards

Assembly Bill 1493 (“the Pavley Standard” or AB 1493) required CARB to adopt regulations to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks. CARB introduced a new approach to combine the control of smog-causing pollutants and GHG emissions into a single package of standards. These standards include efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California.

Advanced Clean Cars Program

In 2012, CARB approved the Advanced Clean Cars (ACC) program, a new emissions-control program for non-commercial passenger vehicles and light-duty truck for model years 2017–2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero emission vehicles. By 2025, when the rules will be fully implemented, new

---

[11] CARB. October 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. Available at: https://ww2.arb.ca.gov/sites/default/files/classic//diesel/documents/rrpfinal.pdf, accessed April2022.

automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

Executive Order N-79-20

Executive Order N-79-20 requires all new passenger vehicles sold in California and all off-road vehicles and equipment be zero-emission where feasible by 2035, while all medium- and heavy-duty vehicles be zero-emission where feasible by 2045. Governor Gavin Newsom ordered extensive inter-agency efforts to support the Executive Order, including evaluations of technological feasibility and cost effectiveness, expansion of electric vehicle (EV) charging options and affordable fueling, as well as identification of near-term strategies to increase zero-emission public transportation options.

The Executive Order was aimed at transitioning away from fossil fuel dependence in the State, with emphasis on transportation initiatives. However, Governor Newsom addressed efforts to repurpose oil production facilities and extraction sites while continuing the State's existing goals to reduce the carbon intensity of fuels.

Regional

South Coast Air Quality Management District

While CARB is responsible for the regulation of mobile emission sources within the State, local Air Quality Management Districts (AQMDs) and Air Pollution Control Districts (APCDs) are responsible for enforcing standards and regulating stationary sources. The proposed Project is located in the South Coast Air Basin and is subject to the guidelines and regulations of the South Coast Air Quality Management District (SCAQMD). SCAQMD is principally responsible for protecting public health and welfare through the administration of federal and State air quality laws, regulations, and policies. Included in the SCAQMD's tasks are the monitoring of air pollution, the preparation of the Air Quality Management Plan (AQMP) for the South Coast Air Basin, and the promulgation of rules and regulations. The AQMP includes strategies and tactics to be used to attain the NAAQS and CAAQS standards in South Coast Air Basin, whereas the rules and regulations include procedures and requirements to control the emission of pollutants and to prevent adverse impacts.

For the proposed Project area, the Southern California Association of Governments (SCAG) is the federally designated Metropolitan Planning Organization and the State-designated transportation planning agency for six counties: Riverside, San Bernardino, Los Angeles, Ventura, Imperial, and Orange Counties. The SCAQMD and SCAG are jointly responsible for preparing the AQMP for the South Coast Air Basin. In particular, the 2016 AQMP is based on demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by SCAG for their 2016 Regional Transportation Plan (RTP), which forms part of SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Thus, consistency with the planning assumptions contained within the RTP/SCS demonstrates consistency with SCAQMD's 2016 AQMP. In May 2020, SCAG released the final 2020-2045 RTP/SCS called Connect SoCal, which was adopted by SCAG's Regional Council on September 3, 2020. On October 30, 2020, CARB also accepted SCAG's determination that the SCS met the applicable future State GHG reduction targets of 19 percent. The 2020-2045 RTP/SCS will be incorporated into the forthcoming 2022 AQMP.

Below is a list of key SCAQMD rules relevant to the proposed Project:

- SCAQMD Rule 402: Nuisance - Prohibits discharges of air contaminants that causes nuisance to the public.

- SCAQMD Rule 403: Fugitive Dust - Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and disturbed surface areas, as well as track-out beyond an active operation.

- SCAQMD Rule 1113: Architectural Coatings - Requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

- SCAQMD Rule 1470: Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines - Implements the Airborne Toxic Control Measures for Stationary Compression Ignition Engines for engines greater than 50 horsepower (hp); sets forth requirements to reduce PM emissions and requires off-road engines to meet standards specified in the Off-Road Compression-Ignition Engine Standards; establishes additional requirements for engines located in close proximity to existing schools.

Air Quality Management Plan Status

The AQMP and SIP processes are concurrent. The SIP is required under the federal CAA to provide the framework for non-attainment areas to come into attainment of the NAAQS, and the AQMP is prepared by the SCAQMD, in part, to satisfy the requirement for a SIP. The AQMP traditionally evaluates all criteria pollutants and represents the required SIP elements, which are then transmitted to CARB for review, approval, and transmittal to the USEPA for inclusion in the overall California SIP.

The SCAQMD has been preparing AQMPs (and related SIP elements) since the 1989 AQMP. The 2016 AQMP is the most recent and includes updates of ozone and $PM_{2.5}$ SIP elements (including new attainment demonstrations and control measures). The 2022 AQMP is currently under development and a draft was released in May 2022.[12]

Metro Green Construction Policy

Metro adopted a Green Construction Policy in August 2011 and committed to using more sustainable construction equipment and vehicles for all construction projects performed on Metro properties and in Metro rights-of-way. The Green Construction Policy also committed to implementing best practices to reduce emissions. Under the Policy, all off-road diesel-powered construction equipment greater than 50 hp is required to meet Tier-4 off-road emissions standards. In addition, idling of construction equipment shall be restricted to 5 minutes unless certain exemptions apply, and construction equipment shall incorporate, where feasible, emission-reduction technologies such as hybrid drives and specific fuel economy standards.

12 South Coast Air Quality Management District. Draft 2022 Air Quality Management Plan. Available at: http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan. Accessed July 2022.

Metro Moving Beyond Sustainability Strategic Plan

In September 2020, the Metro Board of Directors approved Moving Beyond Sustainability, a plan outlining a comprehensive strategy for the next decade to make Metro facilities greener, reduce air pollution and trash from construction, and reduce smog and greenhouse gases across Los Angeles County. The plan has goals tied to water quality and conservation, solid waste, materials, construction and operations, energy resource management, emissions and pollution control, resilience and climate adaptation, and economic and workforce development. Moving Beyond Sustainability will be updated every five years with formal progress reports every two years, and annual performance updates. It is also designed to align with and support parallel efforts and plans underway at the City of Los Angeles and Los Angeles County, including the Green New Deal and Our County.[13]

2019 Metro Climate Action and Adaptation Plan

First published and approved by the Metro Board in June 2012, the Climate Action and Adaptation Plan (CAAP) establishes a framework to identify the areas of greatest opportunity for Metro to reduce GHG emissions, and evaluates opportunities based on their cost and the volume of emission reduction. Metro's influence on GHG emissions extends to all of Los Angeles County's transportation systems.

The 2019 CAAP outlines how Metro will reduce operational GHG emissions and protect riders from climate change. Since the adoption of the first CAAP, Metro has reported that its GHG emissions have decreased by 12 percent, despite an increase in service by 4 percent. The CAAP includes a GHG emissions inventory for Metro activities from 2017 and demonstrates how these emissions are expected to change by 2030 and 2050. Metro outlines 13 GHG reduction measures in the CAAP that will enable Metro to achieve a goal of 79 percent reduction in emissions relative to 2017 levels by 2030 and 100 percent by 2050. It also includes climate adaptation actions to protect its infrastructure, along with Metro staff and riders.

2020-2045 Regional Transportation Plan/Sustainable Community Strategies (Connect SoCal)

The 2020-2045 RTP/SCS, also known as Connect SoCal, was adopted by the Regional Council on September 3, 2020, and replaces the 2016-2040 RTP/SCS.[14] The RTP/SCS serves as a long-range regional transportation planning tool through the year 2045. The core vision of the 2020-2045 RTP/SCS is to build upon and expand land use and transportation strategies to increase mobility options, reduce vehicle miles traveled and achieve a more sustainable growth pattern.[15] The 2020-2045 RTP/SCS lists ten goals that were used to develop the plan and its guiding policies. These goals include the following:

1. Encourage regional economic prosperity and global competitiveness.
2. Improve mobility, accessibility, reliability, and travel safety for people and goods.
3. Enhance the preservation, security, and resilience of the regional transportation system.

---

13 Ibid.

14 Southern California Association of Governments (SCAG). Connect SoCal. Available at: https://scag.ca.gov/connect-socal, accessed April 2022.

15 SCAG. 2020. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. Available at: https://scag.ca.gov/read-plan-adopted-final-plan, accessed April 2022.

4. Increase person and goods movement and travel choices within the transportation system.

5. Reduce greenhouse gas emissions and improve air quality.

6. Support healthy and equitable communities.

7. Adapt to changing climate and support an integrated regional development pattern and transportation network.

8. Leverage new transportation technologies and data-driven solutions that result in more efficient travel.

9. Encourage development of diverse housing types in areas that are supported by multiple transportation options.

10. Promote conservation of natural and agricultural lands and restoration of habitats.

Local

Central City Community Plan

The Central City Community Plan addresses the need to improve transportation and circulation, with transportation decisions and funding choices made in the context of multiple-regional plans and policies including the AQMD. While the community plan does not include any directly applicable goals and objectives related to air quality, the community plan sets objectives and policies to address issues with congestion within the regional transportation network such as improving downtown’s pedestrian environment to increase efficiency of the transportation and circulation systems. The community plan also addresses the importance of open space with objectives and policies such as encouraging the expansion of open space as well as the linkages between open space and transit, parking, historic resources, cultural facilities, and social service programs. These improvements in transportation, circulation, and open space would improve air quality conditions in the community.

Central City North Community Plan

The Central City North Community Plan includes programs using Transportation Demand Management strategies to encourage vehicular trip reduction that would inherently have an air quality nexus. These strategies include implementing Clean Air Program projects for ridesharing and transit ridership, using market incentives to achieve regional levels of trip reduction as mandated by State and Federal Clean Air Acts, and encouraging regional agencies to consider further measures such as carpooling and commute assistance for work trips. These programs tie into the overall goals of the community plan to encourage alternative modes of transportation, maintain a safe, efficient freeway and street network, and to develop a public transit system that improves mobility, which in turn would improve air quality conditions in the community.

Adopted on December 15, 2000, the goals, objectives, and policies developed in the Central City North Community Plan strive to:

- Preserve and enhance the positive characteristics of existing residential neighborhoods while providing a variety of housing opportunities with compatible new housing;

- Improve the function, design, and economic vitality of the commercial corridors;

- Preserve and enhance the positive characteristics of existing uses which provide the foundation for community identity, such as scale, height, bulk, setbacks, and appearance;
- Maximize the development opportunities of future transit systems while minimizing any adverse impacts; and
- Plan the remaining commercial and industrial development opportunity sites for needed job producing uses that will improve the economic and physical condition of the Central City North area.

Silver Lake–Echo Park–Elysian Valley Community Plan

The Silver Lake–Echo Park–Elysian Valley Community Plan includes goals and objectives centered around transportation and open space improvements that would inherently have an air quality nexus. One of the goals for the plan is to develop a public transportation system that improves mobility with convenient alternatives to automobile travel. Similarly, another goal of the plan is to encourage alternative modes of transportation over single occupant vehicles to reduce vehicle trips. The plan also highlights the need for a Transportation Demand Management Program and other improvements to enhance safety and mobility. The plan includes additional objectives and policies regarding improvements in transportation in relation to housing by placing housing in proximity to goods, services, and facilities to reduce vehicle trips. The plan also addresses the importance of conserving and maintaining open space, park facilities, and stairways characteristic of the area to enhance linkages for greenways and trail systems.

Proposed DTLA 2040 Community Plan

The City of Los Angeles is currently in the process of updating the Central City and Central City North Community Plans through the Downtown Los Angeles 2040 Draft Community Plan. Because it is unknown when the new community plan would be adopted and its EIR certified, the analysis in this section is based on the current applicable plans.

3.3.2 Environmental Setting

Climate and Meteorology

The South Coast Air Basin is a coastal plain with connecting broad valleys and low hills, surrounded by high mountains and the Pacific Ocean to the southwest. The region lies in the semi-permanent high-pressure zone of the eastern Pacific. Climate within the South Coast Air Basin is determined by this terrain and geographical location; as a result, the climate is mild and tempered by cool ocean breezes. The climate maintains a consistent weather pattern of moderate temperatures and comfortable humidity, and limits precipitation to a few storms during the winter-wet season. However, there are periods of extremely hot weather, winter storms, or Santa Ana winds.

Although the South Coast Air Basin has a semi-arid climate, air near the surface is generally moist because of the presence of a shallow marine layer. There is a limited capacity to disperse air contaminants horizontally due to very low average wind speeds. The typical wind flow pattern fluctuates only with occasional winter storms or strong northeasterly Santa Ana winds from the mountains and deserts northeast of the South Coast Air Basin. Summer wind flow patterns represent worst-case conditions due to higher temperatures and more sunlight, which results in ozone formation.

Local Air Quality Monitoring Data

The proposed Project alignment is located within the SCAQMD jurisdiction. The SCAQMD maintains ambient air quality monitoring stations throughout the South Coast Air Basin. The Central LA air monitoring station is the station closest to the proposed Project alignment. The Central LA air monitoring station monitors CO, NO_2, O_3, SO_2, $PM_{2.5}$, and PM_{10}.

Table 3.3-2 lists the most recent five years of published data at the Central LA monitoring station for CO, NO_2, O_3, SO_2, $PM_{2.5}$, and PM_{10}. The data shows that CO, NO_2, and SO_2 levels are below the State and federal standards. In addition, O_3 levels have exceeded the State 1-hour standard in four of the past five years, and the 8-hour standards and the federal standard in all of the past five years; PM_{10} levels exceeded both the State 24-hour standard and State annual standard in all of the past five years but are below the federal 24-hour standard; and $PM_{2.5}$ levels exceeded federal 24-hour standards in all of the past five years but were below State and federal annual levels in all years except 2018 and 2020.

3.3.3 Methodology

Air quality emissions were calculated using CalEEMod® 2020.4.0, California Emissions Estimator Model. CalEEMod® is a statewide program designed to calculate both criteria and GHG emissions from development projects in California. This model was developed by SCAQMD in coordination with other California air districts. CalEEMOD® is recommended by SCAQMD and utilized by numerous lead agencies to quantify the emissions associated with development projects undergoing environmental review. CalEEMod® utilizes well-established and SCAQMD-accepted models for emission estimates combined with documented modeling assumptions that can be used if site-specific information is not available. CalEEMOD® incorporates and relies upon models and emissions estimates that are based on published and well-established sources such as the USEPA AP-42 emission factors,[16] CARB's on-road and off-road mobile source emission factor models, and studies commissioned by California agencies such as the California Energy Commission (CEC) and CalRecycle. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is an accepted and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California and is recommended by the SCAQMD as the technical expert agency on air quality matters.[17] Accordingly, utilizing CalEEMOD® provides a consistent, transparent and reasonable methodology for estimating the proposed Project's construction and operational air quality emissions for purposes of this Draft EIR. The full methodology is described in the *Los Angeles Aerial Rapid Transit Air Quality/Health Risk Assessment Technical Report* (Appendix D of this Draft EIR).

[16] United States Environmental Protection Agency (USEPA). AP-42: Compilation of Air Emissions Factors. Available at: https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors, accessed April 2022.

[17] South Coast Air Quality Management District (SCAQMD). California Emissions Estimator Model®. Available at: http://www.caleemod.com/, accessed April 2022.

Table 3.3-2: Ambient Air Quality Data, Central LA Monitoring Station

Pollutant and Air Quality Standards Comparative Metrics	2016	2017	2018	2019	2020
Ozone (O_3)					
Maximum Concentration 1-hr period, ppm	0.103	0.116	0.098	0.085	0.185
Maximum Concentration 8-hr period, ppm	0.078	0.086	0.073	0.080	0.118
Annual 4th Highest 8-hr maximum over 3 years	0.071	0.080	0.071	0.065	0.093
Days of Exceedances, California 1-hr Standard	2	6	2	0	14
Days of Exceedances, California 8-hr Standard	4	14	4	2	22
Days of Exceedances, Federal 8-hr Standard	4	14	4	2	22
Carbon Monoxide (CO)					
Maximum Concentration 1-hr period, ppm	1.9	1.9	2.0	2.0	1.9
Maximum Concentration 8-hr period, ppm	1.4	1.6	1.7	1.6	1.5
Number of Exceedances, California 1-hr Standard	0	0	0	0	0
Number of Exceedances, California 8-hr Standard	0	0	0	0	0
Number of Exceedances, Federal 1-hr Standard	0	0	0	0	0
Number of Exceedances, Federal 8-hr Standard	0	0	0	0	0
Nitrogen Dioxide (NO_2)					
Maximum Concentration 1-hr period, ppm	0.065	0.081	0.070	0.070	0.062
98th Percentile Daily Maximum Concentration 1-hr period, ppm	0.061	0.062	0.057	0.056	0.055
Annual Arithmetic Mean (AAM), ppm	0.021	0.021	0.019	0.018	0.017
Number of Exceedances, California 1-hr Standard	0	0	0	0	0
Exceed California Annual Standard?	No	No	No	No	No
Number of Exceedances, Federal 1-hr Standard	0	0	0	0	0
Exceed Federal Annual Standard?	No	No	No	No	No
Sulfur Dioxide (SO_2)					
Maximum Concentration 1-hr period, ppm	0.013	0.006	0.018	0.010	0.004
99th Percentile Daily Maximum Concentration 1-hr period, ppm	0.003	0.003	0.003	0.002	0.003
Number of Exceedances, California 1-hr Standard	0	0	0	0	0
Number of Exceedances, Federal 1-hr Standard	0	0	0	0	0
Respirable Particulate Matter (PM_{10})					
Maximum Concentration 24-hr period, µg/m^3	67	96	81	62	77
Annual Arithmetic Mean (AAM), µg/m^3	32.4	34.4	34.1	25.5	23.0
Number of Exceedances, California 24-hr Standard	18	41	31	3	24
Exceed California Annual Standard?	Yes	Yes	Yes	Yes	Yes
Number of Exceedances, Federal 24-hr Standard	0	0	0	0	0
Fine Particulate Matter ($PM_{2.5}$)					
Maximum Concentration 24-hr period, µg/m^3	44.4	49.2	43.8	43.5	47.3
98th Percentile Concentration 24-hr period, µg/m^3	27.3	27.8	30.5	28.3	28.0
Annual Arithmetic Mean (AAM), µg/m^3	11.8	11.9	12.6	10.9	12.3
Exceed California Annual Standard?	No	No	Yes	No	Yes
Number of Exceedances, Federal 24-hr Standard	2	5	3	1	2
Exceed Federal Annual Standard?	No	No	Yes	No	Yes

Source: SCAQMD. Historical Data by Year. Available at: https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year. Accessed April 2022.

Operational air quality emissions were evaluated for: (1) Baseline/Existing – calculated existing on-road mobile emission conditions from passenger vehicles traveling to and around Dodger Stadium in year 2019; (2) Project Build-out – calculated projected emissions in year 2026, after completion of all construction activity; and (3) Horizon Year Projection – calculated projected emissions in year 2042. A horizon year of 2042 was chosen because it is the horizon year in Metro's Long Range Transportation Plan.

Additionally, there are two regulatory measures and one project design feature that result in quantified emissions reductions. These have been taken into account in the analysis as noted below.

Construction

Compliance with SCAQMD Rule 403 regarding fugitive dust. The construction emission estimates include a fugitive dust control factor, which is a conservative representation of the level of fugitive dust control expected through compliance with SCAQMD Rule 403. The analysis quantifies the following aspect of compliance with SCAQMD Rule 403:

- Watering active construction areas at least two times daily to minimize fugitive dust emissions[18].

Compliance with SCAQMD Rule 1113 regarding architectural coatings. This rule limits the VOC content of architectural coatings used in the area under the jurisdiction of the SCAQMD. Additionally, as discussed in Section 3.10, Hydrology and Water Quality, in accordance with National Pollution Discharge Elimination System Construction General Permit permitting requirements, the Project Sponsor would be required to prepare and submit a construction Stormwater Pollution Prevention Plan, which would identify the best management practices related to fugitive dust that would be in place prior to the start of construction activities and during construction.

Operations

- Compliance with VOC limits per SCAQMD Rule 1113 regarding architectural coatings.

Project Design Features

As set forth in AIR-PDF-A, and consistent with Metro's Green Construction Policy, all Project-related off-road diesel-powered construction equipment greater than 50 hp within and outside of Metro property shall meet Tier-4 off-road emissions standards.

Health Risk Assessment

The Health Risk Assessment (HRA) evaluates the estimated cancer risk and non-cancer chronic hazard index (HIC) associated with construction of the Project. Acute non-cancer health effects were not estimated, as the only source of chemicals with acute toxicity are total organic gas emissions related to Project traffic, which are not anticipated to be significant. The HRA was conducted in accordance with SCAQMD risk assessment guidelines, which are based on the Air Toxics Hot Spots Program Risk Assessment Guidelines developed by the the California Office of

[18] Note that the control efficiency of watering is dependent on numerous variables such as soil/ground conditions, temperature, and vehicle travel specifics. For unpaved roads, increased frequency and/or water amounts are expected to improve the control efficiency. The control effectiveness in this analysis is based on the CalEEMod® default for this watering assumption.

Environmental Health Hazard Assessment (OEHHA) and updated in 2015.[19] The 2015 OEHHA guidelines are based on years of scientific studies evaluating health risks and include a number of conservative assumptions to be protective of human health and to estimate potentially higher risks and sensitivity factors for infants, children, and other sensitive receptors.[20] The HRA also assessed risks for off-site sensitive receptors including residents, daycare children, school children, and senior center based on OEHHA's 2015 Hot Spots Guidelines.

The air concentrations of TACs from Project emissions were estimated using the American Meteorological Society/Environmental Protection Agency regulatory air dispersion model (AERMOD) at off-site receptors, which has been approved for use by USEPA, CARB, and SCAQMD. AERMOD generates air concentrations that result from emissions from multiple sources for each receptor location by incorporating variables including meteorological data, local terrain data, and physical data. Lifetime cancer risk and HIC for off-site sensitive receptors were estimated from Project construction emissions, particularly DPM emissions from off-road diesel construction equipment during the entire duration of construction as recommended by the California Environmental Protection Agency (Cal/EPA). Locations of sensitive receptors were identified and include future residential developments and existing residences, schools, daycare centers, and senior centers. Boundary sensitive receptors adjacent to the construction areas were also included to ensure the maximum modeled impacts were captured. The full methodology is described in the *Los Angeles Aerial Rapid Transit Air Quality/Health Risk Assessment Technical Report* (Appendix D of this Draft EIR).

Thresholds of Significance

For purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard;

19 California Environmental Protection Agency (Cal EPA), Office of Environmental Health Hazard Assessment (OEHHA). February 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, accessed April 2022.

20 SCAQMD identifies the following as sensitive receptors: long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, daycare centers, and athletic facilities.

- Expose sensitive receptors to substantial pollutant concentrations; and/or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

To assist in answering the Appendix G Threshold questions, this section utilizes the thresholds of significance established by the SCAQMD, as shown in Table 3.3-3, for construction and operational emissions on regional and local ambient air quality. The following impact analysis estimates Project-related construction and operational mass emissions and compares the emissions to these mass daily significance thresholds. The impact analysis also evaluates the localized ambient air quality impacts from on-site construction activities using SCAQMD's localized significance threshold (LST) methodology.[21] In accordance with SCAQMD guidance, if emission estimates for the proposed Project activities are below the LST emission levels found in the SCAQMD's published LST mass "look-up" tables, the proposed construction activity would not significantly impact ambient air quality. If Project emissions are above the LST mass look up tables, then site-specific modeling would be required to determine the potential impact on ambient air quality. This LST evaluation was completed in consideration of the residential or sensitive receptor locations as identified for the HRA as described above. An evaluation of ambient air impacts for operational emissions is not needed because the Project does not include any land uses or operational emissions that would be expected to impact ambient air quality during operations, consistent with SCAQMD's methodology.[22]

[21] SCAQMD. July 2008. SCAQMD Final Localized Significance Threshold Methodology. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf, accessed April 2022.

[22] SCAQMD. July 2008. SCAQMD Final Localized Significance Threshold Methodology. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf, accessed Apri l2022.

Table 3.3-3: SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds		
Pollutant	**Construction**	**Operation**
NO_X	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs) and Odor Thresholds		
TACs	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality Standards for Criteria Pollutants		
NO_2 1-hour average Annual Arithmetic Mean	SCAQMD is in attainment; project is significant if It causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (State) 0.03 ppm (State) and 0.0534 ppm (federal)	
PM_{10} 24-hour average Annual Average	10.4 μg/m^3 (construction); 2.5 μg/m^3 (operation) 1.0 μg/m^3	
$PM_{2.5}$ 24-hour average	10.4 μg/m^3 (construction); 2.5 μg/m^3 (operation)	
SO_2 1-hour average 24-hour average	0.25 ppm (State) & 0.075 ppm (federal—99th percentile) 0.04 ppm (State)	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (State) and 35 ppm (federal) 9.0 ppm (State/federal)	

Notes: lbs/day = pounds per day; ppm = parts per million, μg/m^3 = micrograms per cubic meter.
Source: SCAQMD. Air Quality Significance Thresholds. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf, accessed April 2022.

As shown in Table 3.3-3, the SCAQMD has established significance thresholds to assess health risk impacts of TACs from project-related emissions sources on nearby sensitive receptors including residents and other human populations. These significance thresholds include a maximum incremental cancer risk of 10 in a million, incremental chronic and acute hazards indices of 1.0, and cancer burden of 0.5.[23] The impact analysis evaluates the human health risk impacts from onsite construction activities to the significance thresholds SCAQMD has established.

23 SCAQMD. April 2019. Air Quality Significance Thresholds. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf, accessed April 2022.

3.3.4 Environmental Impacts

AIR-1: *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Less Than Significant Impact. SCAQMD's 1993 *CEQA Air Quality Handbook specifies the following two-criteria approach for assessing a Project's consistency with applicable SCAQMD and SCAG policies:*

Criterion 1: Would the project result in any of the following:

- *An increase in the frequency or severity of existing air quality violations; or*
- *Cause or contribute to new air quality violations; or*
- *Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP?*

Criterion 2: Would the project exceed the assumptions utilized in preparing the AQMP?

- *Is the Project consistent with the pollution and employment growth projections upon which AQMP forecasted emission levels are based;*
- *Does the Project include air quality mitigation measures; or*
- *To what extent is Project development consistent with the AQMP land use policies?*

The most current air quality plan for the region is the SCAQMD 2016 AQMP, which is based on demographic growth forecasts for various socioeconomic categories developed by SCAG for their 2016-2040 RTP/SCS. Thus, consistency with the planning assumptions contained within the RTP/SCS demonstrates consistency with SCAQMD's 2016 AQMP.

As discussed below for AIR-2, the proposed Project would not increase the frequency or severity of existing air quality violations, or cause or contribute to new air quality violations based on the analysis to SCAQMD significance thresholds. The proposed Project would not delay the goals of the AQMP because the proposed Project does not cause any significant air quality impacts, and it advances AQMP goals of encouraging alternative modes of transit and reducing emissions by decreasing vehicle miles traveled. Further, the proposed Project is consistent with the SCAG RTP/SCS, a long-range transportation plan that is developed and updated by SCAG every four years. The RTP/SCS provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 20-year period, the RTP/SCS considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address our mobility needs. The RTP/SCS integrate land use and transportation strategies that will achieve CARB's GHG emissions reduction targets in accordance with SB 375, with a key goal of reducing regional levels of vehicle miles traveled over time to decrease emissions from vehicles, which the proposed Project would help advance by encouraging alternative modes of transit and decreasing vehicle miles traveled.[24]

[24] SCAG. 2020. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. Available at: https://scag.ca.gov/sites/main/files/file-attachments/f2016rtpscs.pdf?1606005557, accessed April 2022.

The proposed Project would not create any overall population growth; therefore, it has no effect on the growth assumptions used in the 2016 AQMP and 2016-2040 RTP/SCS, as well as the newer 2020-2045 RTP/SCS, Connect SoCal. In addition, the proposed Project would decrease the number of people traveling to Dodger Stadium (and surrounding areas) in passenger vehicles and increase the number of people using public transit. This shift in transportation mode would reduce total vehicle miles traveled and vehicle idling time in and around Dodger Stadium associated with passenger vehicles. As a result, no air quality mitigation measures have been proposed with the Project. As a result, the proposed Project is consistent with SCAG's 2016-2040 RTP/SCS, SCAG's 2020-2045 RTP/SCS, and the SCAQMD 2016 AQMP, and would not impair or delay the region's ability to achieve the SCAQMD's goals for attainment of air quality standards. Impacts related to conflict with or obstruction of implementation of the applicable air quality plan would be less than significant, as the proposed Project satisfied both criterion.

AIR-2: *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

Less Than Significant Impact. The proposed Project is located within Los Angeles County, which is currently designated as nonattainment for the federal and State O_3 standards, the State PM_{10} standards, the federal and State $PM_{2.5}$ standards, and the federal Pb standards. Ozone precursors include VOC and NO_X. To evaluate this significance criteria, the proposed Project's estimated air quality emissions are compared to the SCAQMD significance thresholds.

Mass Daily Thresholds

The proposed Project involves the construction of stations, a junction, and towers for an aerial gondola system. The proposed Project would result in construction emissions associated with site preparation, demolition, grading, utility installation, building, coating, and paving from off-road construction equipment, and on-road mobile equipment associated with workers, vendors, and hauling. During construction, some staging and assembly of proposed Project materials and equipment would occur at a laydown area within the Mesa Lot at Dodger Stadium. The construction emissions are estimated for each day of proposed Project construction, which captures the activities occurring across the various construction phases at all of the proposed Project stations/towers. The maximum daily emissions are reported for the days within the proposed Project construction period that produce the highest emissions of given criteria air pollutant. The estimated maximum mass daily emissions due to construction of the proposed Project are presented in Table 3.3-4. As shown in Table 3.3-4, the estimated maximum mass daily emissions for construction of the proposed Project would be less than the SCAQMD mass daily significance thresholds for all criteria pollutants.

Table 3.3-4: Maximum Mass Daily Emissions Due to Construction of the Project

	VOC[1]	**CO**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions[1, 2] (lbs/day)	24	258	51	0.5	11.8	3.8
SCAQMD Significance Thresholds	**75**	**550**	**100**	**150**	**150**	**55**
Exceedance of the Threshold for Any Year of Construction?	No	No	No	No	No	No

Notes:
[1] For purposes of this assessment, VOC is assumed to be equivalent to reactive organic gases (ROG).
[2] These values represent the maximum daily emissions of each pollutant during construction. The maximum daily emissions for each pollutant may occur under different phases of construction.
Sources: Ramboll US Consulting, Inc., 2022; SCAQMD. Air Quality Significance Thresholds. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2, accessed April 2022.

The proposed Project would also result in operational emissions associated with buildout and originate from area sources (e.g., landscaping-related fuel combustion sources, consumer products, and architectural coatings), energy use, and mobile sources. The operational emissions estimated for the existing/baseline in 2019 include the current vehicular emissions associated with games and special events at Dodger Stadium resulting from passengers in vehicles travelling to the game along with employees.[25] The build-out and horizon year mobile emissions utilize vehicle miles travelled and trip estimates prepared by Fehr & Peers alongside emission factors for light-duty vehicles. Area source emissions in the build-out and horizon year include VOC emissions associated with operational architectural coatings and use of consumer products. The estimated maximum mass daily emissions due to the proposed Project's operations are presented in Table 3.3-5. Emissions are determined by subtracting the existing/baseline emissions (2019) from the build-out year (2026) and horizon year (2042). The proposed Project emissions are compared against SCAQMD mass daily significance thresholds for operations. The resulting estimated maximum mass daily emissions for proposed Project operations are less than the SCAQMD mass daily significance thresholds for all criteria pollutants. Further, as shown in Table 3.3-5, the proposed Project would result in a net reduction in criteria pollutant emissions in both 2026 (Build Out) and 2042 (Horizon Year) by reducing vehicle miles travelled and thereby decreasing emissions compared to existing conditions.

25 The proposed Project is expected to result in a net reduction in vehicle miles traveled; therefore, the operational emissions associated with on-road mobile sources are negative.

Table 3.3-5: Maximum Mass Daily Emissions Due to Operation of the Project

Criteria Air Pollutant Emissions (lbs/day)						
Description	**CO**	**SO_X**	**NO_X**	**VOC[1]**	**PM_{10}**	**$PM_{2.5}$**
2019: Baseline/Existing						
On-Road Mobile Emissions	565	1.15	40.3	34.8	103.4	26.2
2026: Build-Out						
On-Road Mobile Emissions	312	0.92	17.7	20.7	98.3	24.7
Area Sources[2]	--	--	--	1.9	--	--
Net Emissions	**-253**	**-0.23**	**-22.6**	**-14**	**-5.1**	**-1.5**
SCAQMD Significance Thresholds	**550**	**150**	**55**	**55**	**150**	**55**
Exceedance of Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
2042: Horizon Year						
On-Road Mobile Emissions	191	0.74	7.9	11.3	92.9	23.2
Area Sources[2]	--	--	--	1.91	--	--
Net Emissions	**-374**	**-0.41**	**-32**	**-24**	**-10.5**	**-3.0**
SCAQMD Significance Thresholds	**550**	**150**	**55**	**55**	**150**	**55**
Exceedance of Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
[1] For purposes of this assessment, VOC is assumed to be equivalent to ROG.
[2] Area sources include VOC emissions associated with operational architectural coatings and use of consumer products.

Sources: Ramboll US Consulting, Inc., 2022. SCAQMD. Air Quality Significance Thresholds. Available at http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2, accessed April 2022.

Localized Significance Thresholds

The localized significance thresholds analysis was performed following SCAQMD's 2008 Final Localized Significance Threshold Methodology to analyze localized impacts associated with proposed Project-specific emissions. This analysis assesses the proposed Project's maximum daily on-site emissions from construction for the closest receptors to each station/tower. The on-site construction emissions include off-road equipment use and on-site fugitive dust emissions from grading, bulldozing, truck loading, and demolition. As shown in Table 3.3-6, estimated maximum on-site daily emissions would be below the applicable SCAQMD mass-rate LSTs for NO_X, CO, PM_{10}, and $PM_{2.}$for construction of each of the proposed Project components.

As the screening analysis in Table 3.3-6 shows, construction emissions would be below the mass-rate LSTs; therefore, air dispersion modeling is not required. Furthermore, as the SCAQMD LST has not been updated to reflect the federal 1-hour NO_2 standard, an estimated LST was estimated by scaling the SCAQMD LST that represents the State 1-hr NO_2 standard with the ratio of the federal to State 1-hr NO_2 standard (0.10 ppm/0.18 ppm). Based on the estimated LST, onsite NO_X emissions would be below the federal 1-hour NO_2 standard.[26]

[26] Because the federal 1-hour NO_2 standard was introduced after the SCAQMD LSTs were published, a screening threshold was derived by scaling the SCAQMD NO_X LSTs by the ratio of the 1-hour federal standard (188 µg/m^3) to the 1-hour CAAQS (339 µg/m^3) (on which the SCAQMD NO_X LST is based). Since the federal threshold is based on the 98th percentile and on a 3-year average, this approach is conservative.

Table 3.3-6: Comparison of Project Construction Emissions to SCAQMD Localized Significance Thresholds

Project Component	Size (Acres)	Distance to Receptor[1] (m)	SCAQMD LSTs[2] (lbs/day)					Year	Maximum Daily On-Site Emissions (lbs/day)[4]				Exceed SCAQMD LSTs? (lbs/day) (CO, NOX, 1-hour NOX, PM10, and PM2.5)
			CO	NO_X	1-hour NO_X[3]	PM_{10}	$PM_{2.5}$		CO	NO_X	PM_{10}	$PM_{2.5}$	
Alameda Station	1	25	680	74	41	5	3	2024	42	7	0.5	0.1	NO
								2025	25	4	0.1	0.1	NO
Alameda Tower	1	25	680	74	41	5	3	2024	39	6	0.2	0.1	NO
								2025	26	5	0.1	0.1	NO
Alpine Tower	1	25	680	74	41	5	3	2024	39	6	0.2	0.1	NO
								2025	26	5	0.1	0.1	NO
Chinatown / State Park Station	1	25	680	74	41	5	3	2024	42	7	0.4	0.1	NO
								2025	17	4	0.1	0.1	NO
Broadway Junction	1	25	680	74	41	5	3	2024	51	8	2.2	1.0	NO
								2025	28	6	0.1	0.1	NO
Stadium Tower	1	25	680	74	41	5	3	2024	38	5	0.2	0.1	NO
								2025	11	3	0.0	0.0	NO
Dodger Stadium Station	3	25	1,319	126	70	11	6	2024	42	7	0.8	0.2	NO
								2025	16	3	0.0	0.0	NO
Mesa Lot Laydown Area	2	25	1,048	108	60	8	5	2024	6	1	0.0	0.0	NO
								2025	6	1	0.0	0.0	NO

Notes:

[1] A receptor distance of 25 meters was used to represent receptors adjacent to the construction sites. Per the 2008 SCAQMD Final Localized Significance Threshold Methodology, "The closest receptor distance on the mass rate LST look-up tables is 25 meters. It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters." This document is the 2008 SCAQMD Final Localized Significance Threshold Methodology.

[2] LSTs based on the construction LSTs for Central Los Angeles source receptor area (SRA). LSTs are based on the project size and distance to receptor for each on-site location. Obtained from the 2008 SCAQMD Final Localized Significance Threshold Methodology.

[3] An approximated LST was estimated to evaluate the federal 1-hour NO_2 standard, as the SCAQMD LST has not been updated to reflect this standard. This value was estimated by scaling the SCAQMD LST that represents the State 1-hr NO_2 standard with the ratio of the federal to State 1-hr NO_2 standard (0.10 ppm/0.18 ppm).

[4] The on-site emissions include off-road equipment use and on-site fugitive dust emissions from grading, bulldozing, truck loading, and demolition.

Sources: SCAQMD, 2008 SCAQMD Final Localized Significance Threshold Methodology, Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf, accessed April2022; SCAQMD, 2008 SCAQMD Final Localized Significance Threshold Methodology, Appendix C, Mass Rate LST Look-up Tables, Available at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds, accessed April 2022.

AIR-3: *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant Impact. The SCAQMD's LST methodology is used to evaluate localized ambient air quality impacts and whether construction would expose sensitive receptors to substantial pollutant concentrations. As shown in Table 3.3-6, estimated maximum on-site daily emissions for the proposed Project would be below the applicable SCAQMD mass-rate LSTs for NO_X, CO, PM_{10}, and $PM_{2.5}$ for construction of the proposed Project components.[27] See Appendix D for full comparison. Furthermore, as the SCAQMD LST has not been updated to reflect the federal 1-hour NO_2 standard, an approximated LST was estimated by scaling the SCAQMD LST that represents the State 1-hr NO_2 standard with the ratio of the federal to State 1-hr NO2 standard (0.10 ppm/0.18 ppm). Based on the approximated LST, on-site NO_X emissions would be below an estimated threshold for the federal 1-hour NO_2 standard.[28] Therefore, the proposed Project would not expose sensitive receptors to substantial concentrations of NO_X, CO, PM_{10}, and $PM_{2.5}$ during construction. Similarly, the proposed Project would not expose sensitive receptors to substantial concentrations of pollutants during operations because the proposed Project does not include any land uses or operational emissions that would materially impact ambient air quality during operations, consistent with SCAQMD's methodology. Impacts would be less than significant.

Health Risk Assessment

SCAQMD identifies the following as sensitive receptors: long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, daycare centers, and athletic facilities.[29] Locations of sensitive receptors were identified and include future residential developments and existing residences, schools, daycare centers, and senior centers. The proposed Project's potential to expose sensitive receptors to substantial TACs was evaluated through an HRA, as discussed in Section 3.3.3. The construction HRA assesses impacts from DPM emissions from off-road diesel construction equipment. The ambient air concentrations were estimated using AERMOD. Sources and receptors were modelled following SCAQMD Modeling Guidance for AERMOD. The HRA was conducted in accordance with SCAQMD risk assessment guidelines, which are based on the Air Toxics Hot Spots Program Risk Assessment Guidelines developed by the the California OEHHA and updated in 2015.[30] The results from the construction HRA in Table 3.3-7 show that the maximum incremental cancer risk and chronic non-cancer impacts would be below SCAQMD significance thresholds for all modelled receptors, which include the sensitive receptors located near proposed construction areas.

---

27 Ramboll US Consulting, Inc. Los Angeles Aerial Rapid Transit Project Air Quality/Health Risk Assessment Technical Report. April 2022.

28 Because the federal 1-hour NO_2 standard was introduced after the SCAQMD LSTs were published, a screening threshold was derived by scaling the SCAQMD NO_X LSTs by the ratio of the 1-hour federal standard (188 $\mu g/m^3$) to the 1-hour CAAQS (339 $\mu g/m^3$) (on which the SCAQMD NO_X LST is based). Since the federal threshold is based on the 98th percentile and on a 3-year average, this approach is conservative.

29 SCAQMD. 1993. CEQA Air Quality Handbook. Available at: https://www.dtsc-ssfl.com/files/lib_ceqa/ref_draft_peir/Chap4_2-AirQuality/SCAQMD_1993_-_CEQA_Handbook.pdf

30 California Environmental Protection Agency (Cal/EPA), Office of Environmental Health Hazard Assessment (OEHHA). February 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, accessed April 2022.

Table 3.3-7: Maximum Individual Cancer Risk and Hazard Index due to Construction of the Project

Receptor Type	Maximum Incremental Cancer Risk[1] (in a million)	Maximum Incremental HIC[2]
Residential and Sensitive	8.1	0.003
SCAQMD Significance Threshold[3]	10	1
Exceeds Threshold?	No	No

Notes:
[1] Maximum incremental cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to potential carcinogens.
[2] The potential for exposure to result in adverse chronic non-cancer effects is evaluated by comparing the estimated annual average air concentration to the non-cancer chronic reference exposure level for each evaluated chemical.
[3] SCAQMD. Air Quality Significance Thresholds. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf, accessed April 2022.

Per SCAQMD methodology, the population cancer burden was evaluated for areas where the proposed Project's maximum incremental cancer risk (MICR) exceeded one in a million, as presented in Table 3.3-8 below. The cancer burden estimate is prepared following three main steps: (1) The area of impact is first determined based on the results of the residential cancer analysis, assuming 30-year exposure; (2) All census receptors within the one in a million-risk contour are identified; the cancer burden is then estimated using the lifetime 70-year exposure duration; (3) Cancer burden is then calculated for each census tract using the 2020 census population multiplied by the estimated 70-year residential cancer risk. The cancer burden evaluation results in Table 3.3-8 show the proposed Project's cancer burden would also be less than the SCAQMD threshold. An HRA is not required for operational emissions because the proposed Project's operations would not result in a significant level of TACs. Based on the HRA results, the proposed Project would result in a less than significant impact related to exposing sensitive receptors to substantial pollutant concentrations from TACs.

Table 3.3-8: Population Exposure to Project Construction Emissions for Cancer Burden Calculations

Population within Zone of Impact[1]	Maximum Incremental Cancer Risk[2] (in a million)	Cancer Burden[3]	SCAQMD Threshold[4]
1683	**8.1**	**0.014**	**0.5**

Notes:
[1] A zone of impact was determined for cancer risk based on the lifetime cancer risk of 1 in a million or greater. Population within the zone of impact was obtained from the 2020 census data from CARB Hotspots Analysis and Reporting Program's census database and 2020 census block information from the United States Census Bureau.
[2] The MICR was conservatively used to represent the cancer risks at census receptors.
[3] Screening level cancer burden was calculated based on the population within the zone of impact multiplied by the MICR.
[4] SCAQMD. Air Quality Significance Thresholds. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf, accessed April 2022.

Localized Carbon Monoxide Impacts

Further, the proposed Project's potential off-site localized impacts associated with carbon monoxide from vehicle use was evaluated qualitatively. The highest average daily traffic volumes at an intersection impacted by the proposed Project is expected to be well below the daily traffic volumes that would be expected to generate CO exceedances as evaluated in the 2003 AQMP. Therefore, a CO "hot spots" analysis is not needed to determine whether proposed Project-related vehicle trips would have the potential to result in exceedances expose sensitive receptors to substantial carbon monoxide concentrations. Localized carbon monoxide impacts would be less than significant.

AIR-4: *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Less Than Significant Impact. According to the SCAQMD, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed Project would not include any uses identified by the SCAQMD as being associated with odors and is not expected to result in significant odors. Thus, the proposed Project would not result in odors adversely affecting a substantial number of people. Impacts would be less than significant.

3.3.5 Project Design Features

AIR-PDF-A All off-road diesel-powered construction equipment greater than 50 horsepower shall meet, at a minimum, the Tier 4 emission standards for nonroad diesel engines promulgated by the USEPA.

3.3.6 Mitigation Measures

The proposed Project would result in less than significant impacts to air quality. No mitigation measures are required.

3.3.7 Level of Significance after Mitigation

The proposed Project would result in less than significant impacts to air quality.

This page intentionally left blank.

3.4 BIOLOGICAL RESOURCES

This section evaluates the potential impacts to biological resources during construction and operation of the proposed Project. The area evaluated for biological resources, or the combined Biological Survey Area (BSA), includes the proposed aerial alignments, the Project components (i.e., stations, junction, towers, and cables), and a 500-foot survey buffer around the alignment. Information contained in this section is summarized in part from the *Los Angeles Aerial Rapid Transit Biological Resources Assessment* (Appendix E of this Draft EIR).

This chapter also includes information from the tree inventory report that was prepared for the Project by Carlberg Associates in March 2022 (Appendix E of this Draft EIR).

3.4.1 Regulatory Setting

Federal

Federal Endangered Species Act

Enacted in 1973, the federal Endangered Species Act (ESA) provides for the conservation of threatened and endangered species and their ecosystems (United States Code [U.S.C.] Title 16, Chapter 35, Sections 1531–1544). The ESA prohibits the "take" of threatened and endangered species except under certain circumstances, and only with authorization from U.S. Fish and Wildlife Service (USFWS) through a permit under Section 4(d), 7, or 10(a) of the ESA. "Take" under the ESA is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

Formal consultation under the Section 10 permit process for actions by nonfederal agencies would be required if a project has the potential to affect a federally listed species that has been detected in or adjacent to the BSA.

Migratory Bird Treaty Act

Congress passed the Migratory Bird Treaty Act (MBTA) in 1918 to prohibit the kill or transport of native migratory birds, or any part, nest, or egg of any such bird unless allowed by another regulation adopted in accordance with the MBTA (U.S.C. Title 16, Chapter 7, Subchapter II, Sections 703–712). The prohibition applies to birds included in the respective international conventions between the United States and Great Britain, the United States and Mexico, the United States and Japan, and the United States and Russia. USFWS is responsible for overseeing compliance with the MBTA, which currently covers 1,093 bird species.[1] Most actions that result in taking or in permanent or temporary possession of a protected species constitute violations of the MBTA. Examples of permitted actions that do not violate the MBTA are the possession of a hunting license to pursue specific game birds, legitimate research activities, display in zoological gardens, bird-banding, and other similar activities.

Clean Water Act

The federal Clean Water Act (CWA) (33 U.S.C. 1251 et seq.) is the primary federal law that protects the quality of the nation's surface waters when they are traditionally navigable waters,

[1] U.S. Fish and Wildlife Service (USFWS). 2020. Migratory Bird Treaty Act Protected Species (10.13 List). Available at: https://www.fws.gov/birds/management/managed-species/migratory-bird-treaty-act-protected-species.php. Accessed April 2022.

are tributary or adjacent to traditionally navigable waters, or are interstate waters. Waters under the jurisdiction of the CWA are referred to as “waters of the United States.” The U.S. Army Corps of Engineers (USACE) regulates fill in waters of the United States under Section 404 of the CWA. In general, USACE takes jurisdiction over waters that are traditionally navigable, that drain to traditionally navigable water, or that are adjacent or otherwise have a significant nexus to traditionally navigable water. Under Section 401 of the CWA, the Regional Water Quality Control Board (RWQCB) reviews permits issued by USACE for their effects on water quality, and issues certifications in conjunction with USACE permits.

State

California Fish and Game Code

The California Fish and Game Code (CFGC) regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, as well as impacts to natural resources such as wetlands and waters of the State. It includes the California Endangered Species Act (CESA) (Sections 2050–2115) and Lake or Streambed Alteration Agreement (LSAA) regulations (Section 1600 et seq.).

California Endangered Species Act

Wildlife “take” is defined by California Department of Fish and Wildlife (CDFW) as “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Protection extends to the animals, dead or alive, and all their body parts. Section 2081 of CESA allows CDFW to issue an incidental take permit for State-listed threatened or endangered species, should a proposed project have the potential to “take” a State-listed species that has been detected within or adjacent to the project. Certain criteria are required under CESA prior to the issuance of such a permit, including the requirement that impacts of the take are minimized and fully mitigated.

Lake or Streambed Alteration Agreement

CDFW has jurisdictional authority over rivers, streams, and lakes under CFGC Section 1602. CDFW has the authority to regulate all work under the jurisdiction of California that would: substantially divert, obstruct, or change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed. In practice, CDFW marks its jurisdictional limit at the top of the stream or lake bank or the outer edge of the riparian vegetation, where present. Riparian habitat refers to areas in and adjacent to rivers, streams, and creeks that support plant species adapted to (or that can tolerate) occasional or permanent flooding and/or saturated soils. Because lateral extent may vary according to watershed position, water availability, and other factors, riparian habitats do not always support wetland hydrology or hydric soils; wetland boundaries, as defined by CWA Section 404, sometimes include only portions of the riparian habitat adjacent to a river, stream, or lake. Therefore, jurisdictional boundaries under Section 1602 may encompass a greater area than those regulated under CWA Section 404. CDFW enters into a Lake or Streambed Alteration Agreement with an applicant, and can request conditions to ensure that no net loss of river, stream or lake values or acreage will be incurred. The streambed or lakebed alteration agreement is not a permit, but rather a mutual agreement between CDFW and the applicant.

Bird Protections

CFGC Section 3503 prohibits take, possession, or destruction of eggs and nests of all bird species. Section 3503.5 prohibits the killing of raptor species and the destruction of raptor nests.

Take or possession of any migratory non-game bird as designated in the MBTA is prohibited under Sections 3513 and 3800. Section 86 of the Fish and Game Code defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Native Plant Protection

CFGC Sections 1900-1913, the California Native Plant Protection Act, includes measures to preserve, protect, and enhance rare and endangered native plants. The definitions of "rare and endangered" differ from those contained in the CESA. However, the list of native plants afforded protection under the Native Plant Protection Act includes those listed as rare and endangered under the CESA. The Native Plant Protection Act provides limitations on take as follows: "...no person will import into this state, or take, possess, or sell within this State" any rare or endangered native plant, except in compliance with provisions of the CESA. Individual landowners are required to notify the CDFW at least 10 days in advance of changing land uses to allow the CDFW to salvage any rare or endangered native plant material.

California Department of Parks and Recreation

General regulations of California State Parks that may apply to the proposed Project include 14 California Code of Regulations (CCR) § 4306, Plants and Driftwood, which states that it is illegal to "…willfully or negligently pick, dig up, cut, mutilate, destroy, injure, disturb, move, molest, burn, or carry away any tree or plant or portion thereof…". However, 14 CCR § 4309, Special Permits, states that "the Department may grant a permit to remove, treat, disturb, or destroy plants or animals or geological, historical, archaeological or paleontological materials; and any person who has been properly granted such a permit shall to that extent not be liable for prosecution for violation of the foregoing." Therefore, removal of trees under the control of the California Department of Parks and Recreation would require approval of the California Department of Parks and Recreation.

Los Angeles State Historic Park General Plan

The Los Angeles State Historic Park General Plan serves as a long-range management tool that provides guidelines for achieving the vision and purpose of the park. One of the Park Principles for developing the Preferred Park Concept in the general plan is to "Promote a "Touchstone" Landscape for Reflecting on Los Angeles' Natural and Cultural Heritage" by making the park a place of inspiration, reflection, and appreciation of history and nature through the interpretation of the Los Angeles River. The general plan envisions the Natural Open Space area of the park would demonstrate the natural habitats that may have once existed in and near the park, and emphasize native plant communities. The general plan acknowledges that the circumstances of creating an urban park from a brownfield and former rail yard requires special consideration, including a vegetation management and landscape treatment strategy, addressing non-native plant species, and promoting the re-establishment of native wildlife and insects to the park.[2]

[2] California Department of Parks and Recreation. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf. Accessed April 2022.

Local

City of Los Angeles General Plan

The City of Los Angeles General Plan Conservation Element sets forth objectives and policies to protect biological resources, including endangered species and habitats.[3] For endangered species, the General Plan states the following objective: Protect and promote the restoration, to the greatest extent practical, of sensitive plant and animal species and their habitats. Policies to achieve this objective include:

- Continue to require evaluation, avoidance, and minimization of potential significant impacts, as well as mitigation of unavoidable significant impacts on sensitive animal and plant species and their habitats and habitat corridors relative to land development activities.
- Continue to administer City-owned and managed properties so as to protect and/or enhance the survival of sensitive plant and animal species to the greatest practical extent.
- Continue to support legislation that encourages and facilitates protection of endangered, threatened, sensitive, and rare species and their habitats and habitat corridors.

For habitats, the General Plan objective is to: Preserve, protect, restore and enhance natural plant and wildlife diversity, habitats, corridors and linkages so as to enable the healthy propagation and survival of native species, especially those species that are endangered, sensitive, threatened or species of special concern. Policies regarding protection of habitats include:

- Continue to identify significant habitat areas, corridors, and buffers and to take measures to protect, enhance, and/or restore them.
- Continue to protect, restore, and/or enhance habitat areas, linkages, and corridor segments, to the greatest extent practical, within City-owned or managed sites.
- Continue to work cooperatively with other agencies and entities in protecting local habitats and endangered, threatened, sensitive, and rare species.
- Continue to support legislation that encourages and facilitates protection of local native plant and animal habitats.

Proposed DTLA 2040 Community Plan

The City of Los Angeles is currently in the process of updating the Central City and Central City North Community Plans through the Downtown Los Angeles 2040 Draft Community Plan. Because it is unknown when the new community plan would be adopted and this EIR certified, the analysis in this section is based on the current applicable Plans.

[3] City of Los Angeles. 2001. City of Los Angeles General Plan Conservation Element. Available at: https://planning.lacity.org/odocument/28af7e21-ffdd-4f26-84e6-dfa967b2a1ee/Conservation_Element.pdf. Accessed April 2022.

Cornfield-Arroyo Seco Specific Plan

The Cornfield-Arroyo Seco Specific Plan (CASP) Area covers portions of the Central City North, Northeast, and Silverlake-Echo Park Community Plan areas. It governs land use and development plans across approximately 660 acres of land—including, and surrounding, the Los Angeles State Historic Park. One of the purposes of the zoning regulations governing open space is to provide open space areas that provide for native habitat and facilitate the migration of local species.

The Los Angeles City Planning Department is currently evaluating and amending the CASP to strengthen the original vision and intent of the plan.[4]

Significant Ecological Area

Los Angeles County first began to inventory biotic resources and identify important areas of biological diversity in the 1970s. Today, the primary mechanism used by the County to conserve biological diversity is a planning overlay called Significant Ecological Areas (SEAs), designated in the County's General Plan, which provides the framework for how and where unincorporated areas of Los Angeles County will grow through the year 2035.[5] SEAs are ecologically important land and water systems that support valuable habitat for plants and animals, often integral to the preservation of rare, threatened, or endangered species and the conservation of biological diversity in Los Angeles County. Although SEAs are not preserves, they are areas where Los Angeles County deems it important to facilitate a balance between development and resource conservation. Together, the General Plan overlays and a SEA conditional use permit (CUP) process are referred to as the SEA Program. The SEA Program, through goals and policies of the General Plan and the SEA ordinance (Title 22 Zoning Regulations, Section 22.56.215), help guide development within SEAs. The SEA ordinance establishes the permitting, design standards, and review process for development within SEAs, and permits are reviewed by the Significant Ecological Areas Technical Advisory Committee. Development activities in the SEAs are reviewed closely to conserve water and biological resources such as streams, oak woodlands, and threatened or endangered species and their habitat.

The SEA Program applies solely to adopted SEAs in unincorporated areas; however, four SEAs are located entirely outside of the County's jurisdiction, while 12 others have portions in incorporated cities.[6] The BSA does not coincide with an SEA. The closest designated SEA, the Griffith Park SEA, occurs approximately five miles to the north.

City of Los Angeles Native Tree Protection Ordinance

Protected trees under the City's Native Tree Protection Ordinance (Ordinance No. 177404) include oak trees, such as valley oak (*Quercus lobata*) and coast live oak (*Quercus agrifolia*) or any other tree of the oak genus indigenous to California, but exclude the scrub oak (*Quercus dumosa*). Additional protected trees under the City's Native Tree Protection Ordinance include the southern California black walnut (*Juglans californica*), western sycamore (*Platanus racemosa*), and California bay (*Umbellularia californica*), (Section 17.02 of City Municipal Code)

---

4 Cornfield Arroyo Seco Specific Plan (CASP) Update. Los Angeles City Planning. Available at: https://planning.lacity.org/plans-policies/casp-update#about. Accessed April 2022.

5 Los Angeles County, Department of Regional Planning (LACDRP). 2015. Los Angeles County General Plan. Available at: http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan.pdf. Accessed April 2022.

6 LACDRP. 2020. Significant Ecological Areas (SEA) Ordinance Implementation Guide. Available at: http://planning.lacounty.gov/site/sea/wp-content/uploads/2020/07/SEA-IG-6-30-20.pdf.Accessed April 2022.

(Ordinance No. 177404). In December 2020, the City added two shrub species, Mexican elderberry (*Sambucus nigra*) and toyon (*Heteromeles arbutifolia*), to the Native Tree Protection Ordinance. Pursuant to the Native Tree Protection Ordinance, native trees that were planted or grown as part of a tree planting program are not “Protected Trees.” Trees and shrubs must be 4 inches or greater in diameter at 4.5 feet above ground (diameter at breast height [DBH]) to be considered protected. The Board of Public Works must issue a permit before any alterations to protected trees are made that could cause them to be damaged, relocated, or removed. Pruning also requires a permit, and must comply with the pruning standards set forth by the Western Chapter of the International Society of Arboriculture in a manner that does not cause permanent damage or adversely affect the health of the trees. If a tree must be removed, a permit for tree removal must be obtained from the Los Angeles Board of Public Works in accordance with the City’s Native Tree Protection Ordinance. Per the Ordinance, the tree removal permit may require replanting of native trees in the Project area or at another location in the City to mitigate for the removal of these trees. The City’s Ordinance requires replacement of protected trees at a 2:1 ratio, and the size and number of replacement trees shall approximate the value of the tree to be replaced. The City requires replacement for the removal of non-protected but “significant” trees (i.e., those with trunk diameters greater than 8 inches at 4.5 feet DBH) at a replacement ratio of 1:1, and ROW trees to be replaced as specified by the City.

City of Los Angeles Street Tree Policy

The City of Los Angeles Department of Public Works, Bureau of Street Services, Urban Forestry Division (Urban Forestry) manages removal, replacement, and maintenance of the City’s street trees and landscaped median islands. “Street trees” are those occurring in the public right-of-way (ROW), and a permit from Urban Forestry is required to remove a street tree. Under Los Angeles Municipal Code Section 62.170, as a condition to the permit, the permittee may be required to plant another tree of the type and size specified in the permit. However, in accordance with Los Angeles Municipal Code Section 62.177, a payment of in-lieu fees for the purchase, installation, and maintenance of trees is possible when the required replacement trees cannot feasibly be planted on site.

3.4.2 Environmental Setting

The proposed Project alignment would be in the urbanized and developed City of Los Angeles, in the downtown, El Pueblo, Chinatown, Mission Junction, and Elysian Park communities (Figure 3.4-1). The proposed Project would generally be in the public ROW and publicly-owned property, and would cross over SR-110 near Dodger Stadium. The surrounding land uses include high- and medium-density residential, commercial, retail, industrial, institutional, transit-related infrastructure (road and rail), parks and open space, and public facilities uses. Limited vegetation occurs in the BSA, and consists primarily of ornamental landscape species.

Due to its urbanized and developed nature, the BSA provides little opportunity for wildlife species or other biological resources to exist. No native plant communities occur in or adjacent to the BSA. There are no wildlife corridors in the BSA to support movement of wildlife species. There are no sensitive natural communities such as wetlands, oak woodlands, or coastal sage scrub habitat in the BSA. There are no Habitat Conservation Plans that overlap with the BSA, and the nearest Significant Ecological Area is approximately 5 miles north-northwest of Dodger Stadium at Griffith Park.

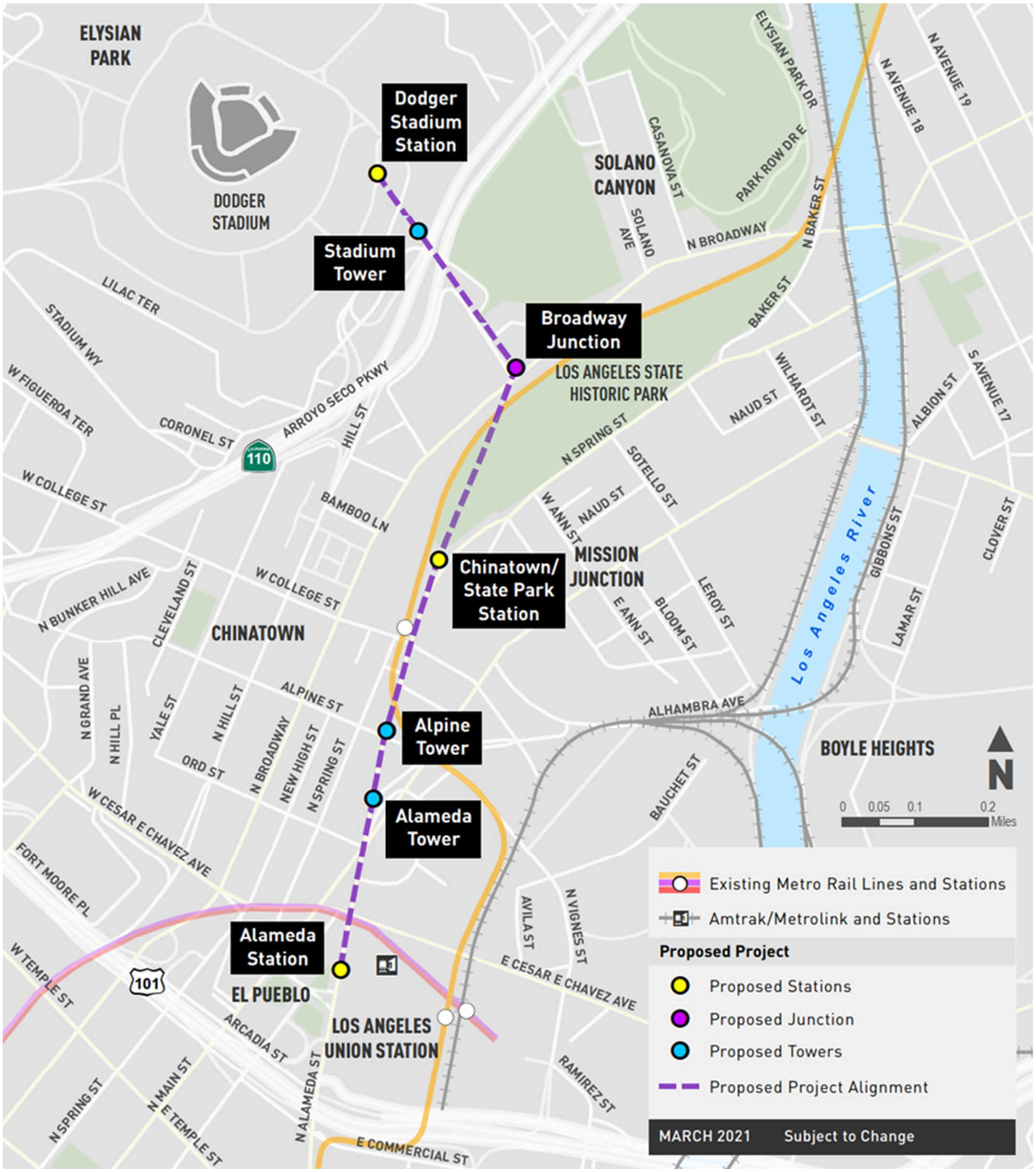


Figure 3.4-1: Proposed Project Location/Alignment

Existing biological resources occurring at and surrounding each Project component site along the Project alignment are presented below. The occurrence of mature trees along the alignment are noted, because they generally provide the most suitable bird nesting opportunities in urbanized environments. Results of the tree inventory prepared for the Project (provided in Appendix E) are also incorporated, and referenced for each Project component site.

The BSA surrounding the Project component sites generally consists of paved roadways, sidewalks, and buildings, with existing vegetation limited to ornamental plantings and shrubs on developed properties, as well as some mature trees north of Los Angeles State Historic Park.

Alameda Station

Approximately 50 mature Mexican fan palm (*Washingtonia robusta*) trees occur near the entrance of Union Station on the eastern side of Alameda Street. Ornamental vegetation occurs on the western side of Alameda Street in the Placita de Dolores, including pink trumpet trees (*Handroanthus impetiginosus*) and ornamental shrubs and vines. Small clusters or solidary street trees, including pink trumpet tree, Mexican fan palm, Canary island date palm (*Phoenix canariensis*), and Moreton bay fig (*Ficus macrophylla*) occur along Alameda Street, between Union Station, north to Cesar E. Chavez Avenue. These street trees fall within the public ROW.

The BSA surrounding the proposed Alameda Station site is composed of paved roadways, sidewalks, and buildings, with areas of lawn at Union Station and across Alameda Street from the station in a pedestrian plaza. The BSA along the alignment between this station and the Alameda Tower is similarly developed, with existing vegetation limited to plantings of ornamental trees and shrubs on developed properties.

Alameda Tower

Four western sycamore (*Platanus racemosa*) trees approximately 40 feet in height occur in proximity to the proposed location of this tower in the Alameda Triangle; a small City green space flanked on all sides by roadways. Two additional western sycamore and a small carrotwood tree (*Cupaniopsis anacardioides*) also occur on this site. Three pink trumpet trees occur as street trees along Alameda Street. One dead pink trumpet tree and an empty tree well also occur along Alameda Street in the public ROW. Additionally, a small blue atlas cedar (*Cedrus atlantica glauca*) tree, which is not identified in the tree report due to its small size, occurs on this site. Most of the green space consists of lawn, and paved or brick pathways, with clusters of ornamental shrubs.

The BSA surrounding the proposed Alameda Tower site consists of paved roadways, sidewalks, and buildings. The BSA along the alignment between this tower and the Alpine Tower is similarly developed, with existing vegetation limited to a few street trees and very little ornamental plantings on developed properties.

Alpine Tower

The proposed Alpine Tower site coincides with a paved City-owned parcel currently being used as a non-public parking storage for City vehicles. No trees are present in the parking area, and only clumps of non-native grasses and weedy herbaceous vegetation are present. Approximately three African fern pine (*Afrocarpus gracilior*) and two Mexican fan palms occur along the northern perimeter of the parcel, roughly 70 to 150 feet east-northeast of the location for this tower.

Very little ornamental vegetation occurs in the surrounding BSA, which is composed of roadways, sidewalks, buildings, and the elevated Metro L Line (Gold) structure. The BSA along the alignment between this tower and the Chinatown/State Park Station is similarly developed, with existing vegetation limited to a few street trees and small clusters of ornamental plantings on developed properties.

Chinatown/State Park Station

Western sycamore, Brisbane box (*Lophostemon confertus*), Fremont cottonwood (*Populus fremontii*), western redbud (*Cercis occidentalis*), forest pansy redbud (*C. canadensis*) trees, and toyon shrubs occur at the proposed location for the Chinatown/State Park Station in the southernmost portion of the Los Angeles State Historic Park. Ornamental shrubs and herbaceous vegetation also occur at the southernmost entrance to the park. Four western sycamore trees occur as street trees near the park entrance. Very little vegetation occurs in the surrounding BSA, and is limited to small ornamental plantings.

The BSA surrounding the proposed Chinatown/State Park Station consists of paved roadways, sidewalks, the elevated Metro L Line (Gold) structure, and buildings. A few Chinese flame (*Koelreuteria bipinnata*) street trees and occasional pockets of ornamental landscaping occur in the BSA outside the Los Angeles State Historic Park, with landscaped plantings of native and non-native species occurring further into the Los Angeles State Historic Park.

The BSA along the alignment between the Chinatown/State Park Station and the Broadway Junction is developed with the Los Angeles State Historic Park, the Metro L Line (Gold) tracks, a steep slope, and paved roadways and sidewalks. The alignment crosses over the western edge of the Los Angeles State Historic Park, composed of lawn, paved and stone walking paths, and ornamental landscaping of trees and shrubs that were installed approximately 6 years ago and are still developing. The same tree species as those occurring at the proposed location for the Chinatown/State Park, as well as Marina strawberry tree (*Arbutus* “Marina’), tipu (*Tipuana tipu*), coast live oak (*Quercus agrifolia*), and cork oak (*Quercus suber*) trees, occur along the alignment between this station and the Broadway Junction. A stand of taller, more mature trees occurs in the northeastern portion of the park, approximately 1,800 feet from the Project alignment and outside the BSA.

Broadway Junction

The Broadway Junction site would be located at 1201 North Broadway, occurring primarily on a privately owned parcel that includes a one-story building at the intersection of North Broadway and Bishops Road, and a patio area north of the building. The existing building at 1201 N. Broadway would be demolished as part of the Project. A few Australian willow (*Geijera parviflora)* trees are on the western side of North Broadway, and occur as street trees at the proposed location for this junction. Additionally, two small jacaranda trees (*Jacaranda mimosifolia*) occur on the Cathedral High School property west of the private parcel. A persimmon tree (*Diospyros virginiana*) and Marina strawberry tree in a small courtyard at 1201 North Broadway occur in the proposed Broadway Junction site.

The outdoor patio area north of the existing 1201 North Broadway building, which coincides with the construction staging area for the proposed Broadway Junction, includes trees along a perimeter fence line, with a cover of non-native grass species and areas of gravel covering the interior of the patio area. Spanish dagger (*Yucca gloriosa*), Chilean pepper, Carolina cherry (*Prunus caoliniana*), avocado (*Persea americana*) trees, and one Mexican elderberry shrub in the far northwestern corner of the site are situated along the perimeter fence line.

Although the Los Angeles State Historic Park is in the BSA just east of this site, it is separated by fencing, a steep slope, and light rail tracks. Paved roadways, sidewalks, the Cathedral High School campus, and homes compose the remainder of the BSA. Ornamental plantings occur on the high school campus and at homes surrounding the proposed junction site. The BSA along the alignment between this junction and the Stadium Tower includes a few homes, the high school campus, SR-110, and Stadium Way. Vegetation includes mature trees on the high school campus, between the north- and south-bound lanes of SR-110, and along Stadium Way. Sugar gum (*Eucalyptus caldocalyx*) and Chilean pepper trees occur along the portion of the alignment that coincides with the Caltrans ROW over SR-110.

Stadium Tower

The proposed Stadium Tower site and surrounding fire buffer area around the Stadium Tower construction site coincide with a grassy area with scattered trees, including Chilean pepper trees, and to a lesser extent, Western Australian flooded gum (*Eucalyptus rudis*), blackwood acacia (*Acacia melanoxylong*), golden wattle (*Acacia pycnantha*), and shrubs. Non-native grasses are present, including wild oat (*Avena sp.*), ripgut brome (*Bromus diandrus*), and yellow clover (*Melilotus indicus*).

The surrounding BSA consists primarily of grassy slopes with scattered Chilean pepper trees and shrubs, and roadways. Topography in the BSA along the alignment between the Stadium Tower and Dodger Stadium Station is an upward sloping terrain between 8 and 20 degrees from the tower to the station site above. The slope includes grassy areas, mature trees, including eucalyptus and Chilean pepper, and the Downtown Gate access road.

Dodger Stadium Station

The proposed Dodger Stadium Station site coincides with a paved parking area that occurs approximately 700 feet east of the stadium, and a screen of trees on a vegetated slope that occurs between the parking area and the Downtown Gate access road to the east. Sugar gum, Chilean pepper, California pepper (*Schinus molle*), and blackwood acacia (*Acacia melanoxylong*) trees are present. The understory includes numerous weeping fig (*Ficus benjamina*) saplings, a few mature native lemonade berry (*Rhus intregrifolia*) shrubs, and non-native grasses.

The BSA surrounding the proposed location for this station consists primarily of paved parking areas and additional trees along the vegetated slope, including mature Red river gum (*Eucalyptus camaldulensis*) and Mexican fan palm. Additionally, stands of mature eucalyptus cover a hillside occurring 200 to 300 feet north and east of the proposed station site.

The location of the proposed pedestrian connections from the station to Dodger Stadium and connections to Elysian Park and adjacent neighborhoods coincide with existing paved parking areas at the stadium. Mature eucalyptus trees surround the stadium complex and occasional Mexican fan palm trees occur in the parking area in close proximity to proposed pedestrian connections.

3.4.2.2 Wildlife

Wildlife occurrences in the BSA are low due to the urbanized setting of the Project area. Ten species of birds and one reptile were observed during the field surveys, including house sparrow (*Passer domesticus*), house finch (*Carpodacus mexicanus*), rock pigeon (*Columba livia*), American crow (*Corvus brachyrhynchos*), California gull (*Larus californicus*), northern mockingbird (*Mimus polyglottos*), black phoebe (*Sayornis nigricans*), hummingbird (*Selasphorus* *sp.*), yellow-rumped warbler (*Setophaga coronate*), lesser goldfinch (*Spinus psaltria*), European starling (*Sturnus vulgaris*), and western fence lizard (*Sceloporus occidentalis*). All of these are common, widespread species that are habituated to urban environments with intensive use; however, three species (house sparrow, rock pigeon, and European starling) are non-native.

Both field surveys, discussed in Section 3.4.3, Methodology, conducted for the proposed Project were conducted during the bird breeding season, generally considered to extend from February 1 through September 30, or as early as December or January through July for raptor species. During the survey, tall structures such as mature trees, power poles and towers, billboards, and buildings were scrutinized for the presence of nests. Raptor species such as red-tailed hawk (*Buteo jamaicensis*), Cooper's hawk (*Accipter cooperii*), great horned owl (*Bubo virginianus*), American crow (*Corvus brachyrhynchos*), and common raven (*Corvus corax*) are known to use tall structures as nesting sites in urban environments. Red-tailed hawk were observed flying in the vicinity of Dodger Stadium during the 2021 survey.

No raptor nests were detected in the BSA during the field surveys. Indications of songbird nesting activities (i.e., territorial chases, carrying nesting material) were detected during the 2021 survey in the Los Angeles State Historic Park. No active nests were detected; however, ornamental landscaping, including mature trees throughout the BSA, provide potentially suitable nesting habitat for songbirds and raptors.

3.4.2.3 Special-Status Plant Species

Special-status plant species include those listed as Endangered, Threatened, Rare, or those species proposed for listing by USFWS under the federal ESA, those listed by CDFW under the CESA, and sensitive species as classified by the California Native Plant Society (CNPS).[7,8,9] The CNPS inventory is sanctioned by the CDFW, and essentially serves as the list of candidate plant species for State listing. CNPS's California Rare Plant Ranks (CRPR) 1B and 2 species are considered eligible for State listing as endangered or threatened.

A total of 69 special-status plant species were identified from the California Natural Diversity Data Base (CNDDB) and CNPS database reviews to have historically been recorded from the Los Angeles and surrounding eight quadrangles, and from a search of the USFWS Information for Planning and Conservation (IPaC) for the Project area. Eleven federal and/or State-listed species were identified during the literature review. The 69 special-status plant species identified during the literature review, their status, and habitat requirements are provided in the *Los Angeles Aerial Rapid Transit Biological Resources Assessment* (Appendix E of this Draft Environmental Impact Report [EIR]).

The BSA coincides with the locations of three special-status plant species recorded in the CNDDB, including prostrate vernal pool navarretia (*Navarretia prostrata*; CRPR 1B.1), salt spring checkerbloom (*Sidalcea neomexicana*; CRPR 2B.2), and Greata's aster (*Symphyotrichum greatae*; CRPR 1B.3). Observations of these species are from more than 70 years ago. There are no records of federal or State-listed plant species that have been recorded from the BSA.

---

7 Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (Title 50 Code of Federal Regulations [CFR] 17.12 [listed plants], Title 50 CFR 17.11 [listed animals], and includes notices in the Federal Register for proposed species).

8 Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (Title 14 California Code of Regulations 670.5).

9 Plants listed as rare under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.).

The BSA does not provide habitat potentially suitable for any of the regional special-status plant species identified during the literature review, discussed in Section 3.4.3, Methodology. The Project area has been completely disturbed, and the native habitats these species were recorded from are no longer present in the BSA.

No USFWS-designated critical habitat for any federally listed plant species coincides with the BSA.

3.4.2.4 Special-Status Wildlife Species

Special-status wildlife species include those listed as Endangered, Threatened, or those species proposed for listing by the USFWS under ESA, and CDFW under CESA. Additional species receive federal protection under the Bald Eagle Protection Act (e.g., bald eagle, golden eagle), the MBTA, and State protection under CEQA Section 15380(d).

All birds, except European starlings, English house sparrows, rock pigeons, and non-migratory game birds such as quail, pheasant, and grouse, are protected under the MBTA. However, non-migratory game birds are protected under CFGC Section 3503. Many other species are considered by CDFW to be California Species of Special Concern (SSC), and others are on a CDFW Watch List (WL).[10] The CNDDB tracks species in California for which there is conservation concern, including many that are not formally listed, and assigns them a CNDDB Rank.[11] Although Species of Special Concern, Watch List species, and species that are tracked by the CNDDB, but not formally listed are afforded no official legal status, they may receive special consideration during the CEQA review process.

CDFW further classifies some species under the following categories: "Fully Protected," "Protected birds" (CDFW Code §3511), "Protected mammals" (CDFW Code §4700), "Protected amphibian" (CDFW Code §5050 and Chapter 5, §41), "Protected reptile" (CDFW Code §5050 and Chapter 5, §42), and "Protected fish" (CDFW Code §5515). The designation "Protected" indicates that a species may not be taken or possessed except under special permit from CDFW; "Fully Protected" indicates that a species can be taken for scientific purposes by permit only (CDFW 2017e). CDFW Code §§3503, 3505, and 3800 prohibit the take, destruction or possession of any bird, nest or egg of any bird except English house sparrows, rock pigeons, and European starlings unless express authorization is obtained from CDFW.

A total of 39 special-status wildlife species was identified from the CNDDB database review to have historically been recorded from the Los Angeles and surrounding eight quadrangles, and from a search of the USFWS IPaC for the Project area. Ten federally and/or State-listed listed species and candidate species for listing were identified during the literature review. The 39 special-status wildlife species identified during the literature review, their status, and habitat requirements are provided in the *Los Angeles Aerial Rapid Transit Biological Resources Assessment* (Appendix E of this Draft EIR).

Nine special-status wildlife species have been recorded in the CNDDB from the BSA, including southern California legless lizard (*Anniella stebbinsi*; SSC), burrowing owl (*Athene cunicularia*; SSC), southwestern willow flycatcher (federal- and State-listed endangered), western mastiff bat (*Eumops perotis californicus*; SSC), hoary bat (Lasiurus cinereus; tracked by CNDDB), big

10 California Department of Fish and Wildlife (CDFW). 2022. *California Natural Diversity Database (CNDDB),* Special Animals List. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406. Accessed May 10, 2022.

11 Ibid.

free-tailed bat (*Nyctinomops macrotis*; SSC), bank swallow (State-listed threatened), American badger (*Taxidea taxus*; SSC), and least Bell's vireo (federal- and State-listed endangered). Records of western mastiff bat and big free-tailed bat are 25 to 30 years old, while remaining wildlife records are from more than 50 years ago. There are no CNDDB records of any federal or State-listed wildlife species from the BSA in over 100 years.

The BSA does not provide habitat potentially suitable for any of the regional special-status wildlife species identified during the literature review. The Project area has been completely disturbed, and the natural habitats these species are known from have long been removed from the BSA.

However, mature palm trees and trees with cavities, crevices, exfoliating bark, or bark fissures, such as eucalyptus trees, may provide roosting habitat for special-status bat species. Bridges, which often provide suitable bat roosting habitat, are generally lacking from the BSA. The overpass of SR-110 over Stadium Way occurs roughly 100 feet south-southeast of the proposed Stadium Tower, which could provide potentially suitable roosting habitat. The elevated Metro L Line (Gold) tracks in the BSA adjacent to the Alpine Tower and Chinatown/State Park Station consist of a smooth concrete bottom that does not provide the crevices and cracks that would typically provide potentially suitable bat roosting habitat.

No bats, or indications of the presence of bats (i.e., urine staining, guano droppings) were observed during the field survey; however, a survey focused on bats was not conducted. Mature palm trees in the vicinity of the proposed Alameda Station, and eucalyptus trees in proximity of the proposed Dodger Stadium Station, may provide potentially suitable roosting habitat for individual and small groups of bats. With the presence of potentially suitable tree roosting habitat in the BSA, and historic records of three special-status bat species occurring in the BSA, including two special-status bats in the past 30 years, there is a remote chance that an individual or small group of special-status bats could occur in the BSA. No USFWS-designated critical habitat for any federal-listed wildlife species coincides with the BSA.

3.4.3 Methodology

This section evaluates the potential impacts on biological resources from construction and operation of the proposed Project. The area evaluated for biological resources, or the BSA, includes the proposed aerial alignment, stations, junction, towers, cabins, and cables, and a 500-foot survey buffer around the alignment. A 500-foot survey buffer is suitable for capturing potential indirect impacts from a project on biological resources. It is anticipated that indirect impacts beyond 500 feet in an urban environment would be diffused, and would not significantly impact biological resources.

Literature Review

A literature review of the CNDDB[12] and the CNPS's on-line Inventory of Rare and Endangered Plants of California[13] were reviewed for the recent distribution information of regional special-status plant and wildlife species and sensitive natural communities. The USFWS

12 California Department of Fish and Wildlife (CDFW). 2022. *California Natural Diversity Data Base (CNDDB).* Full report for Los Angeles, Burbank, Pasadena, Mt. Wilson, Hollywood, El Monte, Inglewood, South Gate, and Whittier quadrangles. Generated May 10, 2022.

13 California Native Plant Society (CNPS). 2022. Inventory of Rare and Endangered Plants (online edition, v8-03 0.39). California Native Plant Society. Sacramento, CA. Available at http://www.rareplants.cnps.org/. Accessed May 9, 2022.

Information for Planning and Conservation[14] on-line environmental review process was also accessed for special-status species, sensitive natural communities, and protected areas known in the Project area.

Field Investigation

A field survey of the proposed Project alignments was conducted on April 1, 2020 during the bird breeding season—generally considered to extend from February 1 through September 15, or as early as December or January through July for raptor species—to document and photograph existing biological resources. During the survey, tall structures such as mature trees, power poles and towers, billboards, and buildings were scrutinized for the presence of nests. A follow-up survey was conducted on April 24, 2021 to verify and record tree species occurring in the Project component footprints. Results of the field survey were used to determine the presence of biological resources such as sensitive ecological areas, wetlands, wildlife migratory corridors, and/or conserved areas in the Project area, and if those areas could potentially support special-status species and sensitive communities identified during the literature review. Binoculars were used to scan for evidence of wildlife activity and for potential bird nest sites. Seasonal, species-specific botanical and wildlife surveys were not conducted as part of this evaluation, because existing conditions in the BSA do not provide the undisturbed native habitats preferred by regional special-status plant and wildlife species.

A tree inventory report was also prepared by Carlberg Associates on March 28, 2022 for the Project alignment, including the construction zones and areas along the alignment between Project components, and trees that could otherwise encroach within 50 feet from the centerline of the proposed Project's ropeway. Trees occurring along the Project alignment were inventoried for species, size, and location. One species protected under the City's Native Tree Protection Ordinance, Mexican elderberry, was identified at the Broadway Junction site, and would be removed by the Project. Western sycamore trees occur in the BSA at the Alameda Tower and Chinatown/State Park Station sites, and toyon at the Chinatown/State Park site. Under the City's Native Tree Protection Ordinance, protected native trees and shrubs that were planted or grown as part of a planting program are not "Protected Trees." A review of historical aerial imagery indicates the western sycamore trees at the Alameda Tower site were intentionally installed as part of a landscaping effort in 2008, when these trees and other ornamental vegetation were planted. Western sycamore trees and toyon shrubs at the Chinatown/State Park site and under the portion of the alignment crossing over the Los Angeles State Historic Park were installed in 2016 during construction of the southern entrance to the Los Angeles State Historic Park, as part of a tree planting program. Therefore, the western sycamore trees and toyon shrubs at both the Alameda Tower and Chinatown/State Park Station sites are not naturally occurring, and are not "Protected Trees" subject to the City's Native Tree Protection Ordinance. The western sycamore trees and toyon shrubs that were installed in 2016 at the Los Angeles State Historic Park occur on State property and may require replacement, because they are subject to the California Department of Parks and Recreation State requirements for a special permit "to remove, treat, disturb, or destroy plants."

Street trees occurring in the public ROW are present throughout the BSA, and coincide with the footprints of many Project components. Coordination with and a permit from Urban Forestry is anticipated for the removal, replacement, and maintenance of street trees under the Project.

14 USFWS. 2022. Information for Planning and Conservation. Available at https://ecos.fws.gov/ipac/. Accessed August 2022.

Impact Analysis Approach

The results of the literature review and field survey are intended to evaluate on-site habitat types and assess the potential for the occurrence of special-status plant and wildlife species. The results were evaluated to determine potential impacts of the proposed Project on biological resources during construction and operation. The Project was analyzed for compliance with applicable regulations that function to conserve and protect biological resources. If the Project could potentially impact biological resources, through effects on species or habitat, there could be a potential for adverse impacts. Biological resources may be either directly or indirectly impacted by a project. Direct and indirect impacts may be either permanent or temporary in nature, as defined below.

Direct: Any alteration, physical disturbance, or destruction of biological resources that would result from project-related activities is considered a direct impact. Examples include clearing vegetation, loss of individual species and/or their habitats, and encroaching into wetlands or a river.

Indirect: As a result of project-related activities, biological resources may also be affected in a manner that is ancillary to physical impacts. Examples include elevated noise and dust levels, soil compaction, increased human activity, decreased water quality, and the introduction of invasive wildlife (domestic cats and dogs) and plants.

Permanent: All impacts that result in the long-term or irreversible removal of biological resources are considered permanent. Examples include constructing a building or permanent road on an area containing biological resources.

Temporary: Any impacts considered to have reversible impacts on biological resources can be viewed as temporary. Examples include the generation of fugitive dust during construction, or removing vegetation for the preparation of construction activities, and either allowing the natural vegetation to recolonize or actively revegetating impacted areas. Surface disturbance that removes vegetation and disturbs the soil is considered a long-term temporary impact because of slow natural recovery in arid ecosystems.

Where a potentially significant impact would be anticipated, proposed mitigation measures to address these potential effects were developed.

Thresholds of Significance

For purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been used as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service;

- Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

3.4.4 Environmental Impacts

BIO-1: *Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Construction Impacts

Less Than Significant Impact with Mitigation. Construction of each Project component would generally require removal of existing ornamental trees and shrubs, demolition of pavement, excavation, drilling augured piles, structural steel erection, and restoration or installation of hardscaping and landscaping. Construction would also require demolition of the existing building at 1201 North Broadway to construct the Broadway Junction. Construction of the proposed Project would occur in a densely urbanized environment, and no natural plant communities[15] occur in the BSA.

Special-Status Plant Species

As discussed in Section 3.4.2, the BSA does not provide habitat potentially suitable for any of the regional special-status plant species identified in the literature review. Because the BSA has been completely disturbed during urban development and consists of roadways, sidewalks, buildings, and rail tracks, habitats preferred by regional special-status plant species are not present. As a result, construction activities would not have a substantial adverse effect on special-status plant species, and no impact would occur.

Special-Status Wildlife Species

As discussed in Section 3.4.2, the BSA does not provide habitat potentially suitable for any of the regional special-status wildlife species identified during the literature review. Because the BSA has been completely disturbed during urban development and consists of roadways, sidewalks, buildings, and rail tracks, habitats preferred by regional special-status wildlife species are not present. However, mature palm trees in the vicinity of the proposed Alameda Station, and trees with cavities, crevices, exfoliating bark, or bark fissures, such as eucalyptus trees in proximity to

[15] California Department of Fish and Wildlife (CDFW). 2022. *California Natural Diversity Data Base (CNDDB)*. Full report for Los Angeles, Burbank, Pasadena, Mt. Wilson, Hollywood, El Monte, Inglewood, South Gate, and Whittier quadrangles. Generated May 10, 2022.

the proposed Dodger Stadium Station, may provide potentially suitable roosting habitat for individual and small groups of special-status bat species. Additionally, the overpass of SR-110 over Stadium Way occurs roughly 100 feet south-southeast of the proposed Stadium Tower, which could provide potentially suitable roosting habitat.

With the presence of potentially suitable tree roosting habitat in the BSA in the vicinity of the proposed Alameda Station and Dodger Stadium Station sites, and the proximity of the SR-110 overpass to the Stadium Tower, as well as historic records of three special-status bat species (western mastiff bat, hoary bat, and big free-tailed) in the vicinity of the BSA, there is a remote chance that an individual or small group of special-status bats could occur in the BSA. Therefore, removal of mature palm and eucalyptus trees during construction of the proposed Project could result in the removal of bat roost sites, resulting in a potentially significant impact to special-status bat species.

Mitigation Measure BIO-A would require a field survey be conducted by a qualified bat biologist to determine the presence of colonial bat roosts within 100 feet of the Project component sites prior to construction and tree removal at the Alameda Station, Stadium Tower, and Dodger Stadium Station sites. If roosting bats are determined to be present, measures outlined in Mitigation Measure BIO-A would be applied that would reduce potential impacts to special-status bats during construction and tree removal to a less than significant level. Therefore, with implementation of Mitigation Measure BIO-A, impacts would be reduced to less than significant.

Migratory Bird Treaty Act/California Fish and Game Code

No natural plant communities[16] exist in the BSA. Typically, ornamental landscaping, particularly mature trees, provide marginal foraging and nesting habitat for bird species, including raptors, which are common in urban environments. As a result, birds protected by the MBTA and the CFGC have the potential to nest in the BSA. Ornamental vegetation, including mature trees, would be removed during construction of the Project components, as further described in Threshold BIO-5 below. If tree removal occurs during the nesting bird season, birds protected by the MBTA would be directly impacted. Therefore, the proposed Project has the potential to result in a substantial adverse effect on species protected in the MBTA and CFGC, resulting in a potentially significant impact.

However, Mitigation Measure BIO-B would be required if construction activities would occur during the nesting season. Mitigation Measure BIO-B would require that a pre-construction nesting survey be conducted by a qualified biologist within 3 days prior to the start of construction activities to determine whether active nests are present in or directly adjacent to the construction zone, avoidance, and buffer areas. If active nests are present within the standard buffer described in Mitigation Measure BIO-B, a qualified biologist would monitor the nest on a weekly basis, and construction activities would be postponed until the biologist determines that the nest is no longer active, or the adults and young are no longer reliant on the nest site. Therefore, with implementation of Mitigation Measure BIO-B, the direct impacts of vegetation removal on nesting birds and their associated nesting habitat would be reduced to less than significant.

Indirect impacts to nesting birds in the BSA could occur during construction as a result of noise, vibration, dust, and increased human presence resulting from construction activities. Disturbances related to construction could result in increased nestling mortality due to nest

[16] California Department of Fish and Wildlife (CDFW). 2022. California Natural Diversity Data Base (CNDDB). Full report for Los Angeles, Burbank, Pasadena, Mt. Wilson, Hollywood, El Monte, Inglewood, South Gate, and Whittier quadrangles. Generated May 10, 2022.

abandonment or decreased feeding frequency. Therefore, indirect impacts (e.g., by noise causing abandonment of the nest) from implementation of the proposed Project would be considered a potentially significant impact.

The proposed Project would implement standard best management practices and mitigation measures related to the control of fugitive dust, noise, and vibration, including compliance with South Coast Air Quality Management District (SCAQMD) Rule 403 and Mitigation Measures NOI-A and NOI-B. SCAQMD Rule 403 would require watering of active construction areas at least two times a day to minimize fugitive dust emissions. Mitigation Measures NOI-A and NOI-B would require temporary noise barriers from eight to 24 feet high during construction, and maintenance of construction equipment, including with noise control devices. Additionally, by implementing the avoidance and minimization measures outlined in Mitigation Measure BIO-B, which requires a pre-construction nesting survey to determine whether active nests are present in or directly adjacent to the construction zone, avoidance, and buffer areas, indirect impacts to nesting birds during construction of the proposed Project would be reduced to less than significant.

Therefore, with the implementation of Mitigation Measures BIO-A and BIO-B, construction of the proposed Project would have a less than significant impact on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

Operational Impacts

Less Than Significant. Operation of the proposed Project would generally consist of cabins traveling on cables in a continuous loop between the Alameda Station and the Dodger Stadium Station. Operation may include noise and increased human activity, especially near station locations and queuing areas.

Special-Status Plant Species

The BSA does not provide suitable habitat for special-status plant species; therefore, operation of the proposed Project would not have a substantial adverse effect on special-status plant species, and no impact would occur.

Special-Status Wildlife Species

Given the heavily urbanized nature of the BSA and limited amount of suitable foraging and nesting habitat, special-status birds and raptors are not expected to occur in the BSA, except potentially as transient migrants. Because migration is not expected to be concentrated in the BSA, significant impacts are not anticipated for special-status species or raptors. Based on this assessment, operational impacts to special-status bird species and raptors would be less than significant.

Migratory Bird Treaty Act/California Fish and Game Code

Operational impacts would be limited to common bird species protected under the MBTA and CFGC. These species could be directly and indirectly impacted by Project operations. Potential direct impacts could include bird collisions with the proposed stations, junction, towers, cabins, and ropeway cables; or electrocution if they come in contact with an energized component of the system. Significant impacts typically can occur when towers or wires are constructed in migratory corridors and obstruct the flight paths of migrant birds. However, the proposed Project alignment is not in or near a known avian migratory corridor and lacks habitat and topographic features that would promote concentrated avian migratory activity. Therefore, impacts to migrating birds would be less than significant.

During the daytime, resident birds or migrants using the habitat in the BSA would be able to visually detect and avoid colliding with the proposed stations, junction, towers, and cabins; however, they could collide with cable spans if the cables are more difficult to see and avoid. Compared to transmission lines, avian collisions with ropeway cables would be relatively unlikely, given that the cables would be 1.75 to 2.5 inches in diameter. By comparison, phase conductors on most transmission lines are 1 to 2 inches in diameter, while shield wires (the lines most associated with bird collisions on transmission lines because they are the highest wire and are smaller in diameter) range from 0.4 to 0.5 inch in diameter.[17] In addition, the ropeway cables would be arranged in two groups of three cables (one group per direction of travel), and the three cables in each group would be spaced between a few inches and a few feet apart in the vertical plane. Relative to typical vertical spacing of transmission lines (at least 6 feet apart to avoid electrocution hazard), these two groups of cables could essentially be considered to be on the same vertical plane, rather than spanning multiple wire levels, which would reduce collision risk. Furthermore, the tight grouping of cables would be expected to make them more visible than one isolated cable the same size. Visibility of the cables would be further increased by the presence of moving cabins attached to them at regular intervals. Overall, the larger diameter of the cables relative to wires on transmission lines, and grouping of multiple cables together on a single plane rather than dispersed across multiple planes, would likely result in a lower probability of avian collisions compared to that associated with transmission lines.

Operation of the proposed Project is not expected to result in the electrocution of birds or other animals. The ropeway cables providing support for the cabins would not be energized. Additionally, all motive power components would be enclosed during normal operations, and would only be opened for inspection or maintenance activities. All on-board electrical requirements for cabins, such as lighting, would be met by super-capacitor type systems. These systems would be low-voltage and inverted so that electrical components would not be exposed.

Potential indirect impacts could include potential displacement of birds or bats from foraging, nesting, or roosting areas due to disturbance from noise and human activity associated with operation of the proposed Project. However, because the proposed Project would operate in a highly disturbed urban area, birds and bats are unlikely to be impacted by the relatively minor change in environment. Project operation could also cause indirect impacts to bird and bat foraging, nesting, or roosting activities from Project lighting. However, lighting would be low-level and primarily integrated into the architectural features. Exterior lighting would be shielded and/or directed toward the areas to be lit, limiting spillover into adjacent habitats potentially suitable for birds and bats. Due to the high level of exterior lighting currently present in the urbanized BSA, lighting proposed by the Project is not anticipated to have an indirect impact on bird and bat species. Given the relatively short length of the alignment, the heavily urbanized nature of the BSA, and limited amount of suitable foraging and nesting habitat, special-status birds and raptors are not expected to occur in the BSA, except potentially as transient migrants. Therefore, operation of the proposed Project would have a less than significant impact on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

---

[17] Avian Power Line Interaction Committee. 2012. Reducing Avian Collisions with Power Lines: *The State of the Art in 2012*. Washington. D.C. Available at: http://www.aplic.org/uploads/files/15518/Reducing_Avian_Collisions_2012watermarkLR.pdf. Accessed April 2022.

BIO-2: *Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*

Construction and Operational Impacts

No Impact. There are no sensitive natural communities[18] such as wetlands, oak woodlands, or coastal sage scrub habitat in the BSA. As described in Section 3.4.2, Environmental Setting, the proposed Project alignment would be in urbanized and developed communities. The surrounding land uses include high- and medium-density residential, commercial, retail, institutional, transit-related infrastructure (road and rail), parks and open space, and public facilities uses. Limited vegetation occurs in the BSA, and consists primarily of ornamental species. No sensitive natural communities or riparian habitat occur in the BSA. Additionally, sensitive aquatic habitats under regulatory jurisdiction of USACE, CDFW, and RWQCB are not present in the BSA. As a result, implementation of the proposed Project would not result in direct or indirect impacts on any riparian habitat or other sensitive natural community, and no impact would occur.

BIO-3: *Would the Project have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Construction and Operational Impacts

No Impact. The BSA does not include federally protected wetlands, including marsh, vernal pool, or coastal habitats. Implementation of the proposed Project would not result in impacts related to a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means. Therefore, no impact would occur.

BIO-4: *Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Construction Impacts

Less Than Significant Impact with Mitigation. Natural vegetation communities or waterways that provide opportunities for resting, cover, foraging, and nesting activities that support regional wildlife movement are not present in the BSA. The Los Angeles River, which is contained in a concrete channel through the downtown Los Angeles area, is approximately 0.4 to 0.6 mile east of the BSA, and serves as a wildlife movement corridor through the heavily urbanized downtown area; however, it occurs outside the BSA. Additionally, there are no wildlife movement corridors between the BSA and the river that could promote movement between areas. Mature trees and vegetation in the Los Angeles State Historic Park may provide resting, foraging, and nesting habitat that support localized bird populations; however, there are no further connections from the park to other green spaces outside the BSA that could promote wildlife movement.

Furthermore, concentrated avian migratory activity is not expected in or near the BSA. Migratory movements tend to be focused along prominent ridgelines, shorelines, and where there is

[18] California Department of Fish and Wildlife (CDFW). 2022. *California Natural Diversity Data Base (CNDDB)*. Full report for Los Angeles, Burbank, Pasadena, Mt. Wilson, Hollywood, El Monte, Inglewood, South Gate, and Whittier quadrangles. Generated May 10, 2022.

favorable stopover habitat. The Project alignment is on a broad urbanized coastal plain, midway between the coast and the mountains, and lacks significant wetlands or similar habitats that might attract large numbers of migrants as stopover habitat. As a result, the BSA does not serve as a regional wildlife corridor, and direct impacts to regional wildlife movement would not occur.

Construction activities would result in increased noise, vibration, dust, and human presence, which may result in bat and bird species avoiding areas where active construction is occurring. Such indirect effects would be temporary in nature and restricted to the duration of construction. As previously discussed in Threshold BIO-1, with implementation of the proposed Project, indirect impacts (e.g., by noise causing abandonment of the nest) would be considered a potentially significant impact.

Therefore, Mitigation Measures BIO-A and BIO-B would be implemented to reduce any potentially significant indirect impacts to localized bird movement or native wildlife nursery sites, specifically for bat roosts and bird nests. Mitigation Measure BIO-A would require a field survey be conducted by a qualified bat biologist to determine the presence of colonial bat roosts within 100 feet of the Project component sites prior to construction and tree removal at the Alameda Station, Stadium Tower, and Dodger Stadium Station sites. Mitigation Measure BIO-B would require a pre-construction nesting survey be conducted by a qualified biologist within 3 days prior to the start of construction activities to determine whether active nests are present in or directly adjacent to the construction zone. In addition, standard construction practices related to the control of dust, noise, and vibration would also be implemented, as discussed in Threshold BIO-1. With implementation of Mitigation Measures BIO-A and BIO-B, impacts related to substantially interfering with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impeding the use of native wildlife nursery sites during construction of the proposed Project would be reduced to a less than significant level. Therefore, impacts would be less than significant with the imposition of mitigation.

Operational Impacts

Less Than Significant. As discussed under construction, natural vegetation communities or waterways are not present in the BSA. Operation of the proposed Project may include noise and increased human activity, especially near station locations and queuing areas. Given the urbanized nature of the BSA and limited amount of suitable foraging and nesting habitat, special-status birds and raptors are not expected to occur in the BSA, except potentially as transient migrants. However, because migration is not expected to be concentrated in the BSA, and the proposed Project would operate in urbanized and developed communities, migratory species are unlikely to be impacted by the relatively minor change in environment. Additionally, common species in the area are unlikely to be impacted by the relatively minor change in environment. As described above, concentrated avian migratory activity is not expected in or near the BSA, because the Project alignment is on a broad urbanized coastal plain and lacks significant wetlands or similar habitats that might attract large numbers of migrants as stopover habitat. Therefore, operation of the proposed Project would result in a less than significant impact related to substantially interfering with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impeding the use of native wildlife nursery sites.

BIO-5: *Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Construction Impacts

Less Than Significant Impact. A tree inventory report was prepared for the Project alignment, including the areas along the alignment between Project components. Trees occurring along the Project alignment were inventoried for species, size, and location. Based on field surveys conducted on April 24, 2021, and a review of the March 28, 2022 tree inventory report, 250 trees along the Project alignment are proposed for removal, and 10 trees that were inventoried would be preserved.

Table 3.4-1 presents the number of trees in the Project alignment that would be impacted by construction of the Project, and proposed for removal. These trees are identified as "Protected Trees," 'significant' trees" as defined by the City's Planning Division, street trees occurring in the public ROW, trees occurring on Los Angeles State Historic Park property, and trees in the SR-110 Caltrans ROW. Based on field surveys conducted on April 24, 2021 and a review of the March 28, 2022 tree report, 250 trees along the Project alignment are proposed for removal and 10 trees that were inventoried will be preserved. A list of the trees identified at Project component sites proposed for removal with the diameter at 4.5 feet (DBH), tree height information, canopy spread, health, structure, and regulatory status are provided in Appendix E.

One species protected under the City's Native Tree Protection Ordinance, Mexican elderberry, was identified at the Broadway Junction site, and would be removed during construction of the Project. Accordingly, the City requires a ratio replacement of 4:1 for the removal of a protected tree.

In addition, western sycamore trees occur in the BSA at the Alameda Tower and Chinatown/State Park Station sites, and toyon shrubs occur at the Chinatown/State Park Station site. Although western sycamore trees and toyon shrubs are considered native; native trees or shrubs that were planted or grown as part of a planting program are not "Protected Trees" under the City's Ordinance. The 24 western sycamore trees at the Alameda Tower and Chinatown/State Park Station sites, and along the portion of the Project alignment crossing over the Los Angeles State Historic Park, and the 19 toyon shrubs at the Chinatown/State Park Station site, and along the portion of the Project alignment crossing over the Los Angeles State Historic Park, are not protected under the City's Native Tree Protection Ordinance. However, the western sycamore trees and toyon shrubs that were installed in 2016 during construction of the southern entrance to the Los Angeles State Historic Park as part of a tree planting program, and those installed beneath the portion of the alignment crossing over the Los Angeles State Historic Park, occur on State property. Therefore, these species are subject to the California Department of Parks and Recreation State requirements for a special permit "to remove, treat, disturb, or destroy plants," as discussed further below.

The City of Los Angeles Planning Department considers all other trees with trunk diameters of 8 inches or greater as 'significant.' Sixty-one significant trees would be removed or disturbed on private property at the Broadway Junction, Stadium Tower, and Dodger Stadium Station sites. An additional 21 significant trees would also be removed in the proposed fire buffer surrounding the Stadium Tower's construction zone. Accordingly, for such trees that are non-protected but are significant, the City requires a replacement ratio of 1:1.

Table 3.4-1: Trees Impacted by Proposed Project

Project Component	City-Ordinance Protected Trees	Significant Trees[1]	Street Trees (Public ROW)	Trees on State Park Property	Trees Within the SR-110 Caltrans ROW
Alameda Station	-	-	12[4]	-	-
Alameda Tower	-	-	10	-	-
Alpine Tower[2]	-	-	-	-	-
Chinatown/State Park Station	-	-	6	24	-
Alignment Over Park	-	-	-	51	-
Broadway Junction	1	18	6	-	-
Alignment Over SR-110	-	-	-	-	8
Stadium Tower	-	10	-	-	-
Stadium Tower Fire Buffer Zone for Construction		21			
Dodger Stadium Station	-	33	-	-	-
TOTAL TREES TO BE REMOVED[3] = 250	**1**	**82**	**34**	**75**	**8**

[1] All trees considered 'significant' by the City of Los Angeles Planning Department occur on private property.
[2] No trees need to be removed for this Project component.
[3] No additional trees located between these Project components and within the Project alignment would require removal for the Project.
[4] 12 impacted trees represents the worst-case scenario for Alameda Station, reflecting the installation and use of a temporary deck spanning over Alameda Street for construction. Only 4 trees may be impacted if this construction option is not used.
Tree Inventory Report, LA ART Project – Los Angeles, CA. March 28, 2022. Carlberg Associates. Appendix E of this Draft EIR.

Thirty-four street trees in the public ROW would be removed or disturbed during construction on public property at the Alameda Station, Alameda Tower, Chinatown/State Park Station, and Broadway Junction sites. Removal of all street trees would occur in accordance with the policies of the Los Angeles Department of Public Works, Bureau of Street Services, Urban Forestry Division. Removal of street trees would require approval of the Board of Public Works, and all existing street trees would be replaced at a ratio agreed upon during consultation with the Urban Forestry Division.

The removal of the 75 trees located on State Park property at the Chinatown/State Park Station and the Project alignment over the park area would require special permit approval of the California Department of Parks and Recreation, and all existing street trees would be replaced at a ratio agreed upon with consultation with the Department. The removal of eight trees in the SR-110 Caltrans ROW would require consultation with and permit approval from Caltrans. Additionally, some trees on private property would be removed or disturbed during construction of the Broadway Junction, Stadium Tower, and Dodger Stadium Station.

No trees are anticipated to be impacted with construction of the Alpine Tower and pedestrian connections at the Dodger Stadium Station. However, as the Project design is refined and construction plans are finalized, additional trees could be impacted at other Project component sites.

The proposed Project would incorporate BIO-PDF-A, which would establish a Tree Protection Zone to protect trees during construction that are not identified to be removed, but are either in the construction footprint, or in close proximity to the construction footprint. In addition, the Project proposes to replace trees located on California Department of Parks and Recreation State property and private property at a 1:1 ratio, with a minimum 24-inch box tree in the Project area, or at another location in the City.

The proposed Project would be required to adhere to the City's Street Tree policy regarding removal of street trees, which would occur in consultation with the Urban Forestry Division, as well as the California Department of Parks and Recreation's regulations concerning the removal of trees (14 CCR § 4306) if located on State property. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Impacts would be less than significant.

Operational Impacts

No Impact. Following construction, operation of the proposed Project would not conflict with any local policies or ordinances protecting biological resources, and no impact would occur.

BIO-6: *Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Construction and Operational Impacts

No Impact. Due to its densely developed and urbanized nature, the Project area provides little opportunity for wildlife species or other biological resources to exist. No natural habitats occur in the BSA, and there are no Habitat Conservation Plans or Natural Community Conservation Plans that overlap with the BSA. The nearest Significant Ecological Area is approximately five miles north-northwest of Dodger Stadium at Griffith Park. Implementation of the proposed Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, impacts would not occur.

3.4.5 Project Design Feature

BIO-PDF-A The Project will establish a Tree Protection Zone to protect trees during construction to establish and maintain a healthy environment for all retained trees during the course of construction. The Tree Protection Zone will apply to any trees within the construction footprint, or any trees where a portion of their drip line overhangs the construction footprint (i.e., the trunk of a tree may be outside of the construction footprint, but the tree's drip line overhangs the construction footprint). The Tree Protection Zone generally encompasses an area within the drip line of the tree plus an additional 5 feet, depending on the species and size of the tree. Any construction activities within the Tree Protection Zone should follow the following guidelines for root protection. For utilities, any required trenching should be routed in such a manner as to minimize root damage. In areas where the grade around the Tree Protection Zone will be lowered, some root cutting may be unavoidable. Cuts should be clean and made at right angles to the roots. When practical, roots will be cut back to a branching lateral root to avoid root damage.

3.4.6 Mitigation Measures

The following mitigation measures would be implemented to reduce impacts related to biological resources.

BIO-A *Avoid and minimize project related impacts to special-status and/or roosting bat species*. During the maternity season (April 15 through August 31) prior to construction, a field survey shall be conducted by a qualified biologist to determine the potential presence of colonial bat roosts within 100 feet of the Alameda Station and Dodger Stadium Station footprints and SR-110 overpass over Stadium Way (near Stadium Tower), because these locations provide potentially suitable habitat. A visual inspection and/or one-night emergence survey of trees to be removed near the Alameda Station and Dodger Stadium Station and of the overpass shall be completed using acoustic recognition technology to determine if any maternity roosts are present.

To avoid any impacts on roosting bats resulting from construction activities for Stadium Tower, the following shall be implemented:

<u>At the SR-110 Overpass</u>

Should an active maternity roost be found at the SR-110 overpass, a determination (in coordination with a qualified bat biologist) shall be made whether indirect effects of construction-related activities (i.e., noise and vibration) could substantially disturb roosting bats, and if exclusionary devices should be used to remove bats. This determination shall be based on baseline noise/vibration levels, anticipated noise levels associated with construction of the Stadium Tower, and the sensitivity to noise-disturbances of the bat species present. If it is determined that noise could result in the temporary abandonment of a maternity roost, construction-related activities shall be scheduled to avoid the maternity season (April 15 through August 31), or as determined by the biologist.

To avoid any impacts on roosting bats resulting from construction activities at Alameda Station and Dodger Stadium Station, the following shall be implemented:

<u>Trees</u>

All trees to be removed as part of the Project at the Alameda Station, Stadium Tower, and Dodger Stadium Station sites should be evaluated for their potential to support bat roosts. In particular, any palm and eucalyptus trees that bats are known to use should be evaluated by a qualified biologist by conducting a one-night emergence survey during acceptable weather conditions; or if conditions permit, physically examine the trees for presence or absence of bats (such as with lift equipment) before the start of construction/tree removal. Palm trees are present at the Alameda Station site along Alameda Street and eucalyptus trees are present at the Dodger Stadium Station site. The following measures would apply to trees to be removed that are determined to provide potential bat roost habitat by a qualified biologist.

- If roosting bats are determined present during the maternity season (April 15 through August 31), the tree shall be avoided until after the maternity season, when young are self-sufficient.

If roosting bats are determined present during the winter months when bats are in torpor, a state in which the bats have significantly lowered their physiological state, such as body temperature and metabolic rate, due to lowered food availability (October 31 through February 15, but is dependent on specific weather conditions), a qualified bat biologist shall physically examine the roost if conditions permit for presence or absence of bats (such as with lift equipment) before the start of construction. If the roost is determined to be occupied during this time, the tree shall be avoided until after the winter season when bats are once again active.

- Trees with potential colonial bat habitat can be removed outside of the maternity season and winter season (February 16 through April 14 and August 16 through October 30, or as determined by a qualified biologist) using a two-step tree trimming process that occurs over 2 consecutive days.
    - Day 1, Step 1: Under the supervision of a qualified bat biologist, tree branches and limbs with no cavities shall be removed by hand (e.g., using chainsaws). This will create a disturbance (noise and vibration) and physically alter the tree. Bats roosting in the tree will either abandon the roost immediately, or, after emergence, will avoid returning to the roost.
    - Day 2, Step 2: Removal of the remainder of the tree under the supervision of a qualified bat biologist may occur on the following day. Trees that are only to be trimmed and not removed would be processed in the same manner; if a branch with a potential roost must be removed, all surrounding branches would be trimmed on Day 1 under supervision of a qualified bat biologist, and then the limb with the potential roost would be removed on Day 2.
- Trees with foliage (and without colonial bat roost potential), such as sycamores, that can support lasiurine bats, shall have the two-step tree trimming process occur over one day under the supervision of a qualified bat biologist. Step 1 would be to remove adjacent, smaller, or non-habitat trees to create noise and vibration disturbance that would cause abandonment. Step 2 would be to remove the remainder of tree on that same day. For palm trees that can support western yellow bat (a special-status bat species documented in the BSA with the potential to occur in the Project area), the two-step tree process shall be used over two days. Western yellow bats may move deeper within the dead fronds during disturbance. The two-day process will allow the bats to vacate the tree before removal.
- The results of bat surveys, evaluations, and monitoring efforts that are undertaken shall be documented in a report by the qualified biologist at the conclusion of all bat-related activities.

BIO-B *Avoid and minimize project-related impacts to nesting birds.* To avoid impacts to nesting birds protected under the MBTA and CFGC resulting from construction activities that may occur during the nesting season, the following mitigation measure shall be implemented:

- Construction activities, including the clearance of trees potentially suitable for nesting birds, shall occur outside of the nesting season (generally February 1 through September 30). If construction activities must occur within this time period, the following measures shall be employed:

- A pre-construction nesting survey shall be conducted by a qualified biologist within 3 days (72 hours) prior to the start of construction activities to determine whether active nests are present within 500 feet of the construction zone. All nests found shall be recorded.

- A minimum 300-foot no-work buffer shall be established around any active passerine bird nest. A minimum 500-foot no-work buffer shall be established around any active raptor nest. The qualified biologist shall monitor the nest on a weekly basis, and construction activities within 300 feet of an active nest of any passerine bird or within 500 feet of an active nest of any raptor shall be postponed until the biologist determines that the nest is no longer active. However, the standard 300- to 500-foot no-disturbance buffer distance may be adjusted (including increases or reductions to the buffer) by a qualified biologist on a case-by-case basis, taking into consideration the location, type, duration and timing, and severity of work, distance of nest from work area, surrounding vegetation and line-of-sight between the nest and work areas (also taking into account existing ambient conditions from human activity within the line of sight), the influence of other environmental factors, and species' site-specific level of habituation to the disturbance. If the qualified biologist determines nesting activities may fail as a result of work activities, the biologist shall immediately inform the construction manager, and all Project work shall cease (except access along established roadways) within the recommended no-disturbance buffer until the biologist determines the adults and young are no longer reliant on the nest site.

- Buffers will be delineated on-site with bright flagging for easy identification by project staff. The on-site construction supervisor and operator staff will be notified of the nest and the buffer limits, and instructed of the sensitivity of the area to ensure the buffer is maintained.

- A summary of preconstruction surveys and methodologies employed, monitoring efforts, and any no-disturbance buffers that were installed shall be documented in a report by the qualified biologist at the conclusion of each nesting season.

3.4.7 Level of Significance after Mitigation

With implementation of Mitigation Measures BIO-A and BIO-B listed above, potential impacts associated with biological resources for Impacts BIO-1 and BIO-4 during construction of the proposed Project would be reduced to a level that is less than significant. Therefore, no significant unavoidable adverse impacts related to biological resources would occur.

This page intentionally left blank.

3.5 CULTURAL RESOURCES

This section evaluates the potential impacts of the proposed Project as it relates to cultural resources, including built resources and archaeological resources. The analysis in this section is based in part on information contained in *the Archaeological and Paleontological Resources Assessment for the Los Angeles Aerial Rapid Transit Project* and the *Historical Resource Technical Report for the Los Angeles Aerial Rapid Transit Project* prepared for the proposed Project (Appendices F and G of this Draft EIR, respectively).

Cultural resources in California are protected by a number of federal, State, and local regulations, statutes, and ordinances. Terminology for elements of the cultural, archaeological, and built environment, regardless of historic significance, varies between federal and state law, as well as between types of environmental review documents. While some terms may appear interchangeable, each has a specific definition under the applicable laws and as applied in this section. To clarify the nuances of the terminology used herein, the following definitions are provided:

- Cultural Resource: A cultural resource is any tangible or observable evidence of past human activity, regardless of significance. Cultural resources are found in direct association with a geographic location (such as an Area of Potential Effects) and may include tangible properties possessing intangible traditional cultural values. Categories of cultural resources include:
  - Building: A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. “Building” may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.
  - Structure: The term “structure” is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.
  - Object: The term “object” is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. This may include a mural or sculpture. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.
  - Site: A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure.
  - Cultural Landscape: Cultural landscapes portray how humans have used and adapted natural resources over time, whether through agricultural, mining, ranching and settlement activities, or traditional Native American cultural practices.

- Historic District: A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.[1]

- Built Resource: A built resource is a cultural resource that remains part of the human-made built environment and provides the setting for human activity. It does not include buried resources. While a built resource may be in poor condition, it is still recognizable as a human-made building, structure, object, district, or cultural landscape. Built resources include the human-made built environment in an identified geographic location, regardless of significance.
- Archaeological Resource: An archaeological resource is a cultural resource that comprises a configuration of artifacts, soil strata, structural remains, or other natural or cultural features that are the evidence of past human activity. An archaeological resource may not be recognizable or even observable without ground-disturbing activities. Archaeological resources include the remnants of past human activity in an identified geographic location, regardless of significance.

  An archeological site may be considered an historical resource if it is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California (PRC Section 5020.1(j)) or if it meets the criteria for listing on the California Register (14 CCR Section 4850). Under CEQA, lead agencies should first evaluate an archeological site to determine if it meets the criteria for listing in the California Register. If an archeological site is an historical resource (i.e., listed or eligible for listing in the California Register) potential adverse impacts to it must be considered, just as for any other historical resource (PRC Sections 21084.1 and 21083.2((I)).[2]

- Previously Identified/Known Resource: A previously identified or known resource is a historical resource that has been identified in a survey or study conducted prior to the current study, and that has been evaluated as eligible for listing in or is already listed in the National Register of Historic Places (NRHP or National Register), CRHR, or local register of historical resources.
- Historic Property: Historic property is a term used in federal law to describe a cultural resource, such as a building, structure, object, site or district that is significant in American history, architecture, engineering, archaeology, or culture at the national, state, or local level; that has integrity, and that meets the National Register of Historic Places (NRHP or National Register) criteria. A historic property is, by definition, eligible for or listed in the National Register.
- Historical Resource: Historical resource is a term used in state law to denote any building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in other specific aspects of California life, and that meets the California Register of Historical Resources (CRHR or California Register) criteria. A historical resource is, by definition, eligible for listing or listed in the California Register. Furthermore, a property is presumed to be historically significant and eligible for the California Register if it is listed in a local register of historical resources or has been

1 National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation (Washington D.C.: National Park Service, Department of the Interior, 1997), 4-5.

2 California Office of Historic Preservation. *Are Archeological Sites Part of the California Register?* Available at: https://ohp.parks.ca.gov/?page_id=21725, accessed April 2022.

identified as historically significant in a historical resources survey (provided certain criteria and requirements are satisfied) unless a preponderance of evidence demonstrates that the property is not historically or culturally significant.[3]

Note that the terms may be combined when appropriate to describe a particular resource. For example, a previously identified built historical resource is one that is part of the man-made built environment, that was identified in a study completed prior to the current study, and that has been evaluated as eligible for listing in or is already listed in the NRHP, CRHR, or local register of historical resources. An archaeological historical resource is one that was identified in a study completed prior to the current study, and that has been evaluated as eligible for listing in or is already listed in the NRHP, CRHR, or local register of historical resources.

3.5.1 Regulatory Setting

Federal

National Historic Preservation Act of 1966

The National Historic Preservation Act of 1966 (NHPA; 16 United States Code 470 et seq.) established the NRHP to recognize resources associated with the country's history and heritage. The NRHP is the federal government's official list of districts, sites, buildings, structures and objects deemed worthy of preservation for their historical significance and is maintained by the National Park Service (NPS). To be eligible for listing in the National Register, a property must be at least 50 years of age (unless the property is of "exceptional importance") and possess significance in American history, architecture, archaeology, engineering, and culture. A property less than 50 years of age may be eligible if it can be demonstrated that sufficient time has passed to understand its historical importance. A property of potential significance must meet one or more of the following four established criteria:

a. Associated with events that have made a significant contribution to the broad patterns of our history; or

b. Associated with the lives of persons significant in our past; or

c. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d. Yield, or may be likely to yield, information important in prehistory or history.[4]

Context

To be eligible for listing in the National Register, a property must be significant within a historic context. *National Register Bulletin #15* states that the significance of a resource can be judged only when it is evaluated within its historic context. Historic contexts are "those patterns, themes, or trends in history by which a specific...property or site is understood and its meaning...is made

[3] Public Resources Code Section 5024.1 and 14 California Code of Regulations Sections 4850 & 15064.5(a)(2).
[4] Title 36 Code of Federal Regulations Part 60.4.

clear."[5] A resource must represent an important aspect of the area's history or prehistory and possess the requisite integrity to qualify for the NRHP.

Integrity

In addition to possessing significance within a historic context, to be eligible for listing in the NRHP a resource must have integrity. Integrity is defined in *National Register Bulletin #15* as "the ability of a property to convey its significance."[6] Within the concept of integrity, the NRHP recognizes the following seven aspects or qualities that in various combinations define integrity: feeling, association, workmanship, location, design, setting, and materials. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. It must also be judged with reference to the particular criteria under which a resource is proposed for nomination.

Historic Districts

The NRHP includes significant properties, which are classified as buildings, sites, districts, structures, or objects. A historic district "derives its importance from being a unified entity, even though it is often composed of a variety of resources. The identity of a district results from the interrelationship of its resources, which can be an arrangement of historically or functionally related properties."[7]

A district is defined as a geographically definable area of land containing a significant concentration of buildings, sites, structures, or objects united by past events or aesthetically by plan or physical development.[8] A district's significance and historic integrity should help determine the boundaries. Other factors include:

- Visual barriers that mark a change in the historic character of the area or that break the continuity of the district, such as new construction, highways, or development of a different character;
- Visual changes in the character of the area due to different architectural styles, types, or periods, or to a decline in the concentration of contributing resources;
- Boundaries at a specific time in history, such as the original city limits or the legally recorded boundaries of a housing subdivision, estate, or ranch; and
- Clearly differentiated patterns of historical development, such as commercial versus residential or industrial.[9]

Within historic districts, properties are identified as contributing and noncontributing. A contributing building, site, structure, or object adds to the historic associations, historic architectural qualities, or archeological values for which a district is significant because:

- It was present during the period of significance, relates to the significance of the district, and retains its physical integrity; or

5 National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation (Washington D.C.: National Park Service, Department of the Interior, 1997), 7-8.
6 National Register Bulletin #15, 44-45.
7 *Ibid*.
8 Title 36 Code of Federal Regulations Part 60.3(d).
9 National Register Bulletin #21: Defining Boundaries for National Register Properties Form (Washington D.C.: U.S. Department of the Interior, 1997), 12.

- It independently meets the criterion for listing in the National Register.[10]

California Register of Historical Resources

In 1992, Governor Wilson signed Assembly Bill 2881 into law establishing the CRHR. The CRHR is an authoritative guide used by State and local agencies, private groups, and citizens to identify historical and archaeological resources and to indicate what resources are to be protected, to the extent prudent and feasible, from substantial adverse impacts.

The criteria for listing historical resources in the CRHR are consistent with those developed by the NPS for listing in the NRHP, but they have been modified for State use to include a range of historical resources that better reflect the history of California. A historical resource is significant at the local, State, or national level under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2. Is associated with the lives of persons important to local, California, or national history;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

The CRHR consists of historical resources that are (a) listed automatically, (b) listed following procedures and criteria adopted by the State Historical Resources Commission, and/or (c) nominated by an application and listed after a public hearing process. The CRHR automatically includes the following:

- California properties listed in the NRHP and those formally Determined Eligible for the NRHP;
- California Historical Landmarks (CHL) from #0770 onward[11]; and
- Those California Points of Historical Interest that have been evaluated by the State Office of Historic Preservation (SOHP) and have been recommended to the State Historical Resources Commission for inclusion on the CRHR.

Properties eligible for listing in the CRHR may include buildings, sites, structures, objects, and historic districts. A property less than 50 years of age may be eligible if it can be demonstrated that sufficient time has passed to understand its historical importance. It is possible that properties may not retain sufficient integrity to meet the criteria for listing in the NRHR, but they may still be eligible for listing in the CRHR. An altered property may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.[12]

The CRHR may also include properties identified during historic resource surveys. However, the survey must meet all of the following criteria:

---

10 National Register Bulletin #16: How to Complete the National Register Registration Form (Washington D.C.: U.S. Department of the Interior, 1997), 16.

11 California Historical Landmarks are sites, buildings, features, or events that are of statewide significance.

12 Title 14 California Code of Regulations Section 4852 (c).

1. The survey has been or will be included in the State Historical Resources Inventory;
2. The survey and the survey documentation were prepared in accordance with office [SOHP] procedures and requirements;
3. The resource is evaluated and determined by the office [SOHP] to have a significance rating of Category 1 to 5 on a Department of Parks and Recreation (DPR) Form 523; and
4. If the survey is five or more years old at the time of its nomination for inclusion in the CRHR, the survey is updated to identify historical resources that have become eligible or ineligible due to changed circumstances or further documentation and those that have been demolished or altered in a manner that substantially diminishes the significance of the resource.

Public Resources Codes Sections 5001 to 5019.59

Public Resources Code (PRC) Sections 5001 to 5019.59 establish the State Parks system and direct its governance. PRC Section 5001.1 establishes the Director of Parks and Recreation. PRC Section 5001.2 directs the Director to "promote and regulate the use of the state park system in a manner that conserves the scenery, natural and historic resources." PRC Section 5006.42 specifically created an Advisory Committee to assist the state in the acquisition and creation of Cornfields State Park (now Los Angeles State Historic Park). PRC Section 5019.59 allows for the creation of historical units "to preserve objects of historical, archaeological, and scientific interest, and archaeological sites and places commemorating important persons or historic events."

Public Resources Code Sections 5024 and 5024.5

PRC Section 5024(a) established a Master List of properties considered to be eligible for inclusion in the NRHP or CRHR and required each state agency to "formulate policies to preserve and maintain, when prudent and feasible, all state-owned historical resources under its jurisdiction."

Under PRC Sections 5024(f) and 5024.5, state agencies must provide notification and submit documentation to the State Historic Preservation Office (SHPO) for any project having the potential to affect State-owned historical resources on or eligible for inclusion in the Master List (buildings, structures, landscapes, archaeological sites, and other non-structural resources). Under PRC Section 5024(f), State agencies request the SHPO's comments on the project.

As discussed further below, the Chinatown/State Historic Park Station is located partially within the southern boundary of the Los Angeles State Historic Park, a State-owned resource.

Los Angeles State Historic Park General Plan

The Los Angeles State Historic Park General Plan serves as a long-range management tool that provides guidelines for achieving the vision and purpose of the park. According to the Los Angeles State Historic Park General Plan, the purpose of the Park is "to provide the public with a place to learn and celebrate the ethnically diverse history and cultural heritage of Los Angeles." As articulated by the Los Angeles State Historic Park General Plan, the goals of the Park include (1) promoting a "touchstone landscape for reflecting on Los Angeles' natural and cultural heritage and (2) emphasizing the importance of the historic site to Los Angeles, California, and the world."

The General Plan states that the Park is identified and recorded as an archaeological site and is listed as a designated Historic-Cultural Monument by the City of Los Angeles (LAHCM). The

General Plan acknowledges the Park has archaeological sensitivities and, as such, recommends continued study of existing and potential resources as well as the need to constantly update and expand the knowledge of historic activities at the Park. As for the cultural resources associated with the Park, the General Plan states that the Park should "[i], document, evaluate, and interpret cultural resources at the Park," and "[p]rotect, stabilize, and preserve significant cultural resources within the Park." Guideline 8 of the Los Angeles State Historic Park General Plan also establishes that protocols be put in place "for periodic assessments of known archaeological and historic resources. This regular inventory and monitoring should consist of updating recordation documentation, site condition assessments, and treatment recommendations." [13]

Local

City of Los Angeles General Plan

The City of Los Angeles General Plan Conservation Element, Sections 3 and 5, set forth objectives and policies to protect archaeological, paleontological, cultural, and historical resources.[14] For archaeological and paleontological resources, the General Plan Conservation Element, Section 3, states the following objective: protect the city's archaeological and paleontological resources for historical, cultural, research and/or educational purposes. The policy to achieve this objective is to, "continue to identify and protect significant archaeological and paleontological sites and/or resources known to exist or that are identified during land development, demolition, or property modification activities." For cultural and historical resources, the General Plan Conservation Element, Section 5 objective is to: protect important cultural and historical sites and resources for historical, cultural, research, and community educational purposes. The policy regarding protection of cultural resources is to, "continue to protect historic and cultural sites and/or resources potentially affected by proposed land development, demolition or property modification activities."

El Pueblo de Los Angeles General Plan

The City of Los Angeles signed an agreement in 1953 with the County of Los Angeles and State of California creating El Pueblo State Historic Park. This agreement allowed the State to purchase most of the property comprising the park. In cooperation with the City and County, in 1980, the State prepared the El Pueblo General Plan to provide guidelines for the preservation, rehabilitation, and interpretation of the historic buildings as well as for new development within the park. With regard to the eastern side of the park where the proposed project would be located, the General Plan states:

- The relationship and connection from the Plaza Substation to Placita de Dolores should be studied and improved.
- The transition between the Plaza and Placita de Dolores needs special design attention.
- To successfully relate El Pueblo to Union Station [Los Angeles Union Station, LAUS], pedestrian crossings should be studied.

[13] California Department of Parks and Recreation. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf, accessed April 2022.

[14] City of Los Angeles. 2001. City of Los Angeles General Plan Conservation Element. https://planning.lacity.org/odocument/28af7e21-ffdd-4f26-84e6-dfa967b2a1ee/Conservation_Element.pdf, accessed April 2022.

- Improvements to Placita de Dolores for expanded function, landscaping, and connections with other site areas are recommended. This should be coordinated with the development of the Plaza Substation and its facade restoration, as well as with the designs for possible connection to Union Station.
- Strong design relationships should be established between the Plaza, Placita de Dolores, Father Serra Park, and possible linkage to Union Station[15].

In 1992, the property within the Park was transferred to the City; in 1994, a separate department was created, and the name was changed to El Pueblo de Los Angeles Historical Monument[16].

El Pueblo de Los Angeles Strategic Plan

The El Pueblo de Los Angeles Strategic Plan (2016) has as one of its objectives "historic preservation and asset management." The goal of that objective is to "continue to implement and adhere to El Pueblo's General Plan by restoring and renovating properties to their highest and best use.[17]

City of Los Angeles Community Plans

Portions of the proposed Project alignment would be located within the Central City North Community Plan Area, the Central City Community Plan Area, and the Silver Lake-Echo Park-Elysian Park Community Plan Area. The City of Los Angeles is currently in the process of updating the Central City and Central City North Community Plans through the Downtown Los Angeles 2040 Draft Community Plan. Because it is unknown when the new community plan would be adopted and its EIR certified, the analysis in this section is based on the current applicable plans.

Elements of the proposed Project would be subject to the goals, objectives, and policies identified in the applicable community plans, as shown in Table 3.5-1.

Los Angeles Cultural Heritage Ordinance

The Los Angeles City Council adopted the Cultural Heritage Ordinance in 1962 and amended it in 2018 (Sections 22.171 et seq. of the Administrative Code). The Ordinance created a Cultural Heritage Commission and criteria for designating LAHCMs. The Commission is composed of five citizens, appointed by the Mayor, who have exhibited knowledge of Los Angeles history, culture, and architecture. A monument is any site, building, or structure of particular historic or cultural significance to the City of Los Angeles, and may be designated if it meets at least one of the following criteria:

- The proposed LAHCM is identified with important events of national, State, or local history, or exemplified significant contributions to the broad cultural, economic or social history of the nation, State, City, or community;

[15] City of Los Angeles, 1980, El Pueblo General Plan.

[16] El Pueblo de Los Angeles State Historic Park General Plan, California Department of Parks and Recreation. August 1981.

[17] City of Los Angeles, 2016, El Pueblo de Los Angeles Strategic Plan, 2016-2020: p. 9; Accessed September 2022 at https://elpueblo.lacity.org/sites/g/files/wph1641/files/2021-01/Low.Res_.EP%20Strategic%20Plan.2016.2021.pdf

Table 3.5-1: City of Los Angeles Community Plans' Goals, Objectives, and Policies

Plan	Goal/Objective/Policy
Central City North Community Plan[18]	Goal 17. Preservation and restoration of cultural resources, neighborhoods, and landmarks which have historical and/or cultural significance. • Objective 17-1. Encourage the preservation, maintenance, enhancement, and reuse of existing buildings and the restoration of original facades. • Objective 17-2. Assist private owners of historic resources to maintain and/or enhance their properties in a manner that will preserve the integrity of such resources in the best possible condition.
	Goal 18. A community which promotes cultural amenities and implements the City's Cultural Master Plan. • Objective 18-1. To enhance and capitalize on the contribution of existing cultural and historical resources in the community.
Central City Community Plan[19]	Objective 10-1. To ensure that the arts, culture, and architecturally significant buildings remain central to the further development of downtown and that it remains clearly discernable and accessible to all citizens in and visitors to Los Angeles.
Silver Lake-Echo Park-Elysian Park Community Plan[20]	Goal 16. Identification, preservation and restoration of cultural resources, neighborhoods, and landmarks which have historical and/or cultural significance. • Objective 16-1. Ensure that the community's historically significant resources are protected, preserved and/or enhanced.

- The proposed LAHCM is associated with the lives of historic personages important to national, State, City, or local history;
- The proposed LAHCM embodies the distinctive characteristics of a style, type, period, or method of construction; or represents a notable work of a master, designer, builder, or architect whose individual genius influenced his or her age.[21]

Unlike the NRHP and CRHR, the Ordinance makes no mention of concepts such as physical integrity or period of significance. Moreover, properties do not have to reach a minimum age requirement, such as 50 years, to be designated as LAHCMs.

3.5.2 Environmental Setting

3.5.2.1 Built Historical Resources

The proposed Project is located within the urbanized and developed City of Los Angeles communities of downtown, El Pueblo, Chinatown, Mission Junction, Solano Canyon, and Elysian

18 City of Los Angeles. 2000. Central City North Community Plan. Available at: https://planning.lacity.org/odocument/e06434a6-341a-48ed-97dc-8f6a85780951/Central_City_North_Community_Plan.pdf, accessed April 2022.

19 City of Los Angeles. 2003. Central City Community Plan. Available at: https://planning.lacity.org/odocument/2ddbdde0-a8fb-46e3-a151-f52fd09cc084/Central_City_Community_Plan.pdf. Accessed April 2022.

20 City of Los Angeles. 2004. Silver Lake-Echo Park-Elysian Park Community Plan. Available at: https://planning.lacity.org/odocument/e87507ac-8c40-49a0-aa1c-21df963f2298/Silver_Lake-Echo_Park-Elysian_Valley_Community_Plan.pdf. Accessed April 2022.

21 Los Angeles Administrative Code Section 22.171.7.

Park. The overview of the historic setting of the Area of Potential Impact (API), including for El Pueblo de Nuestra Señora La Reina de Los Ángeles de Porciúncula (El Pueblo), Los Angeles Plaza Historic District, LAUS, and Chavez Ravine, is detailed in the *Historical Resource Technical Report for the Los Angeles Aerial Rapid Transit Project* (Appendix G).

Identification

The *Historical Resource Technical Report for the Los Angeles Aerial Rapid Transit Project* (Appendix G) prepared for the proposed Project included research, documentation, and a field survey. The field survey of the Project component sites and vicinity was conducted to determine the API for built historical resources. The API includes all areas that could be directly or indirectly affected by the proposed Project. Examples of direct impacts may include physical construction, staging, right-of-way (ROW) acquisition, temporary construction easements (TCEs), and vibratory impacts. Examples of indirect impacts may include visual, auditory, and atmospheric changes to the setting of historical resources. To develop the API, areas within and adjacent to the alignment were considered, as well as view corridors along adjacent streets. Wherever the Project components would be substantially visible along a view corridor, the parcels along that view corridor were included in the API. Building heights, street widths, density, landscape, and grade elevation were all factored into determining the degree of visibility of the Project components along a particular view corridor.

To identify known built historical resources within the API, a records search from the South Central Coastal Information Center (SCCIC)[22] was requested to determine whether or not the API contains any properties that are currently listed under national, state, or city landmark or historic district programs and whether those properties have been previously identified or evaluated as potential historical resources. The California Historical Resources Inventory System (CHRIS), which includes data on properties listed and determined eligible for listing in the NRHP, listed and determined eligible for listing in the CRHR, California-Registered Historical Landmarks, Points of Historical Interest, as well as properties that have been evaluated in historic resources surveys and other planning activities, was also reviewed. The Los Angeles Historic Resources Inventory website was also reviewed for LAHCMs, Historic Preservation Overlay Zones, and potential historical resources identified by SurveyLA, the citywide historic resources survey of Los Angeles. In order to provide a conservative analysis, properties identified by SurveyLA are presumed to be historical resources for the purposes of this analysis under CEQA. These properties were not researched or evaluated on an intensive-level to independently determine their eligibility as historical resources as defined by CEQA.

Survey and Research Results

As shown in Table 3.5-2, 13 historical resources were identified within the API. A review of the databases revealed there are 12 previously identified historical resources; two of the resources are districts that have multiple contributors. One of the districts, the Los Angeles Plaza Historic District, is wholly within the API. There are 29 total resources within its boundaries, 22 of which are contributors. One of the districts, Arroyo Seco Parkway Historic District, is partially within the API has two resources within its boundaries within the API, but neither one is a contributor to that district. An additional three properties within the API were evaluated to determine if they would qualify as historical resources as defined by CEQA, because they have the potential to be

[22] The SCCIC is housed at California State University and is the Information Center of the California Historical Resources Information System (CHRIS), which maintains information about Ventura and Los Angeles Counties.

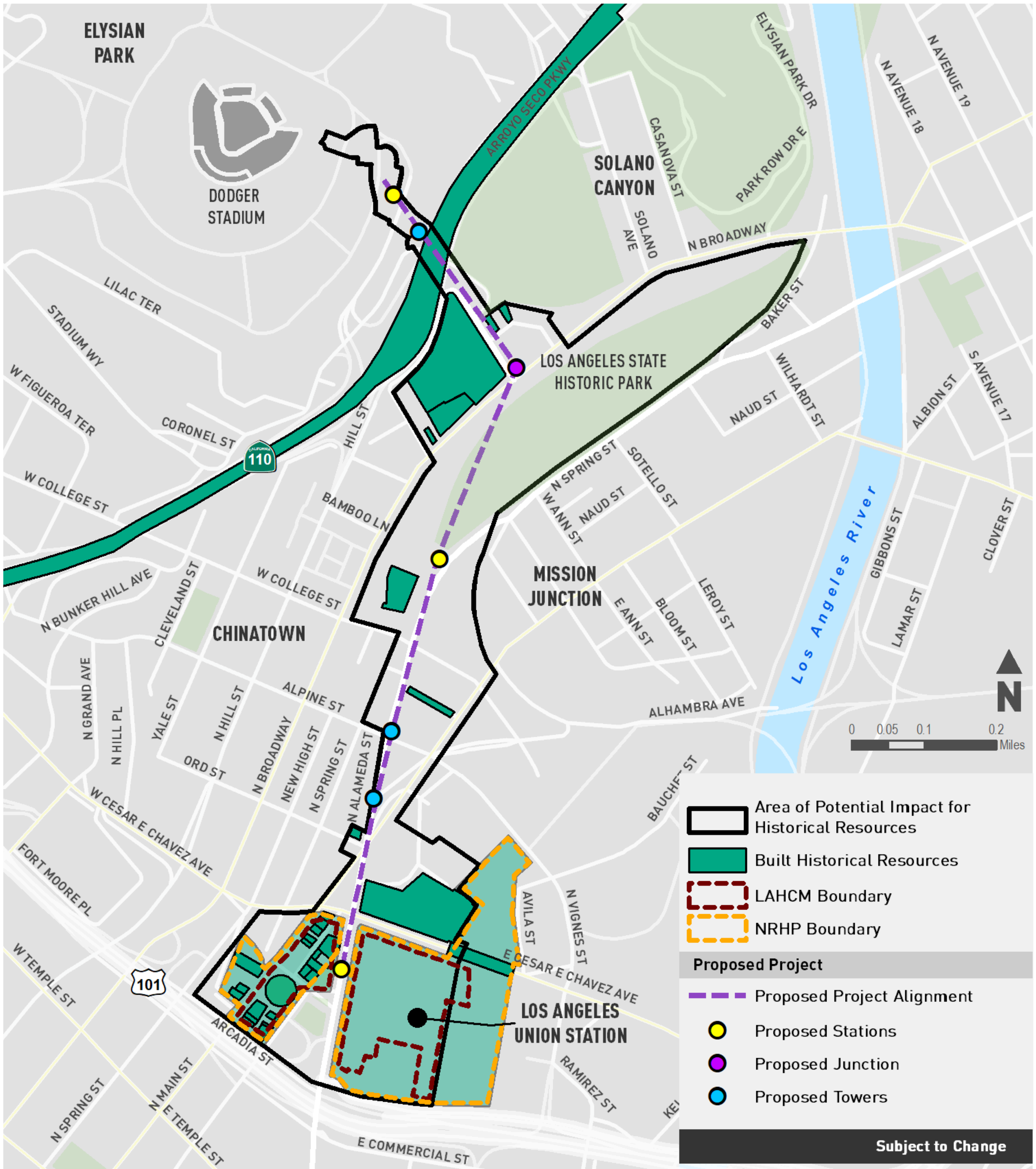


Figure 3.5-1 Area of Potential Impact for Built Historic Resources

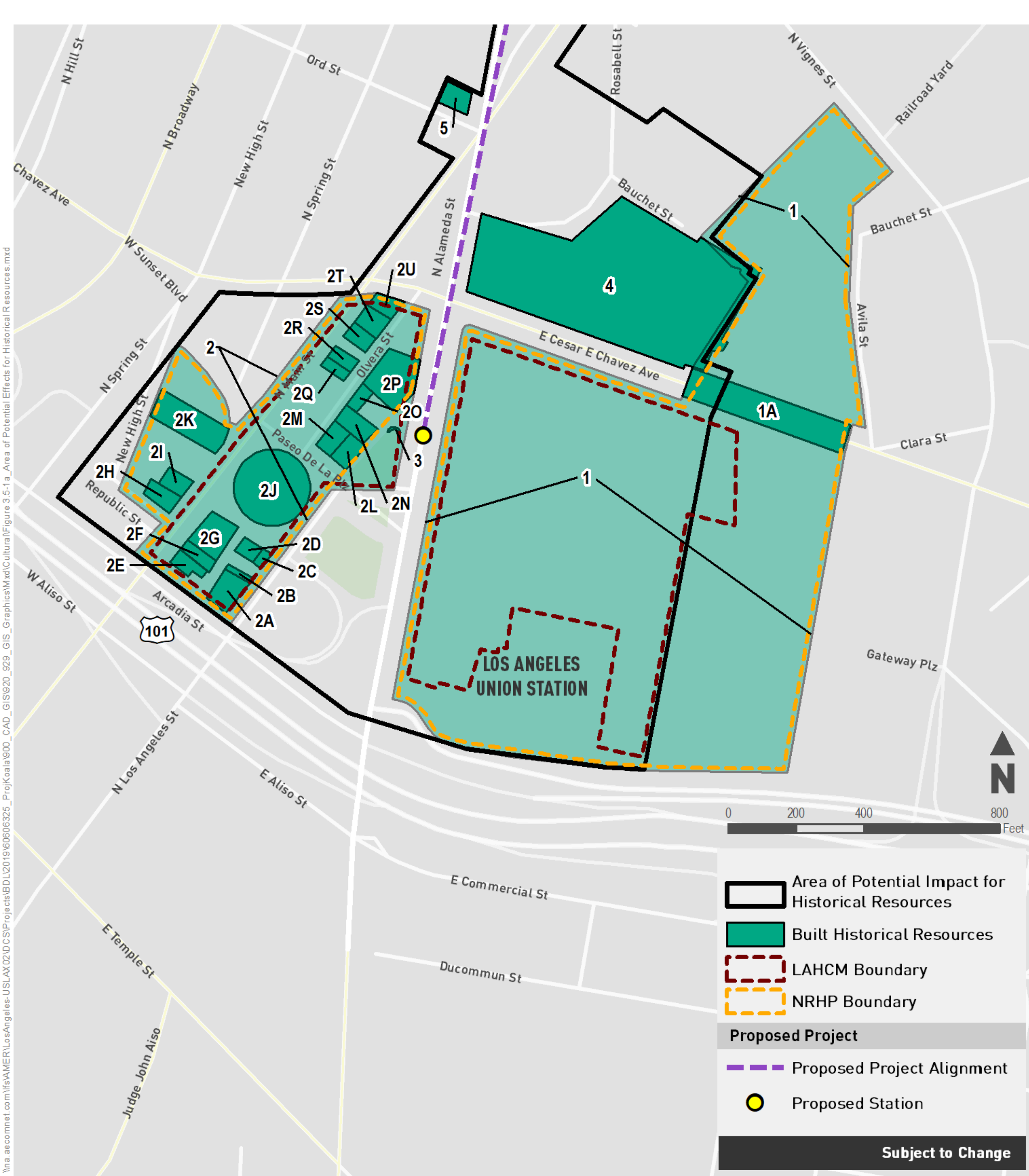


Figure 3.5-1A Area of Potential Impact for Built Historical Resources: Southern Project Alignment

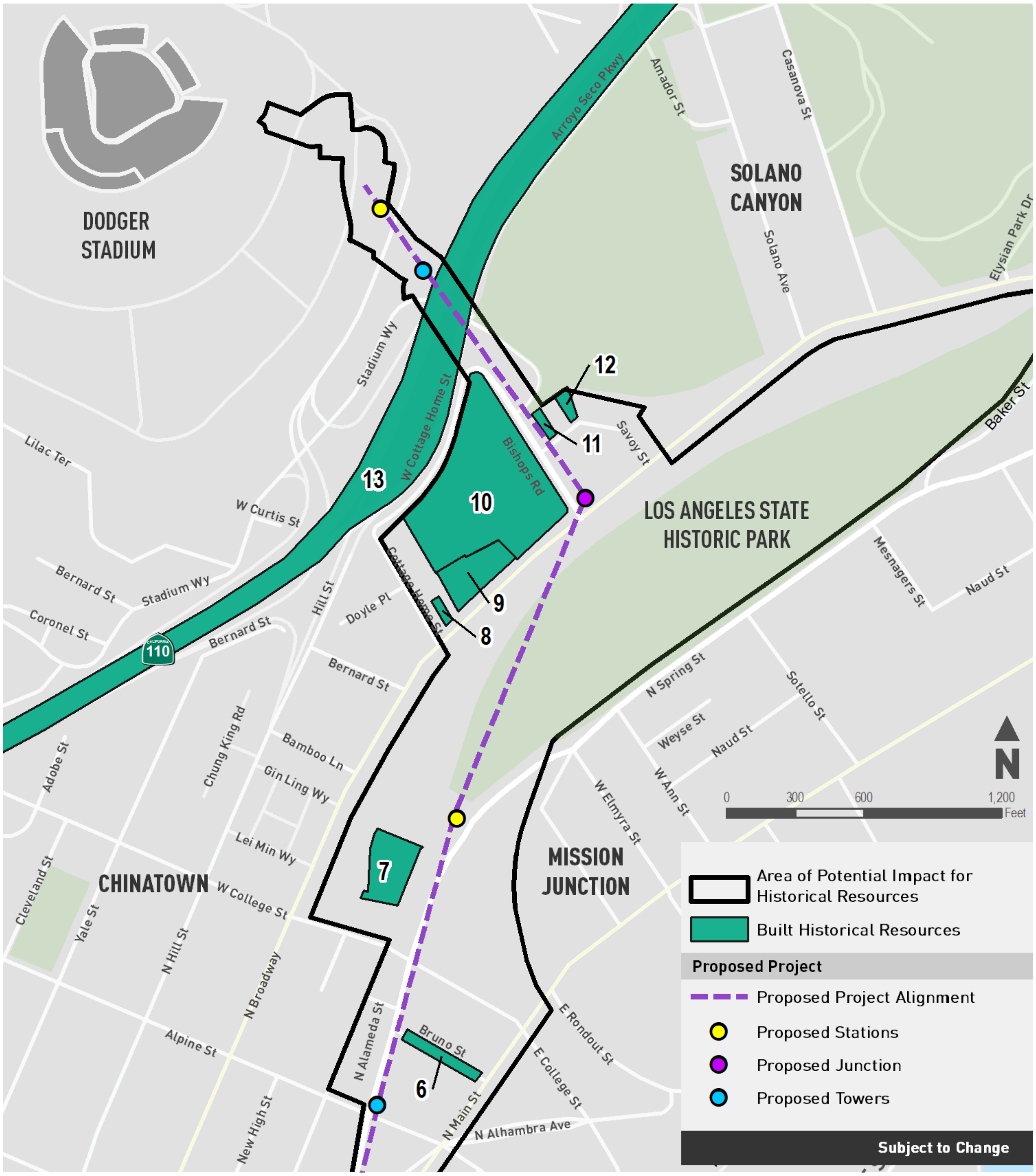


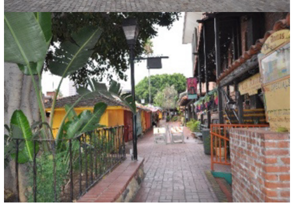
Figure 3.5-1B Area of Potential Impact for Built Historical Resources: Northern Project Alignment

Table 3.5-2: Built Historical Resources within API

Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
1	Los Angeles Union Station Passenger Terminal and Grounds (19-171159) 	Overlapping with Vertical Circulation Elements for proposed Alameda Station site	• Address: 800 N. Alameda Street • Year Built: 1939 • Status Code: 1S (1980); 5S1 (1972) • Period of Significance: 1939* • Criteria for Eligibility: A/1/1, C/3/3* • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Materials, Workmanship, Feeling, Association*	Listed in NRHP and CRHR Listed as LAHCM
1A	Macy Street Grade Separation 	East of the proposed Alameda Station site	• Address: Over Cesar Chavez Avenue, east of Alameda Street • Year Built: 1937 • Status Code: 1S (1980) • Period of Significance: 1937-1939* • Criteria for Eligibility: A/1, C/3* • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1 - Structure: Location, Materials, Feeling, Association ○ Criterion C/3- Structure: Design, Workmanship, Materials, Feeling	Contributor to the LAUS Historic District listed in NRHP and CRHR

Table 3.5-2: Built Historical Resources within API

Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
			• Intact Aspects of Integrity: Location, Design, Setting (Immediate), Materials, Workmanship, Feeling, Association*	

2	Los Angeles Plaza Historic District (19-167020)  	Overlapping with Vertical Circulation Elements for proposed Alameda Station site for LAHCM boundary
		
		Adjacent to and west of the proposed Alameda Station for NRHP boundary
			• Status Code: 1S (1972); 5S1 (1970)
			• Period of Significance: 1818-1932
			• Criteria for Eligibility: A/1/1, C/3/3
			• Essential Aspects of Integrity for the Criteria:
			  ○ Criterion A/1/1 - District: Location, Setting (Immediate), Feeling, Association
			  ○ Criterion C/3/3 - District: Setting (Immediate), Design, Materials, Feeling
			• Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Association*
				Listed in NRHP and CRHR
				
				Listed as LAHCM

2A	Garnier Block 	Southwest of the proposed Alameda Station site	• Address: 419 N. Los Angeles Street • Year Built: 1890 • Status Code: 1D (1972); 2D3 (1985), Within Boundary of HCM #64 • Period of Significance: 1890* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM

Table 3.5-2: Built Historical Resources within API

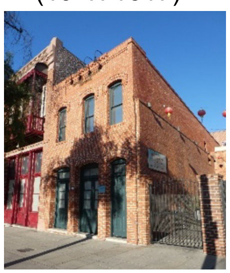
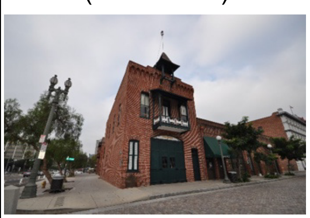
Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
			○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Materials, Workmanship, Feeling, Association*	
2B	Sanchez Building (19-171617) 	Southwest of the proposed Alameda Station site	• Address: 425 N. Los Angeles Street • Year Built: 1898 • Status Code: 1D (2016), Within Boundary of HCM #64 • Period of Significance: 1898* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Materials, Workmanship, Feeling, Association*	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM
2C	Old Plaza Fire House (19-167016) 	Southwest of the proposed Alameda Station site	• Address: 134 E. Paseo de la Plaza • Year Built: 1884 • Status Code: 1D (1972, 2016); 7L (1960), Within Boundary of HCM #64 • Period of Significance: 1884* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria:	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM Listed as CHL

Table 3.5-2: Built Historical Resources within API

Figure ID	**Resource and Primary Number[1]**	**Location of Resource In Relation to the Nearest Project Component**	**Resource Summary**	**Status**
			○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Materials, Feeling, Association*	
2D	Hellman-Quon Building 	Southwest of the proposed Alameda Station site	• Address: 130 E. Paseo de la Plaza • Year Built: 1900 • Status Code: 1D (2016); 2D3 (1984), Within Boundary of HCM #64 • Period of Significance: 1900* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Materials, Feeling, Association*	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM
2E	Masonic Hall (Masonic Building)	Southwest of the proposed Alameda Station site	• Address: 416 N. Main Street • Year Built: 1858 • Status Code: 1D (1972, 2016); 2D3 (1984), Within Boundary of HCM #64 • Period of Significance: 1858* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria:	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM

Table 3.5-2: Built Historical Resources within API

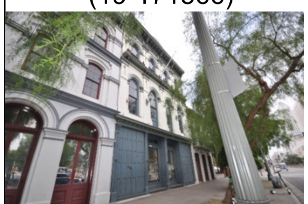
Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
	(19-167105) 		○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Materials, Workmanship, Feeling, Association*	
2F	Merced Theatre (19-171566) 	Southwest of the proposed Alameda Station site	• Address: 420 N. Main Street • Year Built: 1870 • Status Code: 1D (1972, 2016); 2D3 (1984); 7L (1935), Within Boundary of HCM #64 • Period of Significance: 1870* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Materials, Workmanship, Feeling, Association*	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM Listed as CHL
2G	Pico House (Pico Hotel)	Southwest of the proposed Alameda Station site	• Address: 424 N. Main Street • Year Built: 1869-1870 • Status Code: 1D (1972, 2016); 2D3 (1984); 7L (1935), Within Boundary of HCM #64 • Period of Significance: 1870* • Criteria for Eligibility: A/1/1, C/3/3	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM

Table 3.5-2: Built Historical Resources within API

Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
	(19-171572) 		• Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Materials, Workmanship, Feeling, Association*	Listed as CHL
2H	Vickrey-Brunswig Building (19-171607) 	Southwest of the proposed Alameda Station site	• Address: 501 N. Main Street • Year Built: 1888 • Status Code: 1D (2016); 2D (1986) • Period of Significance: 1888* • Criteria for Eligibility: A/1, C/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Association*	Contributor to the Los Angeles Plaza Historic District listed in NRHP and CRHR

Table 3.5-2: Built Historical Resources within API

Figure ID	**Resource and Primary Number[1]**	**Location of Resource In Relation to the Nearest Project Component**	**Resource Summary**	**Status**

2I	Plaza House
	(19-171608)
	
		Southwest of the proposed Alameda Station site	• Address: 507 N. Main Street
			• Year Built: 1883
			• Status Code: 1D (2016); 2D (1986)
			• Period of Significance: 1883*
			• Criteria for Eligibility: A/1, C/3
			• Essential Aspects of Integrity for the Criteria:
			  ○ Criterion A/1 – Building: Location, Materials, Feeling, Association
			  ○ Criterion C/3 – Building: Design, Workmanship, Materials, Feeling
			• Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Association*
				Contributor to the Los Angeles Plaza Historic District listed in NRHP and CRHR

2J	Plaza (Plaza Area, Plaza Park) 	Southwest of the proposed Alameda Station site	• Address: N. Main Street • Year Built: Established 1815; brick walls constructed 1930; kiosk constructed 1962 • Status Code: 1D (1972, 2016); 7L (1935), Within Boundary of HCM #64 • Period of Significance: 1815-1930* • Criteria for Eligibility: A/1/1 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Site: Location, Feeling, Association • Intact Aspects of Integrity: Location, Setting (Immediate), Feeling, Association*	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM Listed as CHL

Table 3.5-2: Built Historical Resources within API

Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
2K	Old Plaza Church (Nuestra Señora Reina de Los Angeles Church [Our Lady Queen of the Angels]) (19-171610) 	Southwest of the proposed Alameda Station site	• Address: 535 N. Main Street • Year Built: 1822-1913 • Status Code: 1D (1972, 2016); 5S1 (1962); 7L (1934) • Period of Significance: 1822-1913* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Workmanship, Association*	Contributor to the Los Angeles Plaza Historic District listed in NRHP and CRHR Listed as CHL Listed as LAHCM
2L	Plaza Community Center (Biscailuz Building) (19-174278) 	Southwest of the proposed Alameda Station site	• Address: 125 E. Paseo de la Plaza • Year Built: 1926 • Status Code: 1D (1972, 2016), Within Boundary of HCM #64 • Period of Significance: 1926* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Setting (Immediate), Feeling, Association*	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM

Table 3.5-2: Built Historical Resources within API

Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
2M	Plaza Methodist Church (19-174277) 	Southwest of the proposed Alameda Station site	• Address: 115 E. Paseo de la Plaza • Year Built: 1926 • Status Code: 1D (2016), Within Boundary of HCM #64 • Period of Significance: 1926* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Workmanship, Association*	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM
2N	Plaza Substation (19-167182) 	Southwest of the proposed Alameda Station site	• Address: 611 N. Placita de Dolores • Year Built: c. 1903 • Status Code: 1S (1978); 1D (2016), Within Boundary of HCM #64 • Period of Significance: 1903* • Criteria for Eligibility: A/1 (1978); A/1/1, C/3/3 (2016) • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Association*	Listed in NRHP and CRHR Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM

Table 3.5-2: Built Historical Resources within API

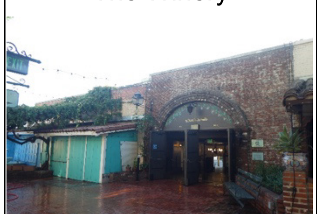
Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
2O	Avila Adobe (19-167019) 	West of the proposed Alameda Station site	• Address: 10 E. Olvera Street • Year Built: 1818 • Status Code: 1D (1972, 2016); 7L (1934), Within Boundary of HCM #64 • Period of Significance: 1818* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Workmanship, Association*	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM Listed as CHL
2P	The Winery 	Adjacent to and northwest of the proposed Alameda Station site	• Address: 11 E. Olvera Street • Year Built: 1870-1914 • Status Code: 1D (2016), Within Boundary of HCM #64 • Period of Significance: 1870-1914* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM

Table 3.5-2: Built Historical Resources within API

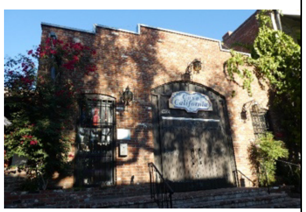
Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
			• Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Workmanship, Association*	
2Q	The Machine Shop 	West of the proposed Alameda Station site	• Address: 10 W. Olvera Street • Year Built: 1910 • Status Code: 1D (2016), Within Boundary of HCM #64 • Period of Significance: 1910* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Setting (Immediate), Feeling, Materials, Workmanship, Association	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, CRHR, and LAHCM
2R	Sepulveda House (19-167015) 	West of the proposed Alameda Station site	• Address: 622-624 N. Main Street • Year Built: 1887 • Status Code: 1D (1972, 2016), Within Boundary of HCM #64 • Period of Significance: 1887* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM

Table 3.5-2: Built Historical Resources within API

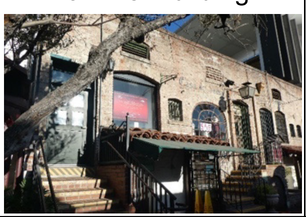
Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
			○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Workmanship, Association*	
2S	Pelanconi House (19-167018) 	Northwest of the proposed Alameda Station site	• Address: 17 E. Olvera Street • Year Built: c. 1855, 1910 • Status Code: 1D (1972, 2016), Within Boundary of HCM #64 • Period of Significance: 1885, 1910* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Workmanship, Association*	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM
2T	Hammel Building 	Northwest of the proposed Alameda Station site	• Address: 634-642 N. Main Street • Year Built: 1909 • Status Code: 1D (2016), Within Boundary of HCM #64 • Period of Significance: 1909* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria:	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM

Table 3.5-2: Built Historical Resources within API

Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
			○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Workmanship, Association*	
2U	 Italian Hall (19-171555)	Northwest of the proposed Alameda Station site	• Address: 644-650 N. Main Street • Year Built: 1908 • Status Code: 1D (2016); 3 (1984); 3B (no date), Within Boundary of HCM #64 • Period of Significance: 1908* • Criteria for Eligibility: A/1/1, C/3/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Workmanship, Association*	Contributor to the Los Angeles Plaza Historic District listed in NRHP, CRHR, and LAHCM Evaluated individually eligible for NRHP

Table 3.5-2: Built Historical Resources within API

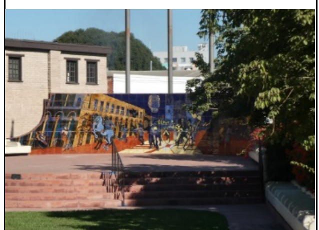
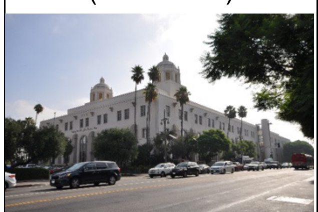
Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
3	*El Grito (The Cry)* Mural 	Adjacent to and west of the proposed Alameda Station site	• Address: 815 N. Alameda Street • Year Built: 1977-1979 • Status Code: 3S, 3CS, 5S3 (2020) • Period of Significance: 1979 • Criteria for Eligibility: C/3/3 • Essential Aspects of Integrity for the Criteria: ○ Criterion C/3/3 – Object: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Workmanship, Association	Evaluated individually eligible for NRHP, CRHR, and LAHCM
4	Los Angeles Terminal Annex Post Office (19-170973) 	Northeast of the proposed Alameda Station site	• Address: 900 N. Alameda Street • Year Built: 1938 • Status Code: 1S (1985); 2S2 (1983) • Period of Significance: 1938-1943* • Criteria for Eligibility: A/1, C/3* • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1 – Building: Location, Materials, Feeling, Association ○ Criterion C/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Workmanship, Association*	Listed in NRHP and CRHR

Table 3.5-2: Built Historical Resources within API

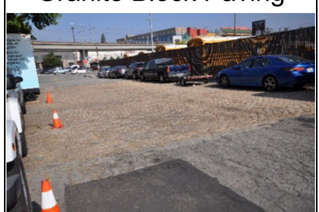
Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
5	Philippe the Original 	Southwest of the proposed Alameda Tower site	• Address: 1001 N. Alameda Street • Year Built: 1925 • Status Code: 3S, 3CS, 5S3 (2016) • Period of Significance: 1951 • Criteria for Eligibility: A/1/1 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Workmanship, Association	Evaluated eligible for NRHP, CRHR, and LAHCM
6	Granite Block Paving 	Northwest of proposed Alpine Tower site	• Address: Bruno Street between Spring Street and Main Street • Year Built: c. 1800s • Status Code: 5S1 • Period of Significance: 1800s* • Criteria for Eligibility: 3* • Essential Aspects of Integrity for the Criteria: ○ Criterion 3 – Structure: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Feeling, Materials, Workmanship, Association*	Listed as LAHCM

Table 3.5-2: Built Historical Resources within API

Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status

7	Capitol Milling Company
	(19-170957)
	
		Adjacent to and southwest of proposed Chinatown/State Park Station site	• Address: 1231 N. Spring Street
			• Year Built: 1855-1889
			• Status Code: 2S2 (1986)
			• Period of Significance: 1855-1889*
			• Criteria for Eligibility: A/1, C/3
			• Essential Aspects of Integrity for the Criteria:
			  ○ Criterion A/1 – Building: Location, Materials, Feeling, Association
			  ○ Criterion C/3 – Building: Design, Workmanship, Materials, Feeling
			• Intact Aspects of Integrity: Location, Design, Feeling, Materials, Association*
				Determined eligible for NRHP through Section 106 process
				
				Listed in CRHR

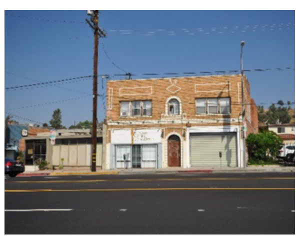
8	1035 N. Broadway
	
		Northeast of proposed Chinatown/State Park Station site and west of proposed Broadway Junction site	• Address: 1035 N. Broadway
			• Year Built: 1890
			• Status Code: 3S, 3CS, 5S3 (2016)
			• Period of Significance: 1890
			• Criteria for Eligibility: A/1/1, C/3/3
			• Essential Aspects of Integrity for the Criteria:
			  ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association
			  ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling
			• Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Workmanship, Association
				Evaluated eligible for NRHP, CRHR, and LAHCM

Table 3.5-2: Built Historical Resources within API

Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
9	St. Peter's Italian Catholic Church (19-170957) 	West of proposed Broadway Junction site	• Address: 1041 N. Broadway • Year Built: 1946, 1972 • Status Code: 2S2 (1994) 5S1 (1984) 3CS, 5S3 (2016) • Period of Significance: 1946, 1972 • Criteria for Eligibility: 1/1 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Workmanship, Association	Determined eligible for NRHP through Section 106 process Listed in CRHR Listed as LAHCM
10	Cathedral High School (19-170957) 	Adjacent to and west of proposed Broadway Junction site	• Address: 1253-1263 Bishops Road and 520 Cottage Home Street • Year Built: Various • Status Code: 2S2 (1994); 5S1 (1984) • Period of Significance: 1925-1950* • Criteria for Eligibility: 1/1* • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – District: Location, Setting, Feeling, Association • Intact Aspects of Integrity: Location, Setting (Immediate), Feeling, Materials, Workmanship, Association*	Determined eligible for NRHP through Section 106 process Listed in CRHR Listed as LAHCM

Table 3.5-2: Built Historical Resources within API

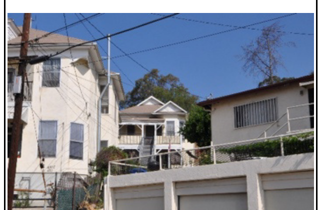
Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
11	451 E. Savoy Street 	North of proposed Broadway Junction site	• Address: 451 E. Savoy Street • Year Built: 1896 • Status Code: 3S, 3CS, 5S3 (2016) • Period of Significance: 1896 • Criteria for Eligibility: A/1/1 • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – Building: Location, Materials, Feeling, Association • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Workmanship, Association	Evaluated eligible for NRHP, CRHR, and LAHCM
12	Charles B. Wellman Residence (19-170956) 	North of proposed Broadway Junction site	• Address: 437 E. Savoy Street • Year Built: 1894 • Status Code: 2S2 (1986) • Period of Significance: 1894* • Criteria for Eligibility: 3 • Essential Aspects of Integrity for the Criteria: ○ Criterion C/3/3 – Building: Design, Workmanship, Materials, Feeling • Intact Aspects of Integrity: Location, Design, Setting (Immediate), Feeling, Materials, Workmanship, Association*	Determined eligible for NRHP through Section 106 process Listed in CRHR

Table 3.5-2: Built Historical Resources within API

Figure ID	Resource and Primary Number[1]	Location of Resource In Relation to the Nearest Project Component	Resource Summary	Status
13	Arroyo Seco Parkway Historic District 	South of proposed Stadium Tower site	• Address: N/A • Year Built: 1938-1953 • Status Code: 1S (2011) • Period of Significance: 1938-1953 • Criteria for Eligibility: A, B, C • Essential Aspects of Integrity for the Criteria: ○ Criterion A/1/1 – District: Location, Setting, Feeling, Association ○ Criterion B/2/2 – District: Location, Setting, Feeling, Association ○ Criterion C/3/3 – District: Setting, Design, Materials, Feeling • Intact Aspects of Integrity: (Phase I) Location, Design, Setting (Immediate), Feeling, Workmanship, Association*	Listed in NRHP and CRHR

Notes:
[1] The primary number of the resource is listed if available in the Office of Historic Preservation Built Environment Resources Directory.
* Information inferred from narrative statement of significance in previously prepared documentation.
ID = Identification
Note: Criteria for Eligibility are defined in Section 3.5-1.
Note: Status Code Definitions are available at State Office of Historic Preservation Department of Parks and Recreation, Technical Assistance Bulletin #8: https://ohp.parks.ca.gov/pages/1069/files/tab8.pdf

impacted by the Project. Two were evaluated as ineligible for the NRHP, CRHR, and as LAHCMs; one, the *El Grito* mural, is located within one of the districts but was not listed as a contributor; thus, it was evaluated individually and found eligible. Table 3.5-2 presents a summary of all built historical resources in the API, listed generally from south to north and west to east. The detailed description of each resource, as well as figures illustrating the boundaries of each resource, is included in the *Historical Resource Technical Report for the Los Angeles Aerial Rapid Transit Project* (Appendix G).

Seven additional resources were also identified through records provided by the SCCIC. Of the seven properties, four resources are not discussed in the context of built resources, but discussed under Section 3.5.2.2, Archaeological Resources of this Draft EIR, instead. These properties include Zanja Madre, Union Pacific Railroad, River Station Area (Los Angeles Historical State Park), and Chavez Ravine. The remaining three resources, Plaza Church Cemetery (First Los Angeles Cemetery), Lugo Adobe, and Mojave Road were not evaluated in the context of built resources because no extant markers or built features remain or are located within the API.

3.5.2.2 Archaeological Resources

The proposed Project alignment is located in a relatively flat area of the northern Los Angeles Basin, with the exception of the northwestern end of the alignment, which is located in the southeastern Elysian Hills. The basin is formed by the Santa Monica Mountains to the northwest, the San Gabriel Mountains to the north, and the San Bernardino and San Jacinto Mountains to the east. The basin was formed by alluvial and fluvial deposits derived from these surrounding mountains. Prior to urban development and the channelization of the Los Angeles River, the Area of Direct Impacts and its vicinity (located less than a half-mile west of the current Los Angeles River channel in much of its alignment) was likely covered with marshes, thickets, riparian woodland, and grassland. Prehistorically, the floodplain forest of the Los Angeles Basin formed one of the most biologically rich habitats in Southern California. Although, historically most of the Los Angeles River was dry for at least part of the year, shallow bedrock in what is now the Elysian Park area north of downtown Los Angeles forced much of the river's underground water to the surface. This allowed for a steady year-round flow of water through the area that later became known as downtown Los Angeles. A detailed overview of the prehistoric, ethnographic, and historic conditions associated with the proposed Project alignment and its surrounding vicinity is provided in the *Archaeological and Paleontological Resources Assessment for the Los Angeles Aerial Rapid Transit Project* (Appendix F).

Identification

The *Archaeological and Paleontological Resources Assessment for the Los Angeles Aerial Rapid Transit Project* (Appendix F) prepared for the proposed Project included research, documentation, and a field survey. An Area of Direct Impacts was established to consider the potential impacts from the Project to archaeological resources. The Area of Direct Impacts is the three-dimensional area of potential ground disturbance. The Area of Direct Impacts includes the maximum Project footprint, including the limits of both temporary and permanent ground disturbance, to the maximum potential depth of excavations, which is approximately 42 feet below the present ground surface for foundations and 125 feet for piles. The Area of Direct Impacts established for archaeological resources includes the maximum areas that may be potentially impacted by the Project.

To identify known archaeological resources within the Area of Direct Impacts, archival research for the Area of Direct Impacts and within an eighth-mile radius of the Area of Direct Impacts was conducted in May and July of 2019 at the SCCIC. The archaeological records search included review of previously recorded archaeological site records and reports; historic site and property inventories; and historic maps, including Sanborn Fire Insurance Maps. Inventories of the NRHP, CRHR, California State Historic Resources Inventory, CHL, and California Points of Interest, and the LAHCM list were also reviewed to identify cultural resources within both the Area of Direct Impacts and vicinity. In addition to the archaeological records search at the SCCIC, online sources consulted include historic newspapers, historic photographs and maps consulted through historicaerials.com, the Los Angeles Public Library (online photo collection and Sanborn fire insurance maps), the United States Geological Survey map database TopoView, and the Calisphere, the University of California's Digital Library.

Pedestrian field surveys of the Area of Direct Impacts were conducted on March 18, 2020, and July 15, 2020, to identify archaeological resources within the Area of Direct Impacts. Fieldwork within Los Angeles State Historic Park was conducted in compliance with Department of Parks and Recreation Permit 20-29, a standard permitting process that allowed the archaeological survey. The entire Area of Direct Impacts was walked over. Where the proposed Project ROW consists of paved street surfaces, the surveyor walked the sidewalks on both sides of the ROW but not within the street. The archaeological survey focused on undeveloped spaces in the Area of Direct Impacts that provided exposed ground surfaces. Where proposed Project components are located within properties that are undeveloped and unpaved, such as at the Stadium Tower location and portions of the Chinatown/State Park Station within the Los Angeles State Historic Park, the Area of Direct Impacts was walked over in transects spaced 10 meters apart.

Survey and Research Results

The records search revealed that approximately 75 percent of the Area of Direct Impacts has been previously surveyed and/or investigated and 103 cultural resource investigations were previously conducted within an eighth-mile of the Area of Direct Impacts. The records search also indicated that 51 cultural resources have been previously recorded within an eighth-mile of the Area of Direct Impacts.

The field surveys revealed that the Area of Direct Impacts is almost entirely paved over, with the exception of portion that is located within the Alameda Triangle, planters and street tree wells along Alameda Street that include artificial fill, portions of the Chinatown/State Park Station, the proposed Stadium Tower, and portions of the proposed Dodger Stadium Station. Ground visibility in the planters was between 25 and 50 percent, depending on the profusion of plants or weeds present. The results of the survey in relationship to the Project components and documented archaeological sites are discussed in the *Archaeological and Paleontological Resources Assessment for the Los Angeles Aerial Rapid Transit Project* (Appendix F) and summarized here as follows. Archival research and the survey resulted in the identification of one multi-component (prehistoric and historic) and eight historic-age archaeological sites, 45 years or older, that have been previously recorded within the Area of Direct Impacts.[23] Each of these sites was revisited during the archaeological survey. However, the archaeological sites are currently paved over and were not encountered on the survey. The pedestrian survey did not reveal any new surface-visible archaeological resources in the Area of Direct Impacts.

[23] The locations of the nine prehistoric, historic, and archaeological resources identified within the Area of Direct Impacts during the records search were revisited in the course of the survey. The eight archaeological resources include: 19-000887, 19-004320, 19-001575, 19-004200, 19-004201, 19-186112, 19-003120, and 19-173073.

Table 3.5-3 provides a description of archaeological resources located within the Area of Direct Impacts, described from south (LAUS) to north (Dodger Stadium). Figure 3.5-2 shows the Area of Direct Impacts for the proposed Project. In order to provide a conservative analysis, archaeological resources that are unevaluated that may be impacted by the proposed Project are presumed to be historical archaeological resources for the purposes of this analysis under CEQA (Resources 19-004320, 19-186112, and 19-173073). As such, eight archaeological historical resources were identified within the Area of Direct Impacts as requiring further analysis in this section. A full description of the resources listed in Table 3.5-3 are provided in the *Archaeological and Paleontological Resources Assessment for the Los Angeles Aerial Rapid Transit Project* (Appendix F).

3.5.3 Methodology

The CEQA and its implementing guidelines (Section 15064.5) require the evaluation of potential impacts to cultural resources. If a project would have a significant impact on a cultural resource, CEQA also requires that all feasible mitigation measures be implemented to reduce or avoid a project's potential impacts, and a range of alternatives be considered that could substantially lessen significant impacts to cultural resources. Under CEQA, the evaluation of impacts to historical resources consists of a two-part inquiry: (1) a determination of whether the Project Site contains or is adjacent to a historically significant resource or resources and, if so; (2) a determination of whether the Project would result in a "substantial adverse change" in the significance of the resource or resources. A "substantial adverse change" in the significance of a historical resource is an alternation that materially impairs the characteristics that convey its historical significance and justify its eligibility for listing.

Thresholds for Significant Impacts

For purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resources pursuant to §15064.5;
- Cause a substantial adverse change in the significance of an archaeological resources pursuant to § 15064.5; or
- Disturb any human remains, including those interred outside of formal cemeteries.

Impacts to Built Historical and Archaeological Historical Resources

While avoidance is the preferred approach to historical resources, that approach is not always feasible. Under CEQA, a project would result in a significant impact to built historical resources if it results in a direct or indirect substantial adverse change to the resource. A significant impact would occur if a project would directly or indirectly diminish any of the characteristics that qualify or define a historical resource. A significant impact may be mitigated with the implementation of feasible mitigation measures to avoid the impact or to reduce the impact to a level of less than significant.

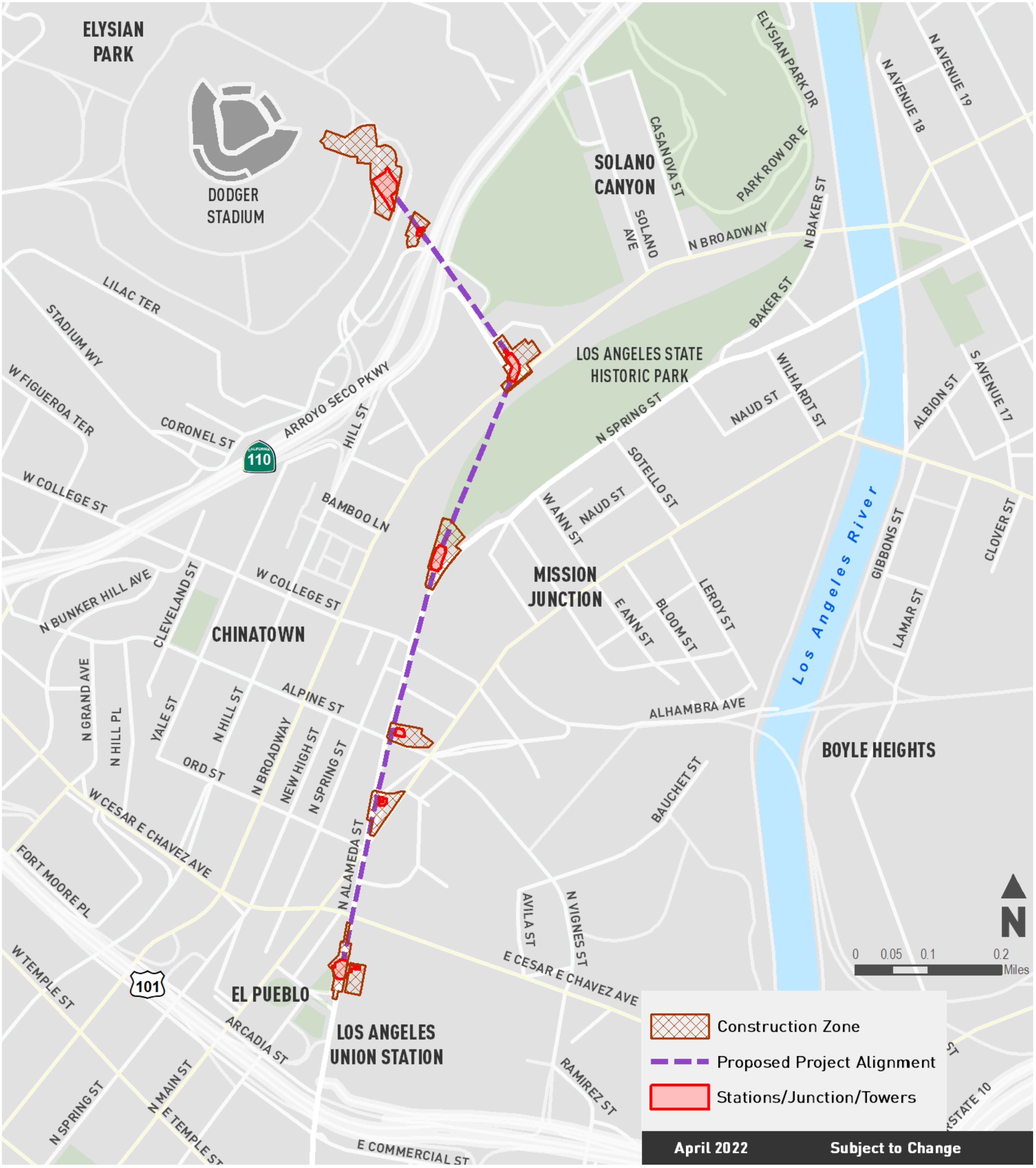


Figure 3.5-2 Area of Direct Impacts for Archaeological Resources

Table 3.5-3: Archaeological Historical[1] Resources within the Area of Direct Impacts

Primary Number	Location of Resource In Relation to the Nearest Project Component	Description	Resource Summary	Status
19-000887	Proposed Alameda Station site	La Placita; Zanja Madre segment, refuse deposits, building foundations	Resource 19-000887 consists of a collection of nineteenth and early-twentieth century building foundations and refuse deposits, as well as a segment of the Zanja Madre. The Resource overlaps approximately 500 square feet of the Area of Direct Impacts at the western location of the proposed Alameda Station where the proposed vertical circulation elements would be located on an area currently containing a parking and loading area for El Pueblo. Because the site was excavated during archaeological excavations prior to the construction of Placita de Dolores, the site boundary extends beyond the existing physical boundaries of the constructed Placita de Dolores to encompass this parking and loading area. Additional archaeological deposits likely extend beyond the mapped resource's boundaries. When the archaeological site was tested in 1978, artifacts were encountered from a depth of approximately 4 inches to approximately 12 inches below the ground surface in one area, beneath which sterile alluvium was encountered. Within the boundaries of 19-000887, the Zanja Madre consists of a circular brick conduit installed circa 1884–1888. The segment of the Zanja Madre that was uncovered extends north-south adjacent to the Avila Adobe complex, to the west of the Project area. In 1978, a large amount of fill was placed on top of the site as a means of protecting it. Three segments of the Zanja Madre were re-excavated during renovations to Placita de Dolores in 2005-2006. Because of the fill dumped upon the site in 1978, the top of the Zanja Madre was encountered at approximately five feet, three inches below the plaza surface. There is no overlap between the known locations of the Zanja Madre within El Pueblo and the proposed ground disturbance for the Alameda Station.	Eligible for NRHP

Table 3.5-3: Archaeological Historical[1] Resources within the Area of Direct Impacts

Primary Number	Location of Resource In Relation to the Nearest Project Component	Description	Resource Summary	Status
19-004320	Proposed Alameda Station site	Refuse deposit	Resource 19-004320 consists of a collection of disturbed artifacts without association. This resource overlaps the Area of Direct Impacts at the proposed Alameda Station site, where it also partially overlaps site 19-000887. The artifacts included ceramic sherds, bottle shards, other glass shards, metal fragments, faunal bone fragments, and vitrified clay pipe fragments. The artifacts were encountered at depths ranging from near the surface to approximately 48 inches. No archaeological features were identified, and, because of the excavation methods, no clear context was recorded for any of the artifacts.	Not formally evaluated for CRHR, but originally recorded as isolates.[1] Overlaps NRHP-eligible resource 19-000887 at the Proposed Alameda Station site.
19-001575	Proposed Alameda Station site	Prehistoric/ Contact period cemetery and lithic reduction site; Old Chinatown; 19th to 20th Century agricultural and habitation remains	Resource 19-001575 is a large multicomponent archaeological site located under and around LAUS. The prehistoric or contact period component consists of a lithic reduction activity area, and a prehistoric and contact-period cemetery. The historic component consists of a wealth of architectural and structural features and other materials related to the development of nineteenth and early twentieth century Los Angeles, including the city's old Chinatown. When LAUS was constructed in 1939, the buildings in the vicinity were razed and 3 to 12 feet of fill was deposited upon the remains. The portion of the Area of Direct Impacts that overlaps site 19-001575 is located within LAUS boundaries, in the existing LAUS parking lot. During the construction of the Metropolitan Water District Headquarters building, approximately 500 feet southeast of the Area of Direct Impacts, a prehistoric and contact period cemetery, portions of the former Los Angeles red light district, and archaeological remains associated with Matthew Keller's winery were uncovered. During additions to LAUS for Metro's Red Line subway system, as well as construction of the Headstart (now First 5) building approximately 400 feet south of the Area of Direct Impacts, refuse deposits, structural remains, and wood conduits associated with the	Eligible for NRHP

Table 3.5-3: Archaeological Historical[1] Resources within the Area of Direct Impacts

Primary Number	Location of Resource In Relation to the Nearest Project Component	Description	Resource Summary	Status
			Old Chinatown were uncovered. Archaeological testing prior to the construction of the Mozaic at Union Station Apartments, approximately 200 feet north of the Area of Direct Impacts, led to the discovery of foundations, refuse deposits, a well, and wood-lined irrigation ditches associated with the nineteenth century home of B.D. Wilson. No documentation exists at the SCCIC that would indicate that any archaeological testing took place within that portion of 19-001575 overlapping the Area of Direct Impact.	
19-004200	Proposed Alameda Tower site	Alameda Street pavement	Resource 19-004200 consists of vitrified brick paving of Alameda Street, encountered beneath approximately 5.5 inches of asphalt beneath the street's eastern shoulder, which was encountered during the removal of asphalt pavement in 2007. The resource was evaluated eligible for inclusion in the CRHR. However, the exposed segment was removed and reused as paving in an adjacent park, significantly impacting the resource's integrity. This resource partially overlaps the Area of Direct Impacts at the proposed Alameda Tower site. However, within much of the Area of Direct Impacts, the resource was impacted and partially destroyed by past construction. To mitigate these past construction impacts, the exposed portions of the brick surface were removed and reused in the circular path in small park bounded by Alameda Street, North Main Street, and Alhambra Avenue. The removed and reused bricks have lost their integrity of location and are no longer considered a historical resource under CEQA.	Eligible for CRHR
19-004201	Proposed Alameda Tower site	Naud Junction foundations, manhole, wooden box, and refuse deposits	Resource 19-004201 consists of the historic site of Naud Junction. This was the site of a warehouse constructed by Edouard Naud in 1878, and has been the site of various shops and warehouses after that date. In 1905 the location was turned into a boxing pavilion, which was torn down in 1913. This resource partially overlaps the Area of Direct Impacts at the proposed Alameda Tower site. A total of	One feature unevaluated

Table 3.5-3: Archaeological Historical[1] Resources within the Area of Direct Impacts

Primary Number	Location of Resource In Relation to the Nearest Project Component	Description	Resource Summary	Status
			five features were recorded in this location. Two archaeological features associated with the site are located within the Area of Direct Impacts. Both features are brick building foundations. However, both features were evaluated and found not to be eligible for inclusion in the CRHR. A wooden feature was not evaluated as it was not fully exposed and was preserved in place.	
19-186112	Proposed Alameda Tower site	Union Pacific Railroad/ Southern Pacific Railroad	Resource 19-186112 consists of a segment of the historic Southern Pacific Railroad, the currently functional portions of which are now owned by the Union Pacific Railroad. Only a small segment of the documented resource, located on Alameda Street, overlaps the Area of Direct Impacts. The recorded segment includes interconnecting tracks and associated features extending from Naud Junction in downtown Los Angeles through Los Angeles, Riverside, and San Bernardino Counties. Portions of the resource have been recorded either as built environment or archaeologically, but most of the resource is documented only by map research. Only a small segment of the documented resource, located on Alameda Street, overlaps the Area of Direct Impacts.	Found ineligible for NRHP through the Section 106 process Unevaluated for CRHR[1]
19-003120	Proposed Chinatown/State Park Station site	Cornfield/River Station; railroad tracks, turntable, building foundations and refuse deposits	Resource 19-003120 consists of the remains of the Southern Pacific Railroad's River Station. The boundaries are roughly coterminous with the boundaries of the Los Angeles State Historic Park, but portions of the archaeological site extend beyond the park boundaries. The period of significance for the archaeological site dates from 1875 to approximately 1904. Extensive archaeological work has been conducted at the site. Excavated features include portions of a depot and hotel including restroom structure, icehouse, paint and varnishing shop, railroad car turn table, and refuse deposits. Maps made utilizing the GIS data provided by California State Parks indicate that archaeological features are recorded or presumed within the Area of Direct Impacts for the Chinatown/State Park Station. These include granite paving	Eligible for NRHP and CRHR Listed as LAHCM

Table 3.5-3: Archaeological Historical[1] Resources within the Area of Direct Impacts

Primary Number	Location of Resource In Relation to the Nearest Project Component	Description	Resource Summary	Status
			stones and an office/warehouse for the railroad. When the Chinatown/State Park Station (including staging area) is overlaid on an archaeological sensitivity map developed by California State Parks, it appears that the Project component is not located in an area of low sensitivity for archaeological resources.[24]	
19-173073	Proposed Dodger Stadium Station site	Site of Chavez Ravine	Resource 19-173073 consists of the former site of the community of Chavez Ravine, which is currently occupied by Dodger Stadium. Chavez Ravine consisted of three communities - Palo Verde, La Loma, and Bishop - located within Chavez Ravine, as well as neighboring Cemetery Ravine and Sulphur Ravine, which were known collectively as Chavez Ravine. These communities partially overlapped the current location of the Dodger Stadium property. The location of the proposed Dodger Stadium Station site is within formerly undeveloped Tract #3201. The resource documented under 19-173073 is mapped as overlapping the 352 acres upon which Dodger Stadium and the parking lots for Dodger Stadium are now built. However, the record was completed after the demolition of Chavez Ravine, and no archaeological or built environment resources are documented in the site record. The current boundary does not represent what would have been an archaeological boundary if the area had been recorded as an archaeological resource. Therefore, while the mapped area of the Dodger Stadium property designated as 19-173073 overlaps the proposed Dodger Stadium Station, no resources associated with Chavez Ravine are anticipated to exist within the Area of Direct Impacts. Regardless of the potential for cultural deposits deeply buried in filled portions of the 19-173073, the site boundaries as drawn represent the boundaries of the Dodger Stadium property, not the community of Chavez Ravine. Historic maps indicate that certain parcels of what is	Unevaluated[1]

[24] California Department of Parks and Recreation. 2005. *Los Angeles State Historic Park General Plan and Final Environmental Impact Report*. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf

Table 3.5-3: Archaeological Historical[1] Resources within the Area of Direct Impacts

Primary Number	Location of Resource In Relation to the Nearest Project Component	Description	Resource Summary	Status
			today the Dodger Stadium property and surrounding area were not developed prior to the construction of Dodger Stadium. The community of Chavez Ravine was located to the west, south, and north of the Area of Direct Impacts. No settlement was located within the Area of Direct Impacts, as the Area of Direct Impacts lay in an undeveloped part of Tract #3201. No resources associated with the community of Chavez Ravine are anticipated to have ever existed within the Area of Direct Impacts.	

[1] An "archaeological historical resource" is one that was identified in a study completed prior to the current study, and that has been evaluated as eligible for listing in or is already listed in the NRHP, CRHR, or local register of historical resources. However, this unevaluated resource is included to provide a conservative approach for potential impacts to resources located within the Area of Direct Impacts for the Project.

The CEQA Guidelines set the standard for determining the significance of impacts to historical resources in Title 14 CCR Section 15064.5(b), which states:

> A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

Title 14 CCR Section 15064.5(b)(1) further clarifies "substantial adverse change" as follows:

> Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

Title 14 CCR Section 15064.5(b)(2) in turn explains that a historical resource is "materially impaired" when a project:

> Demolishes or materially alters in an adverse manner those physical characteristics that convey its significance and that justify its inclusion in or eligibility for inclusion in the California Register, local register, or its identification in a historic resources survey.

As such, the test for determining whether or not a proposed Project will have a significant impact on an identified historical resource is whether or not the project will alter in an adverse manner the physical integrity of the historical resource such that it would no longer be eligible for listing in the National or California Registers or other landmark programs such as the register of LAHCMs.

In addition to the methodologies for the entire project area, a portion of the proposed Project is within the Los Angeles State Historic Park. Under PRC Sections 5024 and 5024.5, state agencies must have policies to preserve and maintain, where possible, all "state-owned historical resources under its jurisdiction listed in or potentially eligible for inclusion in the National Register of Historic Places or registered or eligible for registration as a state historical landmark…"[25]

3.5.4 Environmental Impacts

CUL-1: *Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?*

The analysis below evaluates the proposed Project's potential to cause direct and indirect impacts to known built historical resources based on review of the proposed construction and operational activities associated with the project. There could also be impacts to previously undiscovered subgrade historical resources. Direct impacts include physical components, including the construction footprint, located within built historical resource boundaries. Indirect impacts include visual, auditory, and atmospheric changes to the setting of identified built historical resources. All impacts would either be less than significant or reduced to less than significant with mitigation. Cumulative impacts to historical resources are discussed in Chapter 5.0, Other CEQA Considerations, of this Draft EIR.

---

[25] California Public Resources Code, Section 5024 and 5024.5 (https://california.public.law/codes/ca_pub_res_code_section_5024 and https://california.public.law/codes/ca_pub_res_code_section_5024.5) Accessed August 10, 2022.

Construction Impacts

Less Than Significant Impact With Mitigation. As detailed in the *Historical Resource Technical Report for the Los Angeles Aerial Rapid Transit Project* (Appendix G) and further discussed below, construction of the proposed Alameda Station has the potential to result in both direct and indirect impacts to The Winery, a contributor to the Los Angeles Plaza Historic District, and the *El Grito* mural, which is individually eligible for the NRHP and CRHR; however, in both cases impacts would be mitigated to less than significant. Construction-related impacts to all other historical resources would be less than significant.

Alameda Station

The historical resources in the vicinity of the Alameda Station that have the potential to be impacted by construction of the proposed Project are the Los Angeles Union Station Passenger Terminal and Grounds, including the Macy Street Grade Separation; Los Angeles Plaza Historic District, including contributing buildings; and the *El Grito* mural. Potential impacts to these historical resources are discussed below.

<u>Los Angeles Union Station Passenger Terminal and Grounds</u>

Construction of the vertical circulation elements (e.g., stairs, escalators, and elevators) for the proposed Alameda Station would occur within the physical boundary of the, Los Angeles Union Station Passenger Terminal and Grounds in the planned LAUS Forecourt, south of the Mozaic Apartments building (currently Parking Lot B). Extant paving and landscaping in Parking Lot B (the LAUS parking lot) would be removed and the ground would be excavated for utility relocations and concrete foundations to allow for the Alameda's Station vertical circulation elements. However, the paving and landscaping in Parking Lot B is not original, nor is it a character-defining feature of the Los Angeles Union Station Passenger Terminal and Grounds. Demolition of the paving/landscaping in Parking Lot B would not impact the physical integrity of any of the features that convey the Los Angeles Union Station Passenger Terminal and Grounds significance. Additionally, construction of the proposed Alameda Station would not result in any direct impacts on the Macy Street Grade Separation, a contributor to the Los Angeles Union Station Passenger Terminal and Grounds as the Alameda Station construction site is located at least 600 feet away from the Macy Street Grade Separation.

Thus, the construction of the proposed Alameda Station would not cause any change in the significance of the Los Angeles Union Station Passenger Terminal and Grounds, including the Macy Street Grade Separation, a historical resource as defined in Section 15064.5 and, as such, would have no direct impacts on the historical resource.

Construction activities would require excavation and pile drilling for the foundation, structural steel and the gondola equipment erection, asphalt work, and landscaping, all of which would require a construction crew and equipment to be located on site. As set forth in Section 3.13, Noise and Vibration, of this Draft EIR, construction would have less than significant vibration damage impacts to LAUS. Construction would temporarily introduce visual and auditory elements to the Los Angeles Union Station Passenger Terminal and Grounds. However, these indirect impacts would only occur during the approximately 17-month Alameda Station construction period and would cease after proposed station. Therefore, indirect impacts associated with construction of the proposed Alameda Station on the Los Angeles Union Station Passenger Terminal and Grounds, including the Macy Street Grade Separation related to a substantial adverse change in the significance of a Los Angeles Union Station Passenger Terminal and Grounds, a historical resource, would be less than significant.

Los Angeles Plaza Historic District

The proposed Alameda Station's construction activities would occur within the LAHCM physical boundary of the Los Angeles Plaza Historic District. Construction would involve the installation of circulation elements (i.e., elevators, escalators, stairs) that would be introduced at-grade north of the Placita de Dolores in a proposed new pedestrian plaza at El Pueblo. The area currently provides parking and a loading area for El Pueblo. The only location and/or elements within the Los Angeles Plaza Historic District LAHCM boundary that would be directly impacted by physical construction of the proposed Alameda Station includes existing utilities, a planter, and the parking and loading area for El Pueblo north of Placita de Dolores. The Historic District was designated a LAHCM in 1970; Placita de Dolores was constructed in 1979. Thus, Placita de Dolores and the surrounding infrastructure postdates the designation and are not original, contributing features of the LAHCM. Additionally, as discussed in the *Historical Resource Technical Report for the Los Angeles Aerial Rapid Transit Project* (Appendix G), Placita de Dolores is ineligible for listing under national, state, and city landmark designation programs, and as such, it is not a historical resource as defined by CEQA. Reconfiguring this area would have a direct impact on the Los Angeles Plaza Historic District; however, the direct impact would be limited to non-original, non-contributing features, i.e., the parking and loading area for El Pueblo north of the Placita de Dolores. The Los Angeles Plaza Historic District would continue to convey its significance as a designated LAHCM. Further, the Los Angeles Plaza Historic District would continue to convey its significance as a National Register historic district as the direct impacts identified above would be located outside of the National Register boundary(see Appendix G Figure 7).

Additionally, vibration impacts of construction of the proposed Alameda Station were analyzed in the LA ART Noise and Vibration Technical Report (Appendix M) and further discussed in Section 3.13, Noise. The report identified two contributing buildings in the historic district warranting evaluation for potential vibration impacts due to adjacent construction activities and building construction type: the Plaza Substation and The Winery. The Plaza Substation is also an individual historical resource due to its individual listing in the National Register. The report concluded that the Plaza Substation would not be physically impacted by the nearby construction. Per the findings in the report, the Plaza Substation has a non-engineered masonry structure, but it is located at a sufficient distance (more than 25 feet) from the proposed construction that it would not be subject to damage caused by construction vibration.

The report concluded that The Winery could be subject to damage from use of ground compacting equipment such as vibratory rollers or plate compactors during construction of the vertical circulation elements of the proposed Alameda Station. The direct impacts to The Winery related to potential damage during construction activities would be considered potentially significant but can be reduced to a less than significant level with implementation of mitigation measures, including the use of vibration monitoring equipment (Mitigation Measure VIB-A) and force adjustable ground compaction devices (Mitigation Measure VIB-B). The report also recommends two project design features for pre- and post-construction conditions assessment (CUL-PDF-A and CUL-PDF-B). The mitigation measures and Project Design Features are detailed in Sections 3.5.5 and 3.5.6 below.

Because the direct impacts to The Winery, a contributor to the Los Angeles Plaza Historic District, would be mitigated to less than significant with Mitigation Measures VIB-A and VIB-B, they would not result in a significant impact to either the individual historical resource or the historic district as a whole. The Los Angeles Plaza Historic District would retain all of the character-defining and contributing features that convey its significance as both a LAHCM and a National Register historic district. Thus, with implementation of Mitigation Measures VIB-A and VIB-B, the construction of the proposed Alameda Station would not cause any change in the significance of the Los Angeles Plaza Historic District, a historical resource as defined in Section 15064.5 and, as such, would have no direct impacts on the historical resource.

Indirect impacts from construction of the proposed Alameda Station would occur. Construction activities would require excavation and pile drilling for the foundation, structural steel and gondola equipment erection, asphalt work, and landscaping, which would require a construction crew and equipment to be located on site. Construction would temporarily introduce visual and auditory elements to the setting of the Los Angeles Plaza Historic District. However, these indirect impacts would occur during only the 17-month Alameda Station construction period and would cease after construction of the proposed Alameda Station is complete.

Therefore, indirect impacts associated with construction of the proposed Alameda Station on the Los Angeles Plaza Historic District related to a substantial adverse change in the significance of the historical resources in this historic district would be less than significant.

El Grito (The Cry) Mural

The proposed Project has the potential to result in direct and indirect impacts to the *El Grito* mural as the Alameda Station (including the vertical circulation elements) would be located directly north of the Placita de Dolores, which is the location of the mural.

The vertical circulation elements for the Alameda Station would be introduced at grade north of the Placita de Dolores in a new pedestrian plaza at El Pueblo, near the location of the *El Grito* mural, with the potential to result in direct impacts, although none are anticipated. The stairs and escalators would ascend from the plaza on a northwest-southeast diagonal to the Station platform's height of 31 feet. They would be covered with perforated metal canopies designed for weather protection and shade. An elevator would be located to the north of the stairs and escalators. A reconfigured planter would be constructed west of the stair and escalator landing.

Direct impacts to the *El Grito* mural related to potential vibratory damage during construction activities can be mitigated to a less than significant level with recommended mitigation measures. The LA ART Noise and Vibration Technical Report (Appendix M) identified *El Grito* as warranting evaluation for potential vibration impacts due to the adjacent construction of Alameda Station and the construction type of the wall on which *El Grito* is located. The potential vibration impacts were analyzed and two mitigation measures, the use of vibration monitoring equipment (VIB-A) and force adjustable ground compaction devices (VIB-B), are included in the LA ART Noise and Vibration Report and further discussed in Section 3.13, Noise and Vibration.

In addition to the mitigation measures discussed above, proposed Project design features will be incorporated consisting of pre-construction documentation (CUL-PDF-C), protection during adjacent construction (CUL-PDF-D), and construction monitoring (CUL-PDF-E). These proposed Project features are detailed in Section 3.5.6 below. As there are no direct impacts anticipated to the *El Grito* mural, the proposed Project would not result in a significant impact to the historical resource.

Indirect impacts from construction of the proposed Alameda Station would occur. Construction activities would require excavation and pile drilling for the foundation, structural steel and gondola equipment erection, asphalt work, and landscaping, which would require a construction crew and equipment to be located on site, near *El Grito*. Construction would temporarily introduce visual and auditory elements to the setting of the historical resource. However, these indirect impacts would occur during only the 17-month Alameda Station construction period and would cease after construction of the proposed Alameda Station is complete.

Therefore, indirect impacts associated with construction of the proposed Alameda Station on the *El Grito* mural related to a substantial adverse change in the significance of the *El Grito* mural (an historical resource) would be less than significant.

Alameda Tower

The only historical resource in the vicinity of the proposed Alameda Tower is Philippe the Original. There is no potential for direct impacts to this historical resource due to the physical separation of the components of the Project from the subject property; the northeastern corner of the Philippe the Original building is over 200 feet from the southwestern corner of the proposed Alameda Tower. The proposed tower would be located north of Phillipe the Original; however, the construction staging area would be across the street. Construction of the proposed Alameda Tower would require excavation and pile drilling for the foundation, structural steel and gondola equipment erection, asphalt work, and landscaping, which would require a construction crew and equipment to be located on site. Construction would temporarily introduce visual and auditory elements to the setting of Philippe the Original. However, these indirect impacts would occur during only the 12-month construction period and would cease after construction of the proposed Alameda Tower is complete. Therefore, direct and indirect impacts associated with the construction of the proposed Alameda Station on Phillipe the Original related to a substantial adverse change in the significance of Philippe the Original would be less than significant.

Alpine Tower

The only historical resource in the vicinity of the proposed Alpine Tower is the Granite Block Paving. There is no potential for direct impacts to the Granite Rock Paving due to the physical separation of the components of the Project from the subject property; the northern edge of the proposed Alpine Tower is over 250 feet from the southwestern corner of the Granite Block Paving. A two-story building at 130 Bruno Street is also located between the subject property and the Project components. The proposed tower and construction staging area would be located north of the historical resource, approximately 250 feet away. Construction of the proposed Alpine Tower would require excavation and pile drilling for the foundation, structural steel and gondola equipment erection, asphalt work, and landscaping, which would require a construction crew and equipment to be located on site. However, construction of the proposed Alpine Tower would not be visible in relation to the historical resource due to the existence of the Homeboy Industries building in between the paving and the proposed tower, and separated by physical distance; as such, no indirect impacts would occur. Therefore, direct and indirect impacts associated with the construction of the proposed Alpine Tower related to a substantial adverse change in the significance of the Granite Block Paving would not occur.

Chinatown/State Historic Park Station

The only historical resource in the vicinity of the proposed Chinatown/State Historic Park Station is the Capitol Milling Company. There is no potential for direct impacts to this historical resource due to the physical separation of the components of the Project from the subject property; the southwestern corner of the proposed Chinatown/Park Station platform is over 150 feet from the northeastern corner of the Capitol Milling Company building. The Metro L Line (Gold) is also located between the subject property and the Project components. The proposed station would be located north of the Capitol Milling Company; however, the construction staging area would be across the Metro L Line (Gold) structure. Construction of the proposed Chinatown/State Historic

Park Station would require excavation and pile drilling for the foundation, structural steel and gondola equipment erection, asphalt work, and landscaping, which would require a construction crew and equipment to be located on site. Construction would temporarily introduce visual and auditory elements to the setting of the Capitol Milling Company. However, these indirect impacts would occur during only the 19-month construction period and would cease after construction of the proposed Chinatown/State Historic Park Station is complete. Therefore, construction impacts related to a substantial adverse change in the significance of the Capitol Milling Company would be less than significant.

Broadway Junction

There are five historical resources in the vicinity of the proposed Broadway Junction: 1035 N. Broadway, St. Peter's Italian Catholic Church, Cathedral High School, 451 E. Savoy Street, and the Charles B. Wellman Residence. There is no potential for direct impacts to these historical resources due to the physical separation of the components of the Project from 1035 N. Broadway, St. Peter's Italian Catholic Church, Cathedral High School, and the Charles B. Wellman Residence. The southwestern corner of the proposed Broadway Junction is over 650 feet from the southeastern corner of 1035 N. Broadway, and over 300 feet from the southeastern corner of the Parish Hall of St. Peter's Italian Catholic Church. The Cathedral High School campus buildings dating from the period of significance are physically separated from the proposed Broadway Junction by contemporary buildings dating from 2019 that are concentrated at the southwestern end of the campus. The southwestern corner of the Charles B. Wellman Residence is nearly 325 feet from the northeastern corner of the proposed Broadway Junction in addition to the physical separation created by its unique siting, deep setback on its lot, and two single-family residences. The LA ART Noise and Vibration Technical Report (Appendix M) identified 451 E. Savoy Street as warranting evaluation for impacts caused by construction activities, but the report found that there would be no impacts from vibration.

Cathedral High School is located across North Broadway from the proposed junction and construction staging area, while 451 E. Savoy Street and the Charles B. Wellman Residence are located across Savoy Street from the construction staging area. Construction of the proposed Broadway Junction would require demolition of the existing building at 1201 North Broadway, excavation and pile drilling for the foundation, structural steel and gondola equipment erection, asphalt work, and landscaping, which would require a construction crew and equipment to be located on site. Construction would temporarily introduce visual and auditory elements to the setting of the historical resources. However, these indirect impacts would occur during only the 19-month construction period and would cease after construction of the proposed Broadway Junction. Therefore, construction impacts related to a substantial adverse change in the significance of 1035 N. Broadway, St. Peter's Italian Catholic Church, Cathedral High School, 451 E. Savoy Street, and the Charles B. Wellman Residence would be less than significant.

Stadium Tower

The only historical resource in the vicinity of the proposed Stadium Tower is the Arroyo Seco Parkway Historic District. There is no potential for direct impacts to this historical resource due to the physical separation of the components of the Project from the subject property. The nearest corner of the proposed Stadium Tower is at least 30 feet from the outermost northbound lane of the Arroyo Seco Parkway, in addition to an elevation difference, steep topography, retaining and sound walls, landscaped areas of grass, shrubs, and trees, the Stadium Way overcrossing and undercrossing, chain-link fencing, and above-ground utilities. The proposed tower and construction staging area would be located northwest of this linear historical resource, which is several miles long. Construction of the proposed Stadium Tower would require excavation and pile drilling for the foundation, structural steel work, and gondola equipment erection, which would require a construction crew and equipment to be located on site. Construction would temporarily introduce visual elements to the setting of the Arroyo Seco Parkway District. However, this indirect impact would occur during only the 12-month construction period and would cease after construction of the proposed Stadium Tower. Therefore, direct and indirect impacts associated with the construction of the proposed Stadium Tower related to a substantial adverse change in the significance of the Arroyo Seco Parkway Historic District would be less than significant.

Dodger Stadium Station

Construction of the proposed Dodger Stadium Station would result in no direct or indirect impacts to historical resources. Direct and/or indirect construction impacts related to a substantial adverse change in the significance of a historical resource would not occur because there are none in the vicinity of the proposed station or construction staging area. Therefore, no impact would occur.

Operational Impacts

Less Than Significant. Operation of the proposed Project would result in direct impacts and indirect impacts to historical resources; however, all impacts would be less than significant. Direct impacts include physical components located within historical resource boundaries. Indirect impacts include visual, auditory, and atmospheric changes to the setting of identified historical resources.

Alameda Station

The historical resources in the vicinity of the proposed Alameda Station that have the potential to be impacted by operation of the proposed Project are the Los Angeles Union Station Passenger Terminal and Grounds, including the Macy Street Grade Separation; Los Angeles Plaza Historic District, including contributing buildings; *El Grito* mural; and the Los Angeles Terminal Annex Post Office. Potential impacts to these historical resources are further discussed below. In addition, there could be impacts to previously undiscovered subgrade historical resources.

<u>Los Angeles Union Station Passenger Terminal and Grounds</u>

Operation of the proposed Alameda Station would have a direct impact on the Los Angeles Union Station Passenger Terminal and Grounds property as the vertical circulation elements (i.e., escalators, stairs, and elevators) would be permanently located within the boundaries of the historic resource. However, as described above for construction, the vertical circulation elements would not impact the physical integrity of any of the features that convey the historical resource's significance. Its existing physical integrity and character-defining features would remain intact even with the Alameda Station's vertical circulation elements.

Operation of the proposed Alameda Station has the potential to cause indirect impacts to the Los Angeles Union Station Passenger Terminal and Grounds property, specifically to its setting, due to its location adjacent to and partially within the historical resource's boundary. The proposed Station location is elevated over Alameda Street. The design of the proposed station would consist of a concrete structure and platform with a barrel-arched canopy made of custom-perforated metal. The proposed station's tallest point would be 78 feet above street grade; its platform would be approximately 31 feet above street grade. The proposed Alameda Station would become a dominant visual feature of Alameda Street due to its size, design, and location elevated over the street. The proposed Alameda Station would be a highly visible change to the overall setting of the Los Angeles Union Station Passenger Terminal and Grounds property, which is designated for both its architectural and historical significance. The changes to LAUS' setting resulting from the addition of the proposed Alameda Station would not impact its architectural significance or its ability to convey this significance. The terminal building and its design and materials would not be physically impacted at all. It would retain all character-defining features related to its architectural significance. The setting of LAUS has already been substantially altered by numerous intrusions over time. Newer buildings have been constructed to the north, south, and east of the terminal building, including the Mozaic Apartments on the north, First 5 LA on the south, Metropolitan Water District (MWD) on the south and east, Budget Rental car on the east, and the LA Metro Headquarters to the east of the tracks. As a result, the larger setting along Alameda Street is not a character-defining feature of the historical resource; it is not a physical feature that conveys the historical significance of LAUS.

LAUS was designed in response to its proximity to El Pueblo de Los Angeles. As such, one aspect of LAUS' setting that is important is its axial connection and visual relationship with the Los Angeles Plaza Historic District. The proposed Alameda Station would be located over 100 feet north of the main axis—at the intersection of Los Angeles Street and Alameda Street—between LAUS and the Los Angeles Plaza Historic District. The location is sufficiently offset so it would not interrupt the physical and visual relationship between the two historical resources. This important aspect of the LAUS' setting would be maintained.

The proposed Alameda Station would add a new structure to the setting and would obstruct views of LAUS from the north. However, LAUS would continue to convey its architectural and historical significance during operation of the Project. Its existing physical integrity and character-defining features would remain intact, and its important axial connection and visual relationship with the Los Angeles Plaza Historic District would remain. Additionally, operation of the Alameda Station would have no impact on the Macy Street Grade Separation as the Project is located at a significant distance from the historical resource. Therefore, operational impacts of the Alameda Station related to a substantial adverse change in the significance of the Los Angeles Union Station Passenger Terminal and Grounds would be less than significant.

Los Angeles Plaza Historic District

Similar to the Los Angeles Union Station Passenger Terminal and Grounds, operation of the proposed Alameda Station would introduce new features to the Los Angeles Plaza Historic District, including vertical circulation elements and the proposed new pedestrian plaza at El Pueblo in an area currently containing a parking and loading area for El Pueblo, as described in Chapter 2, Project Description. The new features would be located within the Los Angeles Plaza Historic District's LAHCM boundaries, but not within the National Register boundary. As described under the construction impact analysis above, all components that would be reconfigured in this area would be limited to a non-original, non-contributing feature of the historical resource. The Los Angeles Plaza Historic District would continue to convey its significance as a designated LAHCM. It would likewise continue to convey its significance as a National Register historic district as the work would be located outside its National Register boundary.

Operation of the proposed Alameda Station has the potential to cause indirect impacts to the Los Angeles Plaza Historic District, specifically to its setting, due to its location adjacent to and partially within the historical resource's boundary. The proposed station location is elevated over Alameda Street at the northeast end of the historic district. The design of the proposed station would consist of a concrete structure and platform with a barrel-arched canopy made of custom-perforated metal. The proposed station's tallest point would be 78 feet above street grade; its platform would be 31 feet above street grade.

Within the LAHCM boundary, the proposed Alameda Station would be most visible from Placita de Dolores. Placita de Dolores was constructed in 1979, and the historic district was designated an LAHCM in 1970. Thus, Placita de Dolores and the surrounding infrastructure post-dates the designation and are not original, contributing features of the LAHCM. Placita de Dolores is not part of the National Register historic district as it falls outside of its official boundary. Additionally, as discussed in the Historical Resource Technical Report for the Los Angeles Aerial Rapid Transit Project (Appendix G), Placita de Dolores is ineligible for listing under national, State, and City landmark designation programs, and as such, it is not a historical resource as defined by CEQA.

Within the National Register boundary, the proposed Alameda Station would be most visible from the courtyard formed between the Avila Adobe and the 1970s Avila Annex. This vantage point from the courtyard currently includes views of the non-original, L-shaped annex, a portion of the Mozaic Apartments building, a portion of LAUS, a portion of the First 5 LA building, and a portion of the LA Metro Headquarters. None of the buildings in the view from the courtyard existed at the end of the district's period of significance in 1932. The one building in the viewshed that has an important visual connection to the Los Angeles Plaza Historic District in general is the LAUS terminal building, which was designed in response to its proximity to El Pueblo. That important visual relationship occurs along Los Angeles Street, which stretches between the Plaza and LAUS, not within the limited, coincidental view from the Avila Adobe courtyard; however, the view of the LAUS terminal building from the courtyard would remain intact. The proposed station would obstruct views of the Mozaic Apartments building and LA Metro Headquarters only.

Setting is an important aspect of integrity for historic districts as it is typically a key factor in conveying cohesiveness and unifying contributors. It is particularly important that setting remains intact within the boundary of a historic district, but not necessarily outside of the boundary. The proposed Project would introduce a highly visible new feature to the historic district's setting, as described below, but the new feature, with the exception of the vertical circulation components and associated alterations to the non-original plaza space within the LAHCM boundary, would be located outside of the historical resource's boundary. The proposed Project would be visible from some vantage points when looking toward the Alameda Street-facing elevations of some contributing buildings from outside its boundary of the historic district, from the courtyard of the Avila Adobe within its National Register and LAHCM boundaries, and from Placita de Dolores within its LAHCM boundary, but the proposed Project would not disrupt or interfere with important view corridors, nor would it disrupt the cohesiveness of the setting inside of the National Register or LAHCM boundaries. Contributing buildings would retain their visual and physical relationships with one another.

In addition, the proposed Alameda Station has the potential to cause indirect impacts on four contributing buildings to the Los Angeles Plaza Historic District due to their proximity to the vertical circulation components and passenger station over Alameda Street: Plaza Community Center, Plaza Substation, Avila Adobe, and The Winery. The Plaza Substation is also an individual historical resource due to its listing in the National Register. For all four contributors, the proposed Alameda Station would be visible along their Alameda Street-facing elevations when looking at the historic district from outside of the National Register boundary or from Placita de Dolores within the LAHCM boundary. The proposed station would introduce new features to the setting of these historical resources and would, therefore, have an impact on each historical resource's setting. However, the contributing buildings would retain their visual and physical relationships to each other, and all would continue to convey the significance of the historic district. Furthermore, the Plaza Substation would continue to convey its individual significance within the context of transportation. The existing physical integrity and character-defining features of the historical resources would remain intact.

The proposed Alameda Station would not be visible from the ground of the Plaza Community Center, Plaza Substation, or The Winery because these three buildings are constructed to their east property lines. However, the proposed station would be visible from the Avila Adobe when looking southeast from the courtyard formed between the house and the 1970s Avila Annex. The station would introduce a new feature to the setting of the Adobe and would, therefore, have an impact on the historical resource's setting. However, the impact would be less than significant. The vantage point from the courtyard currently includes views of the non-contributing Avila Annex, a portion of the Mozaic Apartments building, a portion of LAUS, a portion of the First 5 LA building, and a portion of the LA Metro Headquarters. The original part of the Avila Adobe was constructed in 1818. None of the buildings visible from the courtyard existed at the time of its construction, so none were part of its original setting. Furthermore, the broader setting has changed since the end date for the period of significance for the historic district, 1932. The proposed Alameda Station would add another modern structure to the historical resource's broader setting. It would block views of the Mozaic Apartments building and LA Metro Headquarters; however, views of these buildings post-date the period of significance for the historic district and do not contribute to the historical resource's significance or integrity of setting. The view of the First 5 LA building, though a contemporary aspect of the existing setting, would remain intact. The view of LAUS would also remain intact. Although the proposed station would add another non-original element to the broader setting, the visual relationship between the Avila Adobe and LAUS would still exist. The historical resource would retain its visual and physical relationships to the other contributors in the Los Angeles Plaza Historic District and would continue to convey its significance. The existing physical integrity and character-defining features of the historical resource would remain intact. The indirect impact of the Project on the Plaza Community Center, Plaza Substation, Avila Adobe, and The Winery would be less than significant.

Therefore, operational impacts of the proposed Alameda Station related to a substantial adverse change in the significance of Los Angeles Plaza Historic District would be less than significant.

<u>*El Grito* Mural</u>

The new vertical circulation elements for the proposed Alameda Station would be introduced at-grade north of the Placita de Dolores in a proposed new pedestrian plaza at El Pueblo, near the location of the *El Grito* mural, yielding the potential for direct impacts. The stairs and escalators would ascend from the plaza on a northwest-southeast diagonal to the station platform's height of 31 feet. They would be covered with perforated metal canopies designed for weather protection and shade. An elevator would be located to the north of the stairs and escalators. A reconfigured planter would be constructed west of the stair and escalator landing. Operation of the proposed Alameda Station has the potential to cause indirect impacts to the *El Grito* mural due to its location adjacent to the historical resource. However, the physical integrity of the *El Grito* mural, namely its integrity of location, design, materials, workmanship, feeling, and association would remain intact. The mural's integrity of setting has already been substantially compromised by numerous changes to Placita de Dolores over time, especially those completed in 2005 and 2012, such as with the relocation of the replica Bell of Dolores. The mural's existing setting would be further altered by proposed changes in the vicinity of Placita de Dolores included in the Project; however, it would remain highly visible and continue to convey its individual significance as an exceptionally important mural of high artistic value by master artist Eduardo Carrillo. Therefore, the operational impact of the proposed Alameda Station related to a substantial adverse change in the significance of the *El Grito* mural would be less than significant.

Los Angeles Terminal Annex Post Office

Operation of the proposed Project would result in no direct impacts to the Los Angeles Terminal Annex Post Office. Indirect impacts may include the introduction of new visual features to the setting of the historical resource, such cables and cabins traveling over Alameda Street, which would result in a change to the existing setting in the vicinity of the historical resource. However, the change would not constitute a significant impact on the historical resource due to its existing modern surroundings and substantial setback from both Alameda Street and the proposed Project. The historical resource would continue to convey its individual significance and its existing physical integrity and character-defining features would remain intact. Therefore, the operational impact of the proposed Project related to a substantial adverse change in the significance of this historical resource would be less than significant.

Alameda Tower

The only historical resource in the vicinity of the proposed Alameda Tower is Philippe the Original. Operation of the proposed Alameda Tower would result in no direct impacts to Philippe the Original. Indirect impacts include the introduction of new visual features to the setting of Phillippe the Original. Introducing additional modern features in the form of the tower as well as cables and cabins elevated over Alameda Street where it passes in front of Phillippe the Original would result in a change to the existing setting in the vicinity of the historical resource; however, the change would not constitute a significant impact on Phillippe the Original because the setting in the vicinity of the historical resource lacks a distinct or cohesive character, the setting is not a character-defining feature of the resource, and the nearest corner of the restaurant building to the proposed Alameda Tower location is over 200 feet from the nearest corner of the tower base. The historical resource would continue to convey its individual significance and its existing physical integrity and character-defining features would remain intact. Therefore, the operational impact of the proposed Alameda Tower related to a substantial adverse change in the significance of the historical resource, Philippe the Original, would be less than significant.

Alpine Tower

The only historical resource in the vicinity of the proposed Alpine Tower is the Granite Block Paving. Operation of the proposed Alpine Tower would result in no direct impacts to the Granite Block Paving. Indirect impacts include the introduction of new visual features to the setting of the Granite Block Paving. Introducing additional modern features in the form of cables and cabins elevated would result in a change to the existing setting in the vicinity of the Granite Block Paving; however, the change would not constitute a significant impact on the historical resource because the setting in the vicinity of the historical resource lacks a distinct or cohesive character and the setting is not a character-defining feature of the resource. While the proposed Alpine Tower would be visible beyond the bus parking lot when looking west at the paving from points east, they would be substantially in the background and would not detract from the existing setting of the Granite Block Paving. The historical resource would continue to convey its individual significance and its existing physical integrity and character-defining features would remain intact. Therefore, the operational impact of the proposed Alpine Tower related to a substantial adverse change in the significance of the historical resource, Granite Block Paving, would be less than significant.

Chinatown/State Park Station

The only built historical resource in the vicinity of the proposed Chinatown/State Historic Park Station is the Capitol Milling Company. Operation of the Chinatown/State Park Station would result in no direct impacts to the Capitol Milling Company. Indirect impacts include the introduction of new visual features as well as the proposed Chinatown/State Park Station to the setting of the Capitol Milling Company. The Capitol Milling Company is located on the western side of the elevated structure of the Metro L Line (Gold), which creates physical separation between the proposed station and the historical resource. The area immediately surrounding the Capitol Milling Company to the north, west, and south is densely developed with buildings dating from the late 1940s through the 2010s. Thus, the setting in the vicinity of the Capitol Milling Company along Broadway and College Street lacks a distinct or cohesive character, and the setting along Spring Street does not contribute to the significance of the Capitol Milling Company.

Additionally, introducing additional modern features in the form of cables and cabins traveling in front of the Capitol Milling Company would result in a change to the existing setting in the vicinity of the historical resource; however, the change would not constitute a significant impact on the historical resource due to the existing mixed character of its surroundings, distance from the proposed passenger station, and physical separation created by the Metro L Line (Gold) structure. The Capitol Milling Company would continue to convey its individual significance and its existing physical integrity and character-defining features would remain intact. Therefore, the operational impact of the proposed Chinatown/State Park Station related to a substantial adverse change in the significance of the historical resource, the Capitol Milling Company, would be less than significant.

Broadway Junction

There are five historical resources in the vicinity of the proposed Broadway Junction: 1035 N. Broadway, St. Peter's Italian Catholic Church, Cathedral High School, 451 E. Savoy Street, and the Charles B. Wellman Residence. Operation of the proposed Broadway Junction would result in no direct impacts to these historical resources. No direct or indirect impacts resulting from the operation of the Project to 1035 N. Broadway would occur as the proposed Broadway Junction is located a substantial distance from the historical resource and the Project components would not interact physically or visually with the resource. Indirect impacts include the introduction of new visual features to the setting of historical resources nearby, including St. Peter's Italian Catholic Church, Cathedral High School, 451 E. Savoy Street, and the Charles B. Wellman Residence. Introducing additional modern features in the form of the junction as well as cables and cabins traveling adjacent to or potentially above historical resources would result in a change to the existing setting in the vicinity of the historical resources; however, the change would not constitute a significant impact.

The church building for St. Peter's Italian Catholic Church is located on the northern side of North Broadway, over 500 feet south of the intersection of Bishops Road and North Broadway. The parish hall is located east of the church and over 300 feet south of the intersection. There is already a highly visible modern building, the Performing Arts Center for the Cathedral High School campus, which was completed in 2019, adjacent to the historical resource. The setting along North Broadway in this area includes a wide variety of building types and periods of construction. As a result, the setting in the vicinity of the historical resource along North Broadway does not contribute to its significance.

The setting in the vicinity of Cathedral High School lacks a distinct or cohesive character, and the setting outside the campus grounds does not contribute to the significance of Cathedral High

School. The nearest campus buildings to the proposed junction are part of the Performing Arts Center, completed in 2019, which do not contribute to the significance of the historical resource. The new buildings lend physical and visual separation between the proposed Broadway Junction and the older parts of the campus to the north and west. The only Project components in close proximity to the 1920s and both pre- and post-World War II buildings further north along Bishops Road would be the adjacent cables and moving cabins. Furthermore, views from within the campus boundary already include modern buildings and structures. The location of the components of the Project would not interrupt the views from the campus, nor would they impact any other important features of the historical resource's larger setting. The setting within the campus would remain unchanged.

The house at 451 E. Savoy Street is located on the northern side of Savoy Street, one parcel in from its intersection with Bishops Road. The house has a modest setback from the sidewalk. The built environment along Savoy Street is characterized by single- and multi-family residences from the late 1800s through the 1980s. Though the ages of the buildings are not consistent, their scale is, which contributes to a cohesive setting. The historical resource is separated from the proposed Broadway Junction by Savoy Street. Despite the proximity of the proposed junction, views of the house in its current setting would not be obscured or affected by it. As the alignment may travel over 451 E. Savoy Street, the cables and cabins would be visible in the background when looking at the historical resource from the southeast. However, these changes in setting would not constitute a significant impact on the historical resource. Its setting is already highly disturbed and does not resemble what would have been present at the building's late 1800s construction. Though additional modern features would be added to its setting, the historical resource would retain its existing visibility along Savoy Street. The historical resource would continue to convey its individual significance within the context of early residential development as it would remain one of the few remaining examples of its time period in the area, and its existing physical integrity and character-defining features would remain intact.

The Charles B. Wellman Residence is deeply setback from the road behind a multi-family building on the same parcel. Due to the steep topography of the area, the house is elevated several feet above street grade. The built environment along E. Savoy Street is characterized by single- and multi-family residences from the late 1800s through the 1960s. Though the ages of the buildings are not consistent, their scale is. The historical resource is separated from the proposed cables and cabins by two parcels occupied by small single-family residences. It is separated from the proposed Broadway Junction by Savoy Street. Though relatively close (within 200 feet) to the proposed components of the Project, the Charles B. Wellman Residence's unique siting, set back from and elevated above the street, provides substantial visual separation. Views of the house are almost exclusively from the southwest. As a result, the components of the Project would rarely be within the same view as the historical resource. While one would see the components of the Project when looking outward from the house, one would not see the components of the Project when looking toward the house. The relationship between the historical resource and its immediate setting would be unchanged.

Overall, the historical resources would continue to convey their individual significance and their existing physical integrity and character-defining features would remain intact. Therefore, the operational impact of the proposed Broadway Junction related to a substantial adverse change in the significance of the historical resources (1035 N. Broadway, St. Peter's Italian Catholic Church, Cathedral High School, 451 E. Savoy Street, and the Charles B. Wellman Residence) would be less than significant.

Stadium Tower

The only historical resource in the vicinity of the proposed Stadium Tower is the Arroyo Seco Parkway District. Operation of the proposed Stadium Tower would result in no direct impacts to the Arroyo Seco Parkway District. Indirect impacts would include the introduction of new visual features to the setting of the Arroyo Seco Parkway Historic District. Introducing additional modern features in the form of cables and cabins traveling over the historical resource, as well as the proposed Stadium Tower from the southbound lanes of State Route 110 (SR-110), would result in a change to the existing setting at one location along the linear historical resource; however, the change would not constitute a significant impact on the historical resource as the setting of the historic district overall has been altered over time by numerous improvements to SR-110, as well as adjacent new construction; views within the historic district would remain unobstructed and relationships among contributing features would remain unaltered. The Arroyo Seco Parkway District would continue to convey its significance and its existing physical integrity and character-defining features would remain intact. Therefore, the operational impact of the proposed Stadium Tower related to a substantial adverse change in the significance of the historical resource (the Arroyo Seco Parkway District) would be less than significant.

Dodger Stadium Station

Operation of the proposed Dodger Stadium Station would result in no direct or indirect impacts to historical resources. Therefore, the operational impact of the proposed Dodger Stadium Station related to a substantial adverse change in the significance of a historical resource would not occur.

CUL-2: *Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?*

Construction Impacts

Less Than Significant Impact With Mitigation. As noted above, an archaeological historical resource is one that was identified in a study completed prior to the current study, and that has been evaluated as eligible for listing in or is already listed in the NRHP, CRHR, or local register of historical resources. The areas of known archaeological historical resources that are located within the Area of Direct Impacts for the proposed Project include the following, and are discussed under the Project component for which the Area of Direct Impacts to the resource is located. In addition, the portion of Alameda Street that overlaps the construction footprint for the proposed Alameda Station is considered sensitive for the presence of archaeological resources.

1. Resources 19-000887, 19-004320, 19-001575 (associated with the proposed Alameda Station);

2. Resource 19-004200 (associated with the proposed Alameda Tower); and

3. Resource 19-003120 (associated with the proposed Chinatown/State Park Station).

The status of the following resources is "Unevaluated" and are conservatively included in this analysis to evaluate the Project's potential impacts to unknown buried resources that may exist in their vicinity:

a. Resources 19-004201 and 19-186112 (associated with the proposed Alameda Tower); and

b. Resource 19-173073 (associated with the proposed Dodger Stadium Station).

Alameda Station

Construction of the proposed Alameda Station would require a maximum depth of excavation of 10 feet for the foundation within Alameda Street; piles would be drilled to a maximum of 125 feet. The area is currently a paved and active roadway, and is underlain with existing utilities, as described in Section 3.19, Utilities and Service Systems. No artifacts or archaeological features have been documented within this location. However, due to the known sensitivity of the area around the proposed Alameda Station site, as described in Section 3.5.2.2, Archaeological Resources, if an unknown archaeological resource is identified during construction, the impact could be potentially significant.

Mitigation Measures CUL-A and CUL-B would be implemented in order to reduce any potential impacts of discovering resources that were previously unknown. Mitigation Measure CUL-A would require a Cultural Resources Monitoring and Mitigation Plan (CRMMP) that would define pre-construction coordination, construction monitoring for the excavations based on activities and depth of disturbance planned for each Project component, data recovery, artifact and feature treatment, procurement (including a curation plan), and reporting. The CRMMP would define treatment, which may include implementation of archaeological data recovery excavations to remove the resource or preservation in place. All work would be conducted under the direction of a qualified archaeologist meeting the Secretary of Interior Standards for Archaeology (36 CFR Section 61). Mitigation Measure CUL-B would require a worker training program be developed for the Project, which would provide information to construction workers that describe and illustrate potential resources to be encountered by Project construction and outline the protocol to follow if resources are encountered, so that The CRMMP would also discuss the possibility of adaptive reuse of the building materials in the vicinity of the proposed Alameda Tower (for Resource 19-004200) for the proposed Project which may be considered by the Project Sponsor to the extent practicable.

Construction of the proposed Alameda Station within Alameda Street would result in a less than significant impact related to a substantial adverse change in the significance of an archaeological resource.

Vertical Circulation Elements

In addition to construction within Alameda Street, the Area of Direct Impacts for the vertical circulation elements for the proposed Alameda Station would overlaps three documented archaeological sites. The installation of the vertical circulation elements on the western side of the proposed Alameda Station would overlap Resources 19-004320 and 19-000887, and the installation of the vertical circulation elements on the eastern side of the proposed Alameda Station would overlap Resource 19-001575.

Installation of the vertical circulation elements for the proposed Alameda Station would require ground-disturbing activities and include the installation of landscaping and paving. The depth of excavation for the vertical circulation elements would be a maximum of eight feet. The maximum depth of excavation for the installation of paving would be two feet.

As discussed in Table 3.5-2, Resource 19-004320 consists of a collection of disturbed artifacts without association on the western side of the proposed Alameda Station. Although the resource was not formally evaluated when it was documented, isolated artifacts are generally not considered to be significant resources. The resource overlaps Resource 19-000887, an NRHP-eligible resource, but includes no contributing significant features. However, as installation of the vertical circulation elements on the western side of Alameda Station would have a maximum depth of excavation of eight feet, there is potential for an inadvertent discovery to occur, which could result in a potentially significant impact. Impacts to that portion of Resource 19-004320 that overlaps Resource 19-000887 would be mitigated by implementing Mitigation Measure CUL-C (described more fully below), which would require an archaeological testing plan be prepared and implemented, and data recovery plan to be prepared and implemented if significant archaeological remains are encountered during test excavations.

Additionally, due to the sensitivity of the area, impacts to Resource 19-004320 related to construction of the proposed Alameda Station could be potentially significant. To mitigate the impacts of an inadvertent discovery of the resources known to exist in the Area of Direct Impacts, Mitigation Measures CUL-A and CUL-B, as described above, would be implemented. Mitigation Measure CUL-A would require a CRMMP, and Mitigation Measure CUL-B would require a worker training program. With implementation of Mitigation Measures CUL-C, CUL-A and CUL-D, construction of the proposed Alameda Station would result in a less than significant impact related to a substantial adverse change in the significance of archaeological Resource 19-004320.

Resource 19-000887 consists of structural remains, refuse deposits, and a segment of the Zanja Madre. There is no overlap between the known locations of the Zanja Madre within El Pueblo and the proposed ground disturbance for the proposed Alameda Station. The resource is currently occupied by Placita de Dolores (a public plaza that was constructed in 1979), sidewalks, and an existing surface parking lot. The Placita de Dolores would not be impacted by construction of the proposed Alameda Station. Approximately 500 square feet of the proposed Alameda Station (i.e., vertical circulation elements) overlaps the existing paved parking and loading area for El Pueblo within the resource's boundaries. While the proposed Alameda Station's vertical circulation elements would, therefore, overlap the resource as it is currently recorded, construction of the proposed Alameda Station would not extend into the existing physical boundary of the Placita de Dolores. The Placita de Dolores would not be impacted by construction of the proposed Alameda Station.

The construction of the proposed Alameda Station overlapping Resource 19-000887 would require ground-disturbing activities of up to eight feet in the area of the existing paved parking lot and loading area for El Pueblo, within the resource boundaries. The specific part of the resource where construction activities would occur has not yet been tested. However, nearby excavations conducted in 1978 found a midden (a refuse dump) containing Spanish to American period artifacts ranging in depth from 4 to 12 inches below the ground surface. In 1978, fill was placed on top of Resource 19-000887, both to level the site for the construction of Placita de Dolores and to protect the archaeological site. The exact depths and locations of the fill deposits are unknown. Furthermore, only small areas of the archaeological site were sampled in 1978. While these test areas are believed to be representative of the site, they do not represent a complete or comprehensive site excavation.

Thus, because the resource is known to exist in this area and ground-disturbing activities would require excavation of up to eight feet, there is potential for an inadvertent discovery to occur, which could result in a potentially significant impact related to construction of the proposed Alameda Station. Mitigation Measure CUL-C would be required to mitigate potential impacts to Resource 19-000887, which would require an archaeological testing plan be prepared and implemented, and a data recovery plan to be prepared and implemented if significant archaeological remains are encountered during test excavations, in consultation with El Pueblo de Los Angeles Historical Monument Authority. The testing plan would propose limited archaeological excavations of a portion of the site overlapping the Area of Direct Impacts intended to identify the location, integrity, and significance of archaeological deposits that may be impacted by the proposed Project. If significant archaeological remains are encountered that appear to contribute to the site's NRHP and CRHR eligibility during the test excavations, the data recovery plan would be implemented. The data recovery plan would specify a statistically significant sample of the site to be excavated, describe the specific tools, screening size, and methods to be used, and describe how structural remains, if any, would be exposed and mapped. Furthermore, to mitigate the impacts of an inadvertent discovery of the resources known to exist in the Area of Direct Impacts, Mitigation Measures CUL-A and CUL-B, as described above, would also be implemented. Mitigation Measure CUL-A would require a CRMMP, and Mitigation Measure CUL-B would require a worker training program. With implementation of Mitigation Measures CUL-C, CUL-A, CUL-B, and CUL-CA, construction of the proposed Alameda Station would result in a less than significant impact related to a substantial adverse change in the significance of archaeological Resource 19-000887.

Resource 19-001575 consists of a prehistoric to contact period Native American cemetery as well as structural remains and refuse deposits associated with the nineteenth to early twentieth century development of Los Angeles. Construction of the vertical circulation elements for the proposed Alameda Station in the area where the existing LAUS parking lot is located would require ground-disturbing activities within the resource boundaries of up to eight feet. The Native American cemetery is located approximately 500 feet east of the Area of Direct Impacts, and is not anticipated to be impacted by construction. However, as Resource 19-001575 is known to exist in this area, impacts related to construction of the proposed Alameda Station could be potentially significant if an unknown archaeological resource is identified during construction. As such, Mitigation Measure CUL-D would be required to mitigate potential impacts to Resource 19-001575, which would require an archaeological testing plan to be prepared and implemented, and a data recovery plan to be prepared and implemented if significant archaeological remains are encountered during test excavations. The testing plan would propose limited archaeological excavations of a portion of the site overlapping the Area of Direct Impacts intended to identify the location, integrity, and significance of archaeological deposits that may be impacted by the proposed Project. If significant archaeological remains are encountered that appear to contribute to the site's NRHP and CRHR eligibility during the test excavations, the data recovery plan would be implemented. The data recovery plan would specify a statistically significant sample of the site to be excavated, describe the specific tools, screening size, and methods to be used, and describe how structural remains, if any, would be exposed and mapped. Furthermore, to mitigate the impacts of an inadvertent discovery of the resources known to exist in the Area of Direct Impacts, Mitigation Measures CUL-A and CUL-B, as described above, would also be implemented. Mitigation Measure CUL-A would require a CRMMP, and Mitigation Measure CUL-B would require a worker training program. With implementation of Mitigation Measures CUL-A, CUL-B, and CUL-D, construction of the proposed Alameda Station would result in a less than significant impact related to a substantial adverse change in the significance of archaeological Resource 19-001575.

Alameda Tower

Construction of the proposed Alameda Tower would require a maximum depth of excavation of 10 feet for the foundation; piles would be drilled to a maximum of 120 feet. The Area of Direct Impacts for the proposed Alameda Tower overlaps three documented archaeological sites, Resources 19-004200, 19-004201, and 19-186112. The portion of the Area of Direct Impacts that falls within the proposed Alameda Tower is primarily unpaved.

As discussed in Table 3.5-2, Resource 19-004200 consists of the late nineteenth or early twentieth century vitrified brick pavement of Alameda Street that was encountered during removal of the asphalt pavement in 2007. The resource was evaluated eligible for inclusion in the CRHR. However, the exposed segment was removed and reused as paving in an adjacent park, significantly impacting the resource's integrity. It is not anticipated that the recorded resource would be impacted during ground-disturbing activities for construction of the proposed Alameda Tower, as the exposed segment was removed and reused; however, impacts related to construction of the proposed Alameda Tower could be potentially significant if an unanticipated discovery related to this archaeological resource is identified during construction. To mitigate the impacts of an inadvertent discovery of the resources known to exist in the Area of Direct Impacts, Mitigation Measures CUL-A and CUL-B would be implemented. Mitigation Measure CUL-A would require preparation of a CRMMP that would define pre-construction coordination, construction monitoring for the excavations based on activities and depth of disturbance planned for each Project component, data recovery, artifact and feature treatment, procurement (including a curation plan), and reporting. The CRMMP would define treatment, which may include implementation of archaeological data recovery excavations to remove the resource or preservation in place. All work would be conducted under the direction of a qualified archaeological Principal Investigator (as defined in 32 CFR Section 767.8). Mitigation Measure CUL-B would require a worker training program be developed for the Project, which would provide information to construction workers that describe and illustrate resources likely to be encountered by Project construction and outline the protocol to be followed in the event of a find.

Resource 19-004201 consists of the remains of Naud Junction. Two archaeological features associated with the site are located within the Area of Direct Impacts. Both features are brick building foundations. However, both features were evaluated and found not to be eligible for inclusion in the CRHR. As the resource is known to exist in this area, impacts related to construction of the proposed Alameda Tower could be potentially significant if an unanticipated discovery related to this archaeological resource is identified during construction. To mitigate the impacts of an inadvertent discovery of the resources known to exist in the Area of Direct Impacts, Mitigation Measures CUL-A and CUL-B, as described above, would be implemented.

Resource 19-186112 consists of abandoned segments of the Southern Pacific Railroad tracks. The observed portion of the tracks were found not to be significant; as such, no construction impacts are anticipated to occur to Resource 19-186112. Nonetheless, due to the sensitivity of the Project area around the proposed tower as described above, Mitigation Measure CUL-B would be implemented.

With implementation of Mitigation Measures CUL-A and CUL-B, construction of the proposed Alameda Tower would result in a less than significant impact related to a substantial adverse change in the significance of archaeological Resources 19-004200, 19-004201, and 19-186112.

Alpine Tower

Construction of the proposed Alpine Tower would require a maximum depth of excavation of 10 feet for the foundation; piles would be drilled to a maximum of 120 feet. The Area of Direct Impacts for the proposed Alpine Tower is completely paved over, and is underlain with existing utilities, as described in Section 3.19, Utilities and Service Systems. No artifacts or archaeological features have been documented within this location. Therefore, construction of the proposed Alpine Tower would result in a less than significant impact related to a substantial adverse change in the significance of an archaeological resource. Nonetheless, due to the sensitivity of the Project area to the north and south of the proposed tower, Mitigation Measure CUL-B would be implemented, which would require a worker training program be developed for the Project that would provide information to construction workers that describe and illustrate resources likely to be encountered by Project construction and outline the protocol to be followed in the event of a find. With implementation of Mitigation Measure CUL-B, construction of the proposed Alpine Tower would result in a less than significant impact related to a substantial adverse change in the significance of an archaeological resource.

Chinatown/State Historic Park Station

Construction of the proposed Chinatown/State Historic Park Station would require a maximum depth of excavation of 10 feet for the foundation; piles would be drilled to a maximum of 80 feet. The Chinatown/State Park Station is located partially within a City-owned parcel immediately south of Los Angeles State Historic Park, and also partially overlaps the Los Angeles State Historic Park at its southern entrance on State-owned land. The station footprint is entirely located within the boundary of Resource 19-003120. Resource 19-003120 consists of the Southern Pacific Railroad River Station and its boundaries are coterminous with Los Angeles State Historic Park with portions of the archaeological site that extend beyond the park boundaries. As described in Table 3.5-2, extensive archaeological work has been conducted at the site, and when the Chinatown/State Park Station (including staging area) is overlaid on an archaeological sensitivity map developed by California State Parks, it appears that the Project component is located in an area not identified as low sensitivity for archaeological resources byState Parks. Due to the sensitivity of Resource 19-003120, impacts related to construction of the proposed Chinatown/State Historic Park Station could be potentially significant if the Southern Pacific Railroad features, such as the office/freight house foundations, or other archaeological resource is identified during construction.

To mitigate the impacts of an inadvertent discovery of the resources known to exist in the resource boundary, Mitigation Measure CUL-E would be required, which would necessitate an archaeological testing plan be prepared and implemented, and a data recovery plan be prepared and implemented if significant archaeological remains are encountered during test excavations which cannot be avoided. This would be done in consultation with California State Parks and consultation with SHPO would also be required (under PRC Section 5024.5). This consultation would be specific to the possible archaeological features that might be encountered at the Chinatown/State Historic Park Station and the park amenities. The testing plan would propose limited archaeological excavations of a portion of the site overlapping the Area of Direct Impacts intended to identify the location, integrity, and significance of archaeological deposits that may be impacted by the proposed Project. If significant archaeological remains are encountered within the footprint of the Station foundation and columns, a data recovery plan would be implemented to mitigate the impacts to less than significant. The data recovery plan would specify what is to be excavated, describe the specific tools, screening size, and methods to be used, and describe how structural remains, if any, would be exposed and mapped. If significant archaeological remains are encountered that appear to contribute to the site's NRHP and CRHR eligibility during the test excavations, that contribute to the significance of 19-003120 are identified in the area where the park amenities (e.g., the concessions and restrooms) are proposed, CUL-F would provide for a redesign for those structures to attempt to avoid the remains. If redesign is not possible, then the above data recovery plan would cover this area as well in order to mitigate impacts to less than significant.

Mitigation Measures CUL-A and CUL-B would also be implemented following the testing plan. Mitigation Measure CUL-A would require preparation of a CRMMP that would define pre-construction coordination, construction monitoring for the excavations based on activities and depth of disturbance planned for each Project component, data recovery, artifact and feature treatment, procurement (including a curation plan), and reporting. The CRMMP would define treatment, which may include implementation of archaeological data recovery excavations to remove the resource or preservation in place. All work would be conducted under the direction of a qualified archaeological Principal Investigator (as defined in 32 CFR Section 767.8). Mitigation Measure CUL-B would require a worker training program be developed for the Project, which would provide information to construction workers that describe and illustrate resources likely to be encountered by Project construction and outline the protocol to be followed in the event of a find. With implementation of Mitigation Measures CUL-D, CUL-B, and CUL-E, construction of the proposed Chinatown/State Historic Park Station would result in a less than significant impact related to a substantial adverse change in the significance of archaeological Resource 19-003120.

The CRMMP would also discuss the possibility of adaptive reuse of the historic building materials within the Los Angeles State Historic Park (for Resource 19-003120) for the proposed Project which may be considered by the Project Sponsor to the extent practicable.

Broadway Junction

The Area of Direct Impacts for the proposed Broadway Junction is developed with an office building and is paved over. Construction of the proposed Broadway Junction would require demolition of the existing building. Following demolition of the existing building, the site would be excavated to a maximum depth of 7 feet for the foundation for the proposed junction and piles would be drilled to a maximum of 120 feet. No artifacts or archaeological features have been documented within this location. Additionally, as the site of the proposed Broadway Junction has been disturbed from previous construction of the existing building located on site, it is not anticipated that archaeological resources would be encountered during construction of the proposed junction. Therefore, construction of the proposed Broadway Junction would result in a less than significant impact related to a substantial adverse change in the significance of an archaeological resource.

Stadium Tower

Construction of the proposed Stadium Tower would require a maximum depth of excavation of 7 feet for the foundation; piles would be drilled to a maximum of 120 feet. Based on the field survey conducted for the proposed Project, the Area of Direct Impacts appears to be disturbed by past construction associated with the Arroyo Seco Parkway and Dodger Stadium. Additionally, a small Los Angeles Department of Water and Power facility occupies a portion of the Area of Direct Impacts. No archaeological resources were observed in the area and no artifacts or archaeological features have been documented within this location. It is not anticipated that construction of the proposed Stadium Tower would result in impacts to archaeological resources. Therefore, construction of the proposed Stadium Tower would result in a less than significant impact related to a substantial adverse change in the significance of an archaeological resource.

Dodger Stadium Station

Construction of the proposed Dodger Stadium Station would require a maximum depth of excavation of 42 feet for the foundation; piles for the foundation would be drilled to a maximum of 55 feet. The Area of Direct Impacts for the proposed Dodger Stadium Station overlaps Resource 19-173073, as it is mapped. However, as discussed in Table 3.5-2 above, the Area of Direct Impacts was an undeveloped parcel (Tract #3201). No artifacts or archaeological features have been documented within this location. The community of Chavez Ravine was located west, south, and north of the Area of Direct Impacts and did not overlap the Area of Direct Impacts. As no portion of the community of Chavez Ravine existed in the Area of Direct Impacts for the proposed Dodger Stadium Station, and no artifacts or archaeological features have been documented within this location, the resource is not anticipated to be impacted as a result of the Project. Historic maps indicate that certain parcels of what is today the Dodger Stadium property and surrounding area were not developed prior to the construction of Dodger Stadium. Therefore, construction of the proposed Dodger Stadium Station would result in a less than significant impact related to a substantial adverse change in the significance of an archaeological resource.

Operational Impacts

No Impact. Archaeological sites would be subject to adverse effects during only construction activities, as all the archaeological resources within the Project area are buried or inaccessible to the public. Operation of the proposed Project, including routine maintenance activities, would not require any ground-disturbing activities that could expose archaeological sites and result in disturbance of the resources. Therefore, operation of the proposed Project would result in no impact related a substantial adverse change in the significance of an archaeological resource.

CUL-3: *Would the Project disturb any human remains, including those interred outside of formal cemeteries?*

Construction Impacts

Less Than Significant Impact With Mitigation. Construction of the proposed Project would require excavation at the Project component sites, which is anticipated to reach a maximum depth of 10 feet, except at the proposed Dodger Stadium Station where the maximum depth would be 42 feet. Piles for the proposed stations, towers, and junction would be drilled to a max depth of 125 feet.

Resource 19-001575 is a large multicomponent archaeological site located around LAUS. During the construction of the MWD Headquarters building in 1999, approximately 500 feet southeast of the Area of Direct Impacts, a prehistoric and contact period cemetery included at least 14 internments, 5 cremations, and scatters of human remains as well as associated artifacts were encountered. The resource boundaries are roughly coterminous with the LAUS property boundary. A portion of the Area of Direct Impacts for the proposed Alameda Station overlaps site Resource 19-001575. However, because the Native American cemetery is located approximately 500 feet east of the Area of Direct Impacts, the known cemetery is not anticipated to be impacted by construction. Nonetheless, due to the sensitivity of the of the area, Mitigation Measure CUL-F, archaeological testing and data recovery plan for Resource 19-001575, would be prepared and implemented to reduce impacts related to human remains to less than significant.

Additionally, three previously recorded resources (19-001112, 19-004218, 19-167106) within an eighth mile of the Area of Direct Impacts have known cemeteries. None of these resources are located within or adjacent to the Area of Direct Impacts.

The proposed Project would comply with California Health and Safety Code Section 7050.5 and PRC Section 5097 which requires that work be suspended in the immediate vicinity of the discovery and the Los Angeles County Coroner be contacted. If the remains are deemed to be Native American in origin, the County Coroner will contact the Native American Heritage Commission (NAHC), which will identify a Most Likely Descendant pursuant to PRC Section 5097.98 and CCR Section 15064.5. Work may be resumed at the landowner’s discretion, but will only commence after consultation and treatment have been concluded. Work may continue on other parts of the Project while consultation and treatment are conducted. With implementation of Mitigation Measure CUL-D and compliance with the California Health and Safety Code and PRC outlined above, construction impacts related to human remains for the proposed Project would be less than significant.

Operational Impacts

No Impact. Once construction of the proposed Project is complete, there would be no impact to human remains.

3.5.5 Project Design Feature

The Winery

CUL-PDF-A Pre-Construction Documentation of The Winery. Prior to or issuance of building permits for the Alameda Station, the Project Sponsor will prepare documentation equal to Historic American Building Survey Level III for The Winery, per the *Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation*. The report will:

1. Be prepared by a historic preservation professional meeting the Secretary of the Interior's Professional Qualifications Standards for history, architectural history, or historic architecture with demonstrated experience in preparing HABS documentation.
2. Include full-color digital photographs (with a minimum resolution of 300 ppi and 3,000-pixel image size along one dimension) showing the following:
    a. The full northern elevation (facing Cesar E. Chavez Avenue) and
        i. The roofline, foundation, and any door, window, or walkway openings,
        ii. Detail views showing the typical existing condition of the exterior wall, and
        iii. Detail views showing any existing damage to the exterior such as cracks or spalling
    b. West elevation (facing Olvera Street), and
        i. The roofline, foundation, and any door, window, or walkway openings, and
        ii. Detail views showing the typical existing condition of the exterior brick wall, and
        iii. Detail views showing any existing damage to the exterior such as loose bricks and mortar
    c. East elevation (facing Alameda Street)
        i. The roofline and foundation, and
        ii. Detail views showing the typical existing condition of the exterior brick wall, and
        iii. Detail views showing any existing damage to the exterior such as loose bricks and mortar

3. Include written descriptive data, including detailed notes of its pre-construction condition, index to photographs, and photo key plan. Photographs of existing damage will be keyed to a sketch of the elevation indicating its location.
4. Include copies of historic photographs and other supporting documentation, if available.
5. Be offered to the following repositories for use by future researchers and educators. Each repository will be contacted as to whether they are willing and able to accept the items, as well as their preferred format for transmittal. Copies need to only be distributed to repositories that express interest.
    a. Los Angeles Public Library - One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs
    b. El Pueblo de Los Angeles Historical Monument Authority - One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs
    c. California State Library – One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs

CUL-PDF-B Post-Construction Documentation of The Winery. Post-Construction: After construction is complete, pictures of The Winery equivalent to CUL-PDF-A will be taken to objectively compare the condition of The Winery before and after construction.

In the event that damage to the Winery not documented at the time of the pre-construction survey is identified as being caused by construction activities during construction monitoring, the Project Sponsor will retain an experienced professional or professionals qualified to carry out the repairs within 12 months of completion of the project. Repairs will conform to the Secretary of Interior's Standards for the Treatment of Historic Properties (36 CFR Part 68).

El Grito (The Cry) Mural Project Design Features

CUL-PDF- C Pre-Construction Documentation. Prior to the or issuance of building permits for the Alameda Station, the Project Sponsor will prepare documentation equal to Historic American Building Survey Level III for the *El Grito* mural, per the *Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation*. The report will:

1. Be prepared by a historic preservation professional meeting the Secretary of the Interior's Professional Qualifications Standards for history, architectural history, or historic architecture with demonstrated experience in preparing HABS documentation.
2. Include full-color digital photographs (with a minimum resolution of 300 ppi and 3,000-pixel image size along one dimension) showing the following:
    a. The entirety of the *El Grito* mural from edge to edge, looking straight on
    b. The left half of the *El Grito* mural looking straight on
    c. The right half of the *El Grito* mural looking straight on

d. Oblique views illustrating the curvature of the wall

e. Sequential photographs showing the various panels and subjects in greater detail

f. The back and sides of the curved wall on which the *El Grito* mural is located, and

g. Detail views showing:

i. Typical profile view of the *El Grito* mural (e.g., showing the depth of the tiles on the substrate)

ii. Notch shapes at the top two corners (two views, left and right)

iii. Curved shape of the sides of the *El Grito* mural (two views, left and right side)

iv. Typical grout between tiles in two or more locations,

v. Bottom edge where the *El Grito* mural meets the plaza floor

vi. Any existing damage or deterioration prior to construction

3. Include written descriptive data, including detailed notes of its pre-construction condition, index to photographs, and photo key plan. Photographs of existing damage should be keyed to a sketch of mural indicating its location.

4. Include copies of historic photographs and other supporting documentation, if available.

5. Be offered to the following repositories for use by future researchers and educators. Each repository will be contacted as to whether they are willing and able to accept the items, as well as their preferred format for transmittal. Copies need to be distributed to only repositories that express interest.

a. Los Angeles Public Library - One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs

b. UC Santa Cruz Library - One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs

c. Los Angeles Department of Cultural Affairs (DCA) - One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs

d. California State Library – One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs

e. Mural Conservancy of Los Angeles - One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs

f. Museo Eduardo Carillo - One hard copy and/or digital file (dependent on repository preference) of the descriptive data, index to photographs, photo key plan, and photographs

CUL-PDF-D Protection During Adjacent Construction. Prior to the issuance of building permits for the Alameda Station, the Project Sponsor will ensure that the *El Grito* mural is sufficiently protected from any inadvertent damage caused by construction activities. Following National Park Service guidance for protecting historical resources during nearby construction, the following measures, at a minimum, should be implemented:

1. Vibration monitoring equipment (VIB-A) should be carefully installed so that it does not permanently damage the face of the *El Grito* mural.
2. The *El Grito* mural should be cushioned and buttressed from either side of the wall with padded wood supports. The padding may consist of insulating foam or similar material.
3. A protective barrier or barriers made from plywood should be installed over the front, back, top, and sides of the *El Grito* mural and curved wall to diffuse the force of any potential physical contact. The barrier should include removable panels or a similar feature to ensure the vibration monitors and mural can be visually inspected during construction monitoring (CUL-PDF-C).
4. Plastic tarp or polyethylene sheeting should be secured over the wood barriers to protect against the accumulation of dust or contact with materials such as uncured concrete or other liquids that could damage or mark the surface of the *El Grito* mural.

All of the protective measures described above should be installed and secured in such a way that does not damage the *El Grito* mural or the wall on which is it located. The barrier will not be physically attached to the *El Grito* mural or wall with screws, nails, or other fasteners.

CUL-PDF-E Construction Monitoring Plan (Built Resources). Prior to the issuance of building permits for the Alameda Station, the Project Sponsor will prepare a Construction Monitoring Plan in coordination with the DCA. The Construction Monitoring Plan will identify specific project milestones at which a qualified professional meeting the Secretary of the Interior's Standards for architectural history or historic architecture will be notified by the Project Sponsor or Project Sponsor's contractor to visit the site and observe and document the *El Grito* mural's condition. Details will be recorded in construction monitoring memorandums submitted to DCA. These milestones will include, at a minimum:

1. Pre-Construction: Before protection measures are installed (CUL-PDF-D), to confirm the baseline condition of the *El Grito* mural is still consistent with the information presented in the HABS-like documentation (CUL-PDF-C).
2. Pre-Construction: Once protection measures (CUL-PDF-D) are installed, to ensure they are sufficient, and their installation has not damaged the *El Grito* mural.
3. Construction: After each phase of active construction.
4. Post-Construction: After construction is complete and protective measures have been removed. At this stage, pictures of the *El Grito* mural equivalent to CUL-PDF-C will be taken to objectively compare the condition of the *El Grito* mural before and after construction.

The Construction Monitor will also be included on notifications from the real-time vibration monitoring equipment (VIB-A).

In the event that damage to the *El Grito* mural not documented at the time of the pre-construction survey is identified as being caused by construction activities during construction monitoring, the Project Sponsor will retain an experienced professional or professionals qualified to carry out the repairs within 12 months of completion of the Project. Repairs will conform to the Secretary of Interior's Standards for the Treatment of Historic Properties 36 CFR Part 68.

3.5.6 Mitigation Measures

The following mitigation measures are proposed to reduce significant impacts related to cultural resources to a level than less than significant for the proposed Project.

Built Resources

VIB-A Vibration Monitoring (as described in Section 3.13, Noise and Vibration)

VIB-B Force Adjustable Ground Compaction Devices (as described in Section 3.13, Noise and Vibration)

Archaeological Resources

CUL-A Cultural Resources Monitoring and Mitigation Plan. A Cultural Resources Monitoring and Mitigation Plan (CRMMP) shall be prepared for the Project by a qualified archaeologist meeting the Secretary of Interior Standards for Archaeology (36 CFR § 61) prior to construction. Where specific Project components, such as the Chinatown/State Park Station, have requirements specific to that component, the CRMMP will lay out regulatory requirements (such as PRC § 5024) which will be adhered to. This includes SHPO consultation and following practices that seek to avoid and preserve state-owned historical resources, when prudent and feasible. The same would be for any specific requirement from El Pueblo de Los Angeles specific to the work at the Alameda Station. The General Plan acknowledges the Park has archaeological sensitivities and, as such, recommends continued study of existing and potential resources as well as the need to constantly update and expand the knowledge of historic activities at the Park. As for the cultural resources associated with the Park, the General Plan states that the Park should "[i]dentify, document, evaluate, and interpret cultural resources at the Park," and "[p]rotect, stabilize, and preserve significant cultural resources within the Park."

Specifically, the CRMMP shall be applicable to all ground-disturbance activities extending into native soil within known archaeological sites and other areas of high sensitivity. Excavations within a specified radius of known archaeological sites shall be monitored up to depth at which the qualified archaeologist determines the base of the archaeological deposit has been reached. The qualified archaeologist shall supervise the archaeological monitor. Monitoring is expected to be required to the maximum depth of planned excavations at the Alameda Station and up to approximately 15 feet in depth at the Alameda Tower and the Chinatown/State Park Station. Work will also be monitored by Native American monitors in accordance with Mitigation Measure TCR-A. However, if in the course of excavations the qualified archaeologist determines that the site is disturbed or the sensitivity for significant archaeological resources is low because no resources have been encountered, then monitoring may be reduced or suspended. The monitoring plan shall define pre-construction coordination, construction monitoring for the excavations based on activities and depth of disturbance planned for each Project component (including ground-disturbing activities in native soil within known archaeological sites), unanticipated discovery protocols, data recovery (including halting or diverting construction so that archaeological resources can be evaluated and recovered in a timeline manner), artifact and feature treatment, procurement (including a curation plan), and reporting. The Project Sponsor shall coordinate with the archaeologist and Metro to develop an appropriate treatment plan for the resources in accordance with California Public Resources Code (PRC) Section 21083.2(i) if they are determined by Metro to be potentially eligible for the CRHR or potentially qualify as unique archaeological resources pursuant to CEQA. Treatment may include implementation of archaeological data recovery excavations to remove the resource or preservation in place. Key staff shall be identified, and the process of notification and consultation (where entities specific to each station would be identified) shall be specified within the CRMMP as well as protocols for reporting.

If the discovery proves significant under CEQA, the archaeologist shall also be required to curate specimens in a repository with permanent retrievable storage and submit a written report to the lead agency within a year of completion of the fieldwork. Once complete, the final report shall be filed with the SCCIC.

For Resource 19-004200 and the granite paving (within the Area of Direct Impact of the Project) at Site 19-003120, the CRMMP shall describe the required documentation and treatment of the resources during excavation and removal.

CUL-B **Archaeological Resources Worker Training Program.** To mitigate unknown historical resources within the Area of Direct Impacts and mitigate potential impacts to them, qualified archaeologist shall be hired by the Project Sponsor to develop and conduct a worker training program for the Project with input from El Pueblo (as it pertains to the Alameda Station) and Los Angeles State Historic Park staff (as it pertains to the Chinatown/State Park Station) prior to the start of ground-disturbing activities. The training shall be prepared by an archaeologist who meets the Secretary of the Interior's Standards for Archaeology and will be adjusted to the specific details at the two parks. The training shall provide information to construction workers about the known locations of archaeological resources and potential areas that may be sensitive for archaeological resources associated with the Project. Participation in the training by Los Angeles State Historic Park and El Pueblo staff, will be encouraged. In the event construction crews are phased or rotated, additional training shall be conducted for the new construction workers conducting ground-disturbing activities. The qualified archaeologist shall retain documentation demonstrating that the appropriate construction workers attended the worker training program. An appropriate presentation shall be prepared by a qualified archaeologist which shall describe and illustrate resources likely to be encountered by Project excavation and outline the protocol to be followed in the event of a find. If any archaeological resources are encountered during ground-disturbing activities, work shall be temporarily halted in the vicinity of the find, and the Construction Contractor shall contact the qualified archaeologist to examine and evaluate the resource in accordance with the provisions of CEQA as outlined by the CRMMP.

CUL-C Archaeological Testing Plan for 19-000887 and 19-004320 (Alameda Station). To mitigate impacts to Resources 19-000887 and 19-004320, both of which include portions of the Zanja, an NRHP-eligible archaeological site, and where avoidance is not feasible, an archaeological testing plan and data recovery plan for the Area of Direct Impacts, which is located north of the Placita de Dolores, shall be prepared prior to ground-disturbing activities and implemented after the paving is removed. Although the proposed Project is designed to not impact the portion of the Zanja Madre within 19-000887, there is the potential to encounter either previously unrecorded portions of the Zanja or artifact refuse from the overall site. Therefore, a testing plan shall be prepared for the portions of the sites that will be impacted outside of the known Zanja location. Within the Project Area of Direct Impacts, 19-000887 overlaps unevaluated 19-004320 which will, therefore, also be included in the testing plan. The testing plan shall be prepared in consultation with El Pueblo de Los Angeles Historical Monument Authority specific to these resources at the Alameda Station.

The testing plan shall propose limited archaeological excavations of a portion of the site overlapping the Area of Direct Impacts and contain maps showing the overlap of the sites with the project Area of Direct Impacts. The test excavations are intended to identify the location, integrity, and significance of archaeological deposits that may be impacted by the proposed Project. The testing plan shall outline excavation locations and methods, such as where and in what soils mechanical excavations may or may not be used, screen sizes, and the criteria thresholds that would require data recovery. The testing plan shall be implemented once the paving has been removed and far enough in advance of construction for there to be sufficient time to carry out the plan and to prepare a plan for and conduct a data recovery program if needed.

If significant archaeological remains are encountered that appear to contribute to the significance of the overall site during the test excavations, data recovery excavations will be required, and a data recovery plan shall be prepared and implemented. The data recovery plan shall detail the treatment of the surviving archaeological remains, if testing identifies any. The data recovery plan will specify a statistically significant sample of the site to be excavated and shall describe the specific tools, screening size, and methods to be used. The plan shall describe how structural remains, if any, will be exposed and mapped. Laboratory studies planned for the analysis of the finds shall also be described.

CUL-D Archaeological Testing Plan for LAUS Forecourt. To mitigate impacts to Resource 19-001575, an NRHP-eligible archaeological site, an archaeological testing plan and data recovery plan for the Area of Direct Impacts shall be prepared and implemented prior to ground-disturbing activities. The testing plan shall propose limited archaeological excavations of a portion of the site overlapping the Area of Direct Impacts. The test excavations are intended to identify the location, integrity, and significance of archaeological deposits that may be impacted by the proposed Project. The testing plan shall outline excavation locations and methods, such as where and in what soils mechanical excavations may or may not be used, screen sizes, and the criteria threshold that would require data recovery.

If significant archaeological remains are encountered that appear to contribute to the site's NRHP and CRHR eligibility during the test excavations, data recovery excavations will be required, and the data recovery plan shall be implemented. The data recovery plan shall specify a statistically significant sample of the site to be excavated and shall describe the specific tools, screening size, and methods to be used. The plan shall describe how structural remains, if any, will be exposed and mapped. Laboratory studies planned for the analysis of the finds shall also be described.

CUL-E Archaeological Testing Plan for Los Angeles State Historic Park. To mitigate unavoidable impacts to Resource 19-003120, an NRHP-eligible archaeological site, an archaeological testing plan and data recovery plan for the Area of Direct Impacts shall be prepared and implemented prior to ground-disturbing activities. The testing plan shall be prepared in consultation with California State Parks and SHPO (per PRC § 5024.5). The testing plan shall propose limited archaeological excavations of a portion of the site overlapping the Area of Direct Impacts. The test excavations are intended to identify the location, integrity, and significance of archaeological deposits that may be impacted by the proposed Project; and will specifically be used to confirm and define potential foundations for the Southern Pacific Railroad office/freight house that are shown in Sanborn fire insurance maps to overlap the Area of Direct Impacts for the station. The plan shall outline excavation locations and methods, such as where and in what soils mechanical excavations may or may not be used, screen sizes, and the criteria thresholds that would require data recovery.

If significant archaeological remains are encountered that appear to contribute to the site's NRHP and CRHR eligibility during the test excavations and avoidance/ preservation-in-place is not possible, data recovery excavations will be required, and the data recovery plan shall be implemented. The plan shall specify a statistically significant sample of the site to be excavated and shall describe the specific tools, screening size, and methods to be used. The plan shall describe how structural remains, if any, will be exposed and mapped. Laboratory studies planned for the analysis of the finds shall also be described.

CUL-F Redesign of Placement of Park Amenity Structures to Avoid Archaeological Features at Los Angeles State Historic Park Station. After implementation of CUL-E, if it is found that the Los Angeles State Historic Park amenities (e.g., concessions and restroom) at the Los Angeles State Historic Park have the potential to impact any significant features found during the testing phase of CUL-E, the location of the Los Angeles State Historic Park amenity structures will be reconfigured to avoid and/or diminish impacts to those features as feasible.

3.5.7 Level of Significance after Mitigation

Upon implementation of Mitigation Measures VIB-A and VIB-B, potentially significant impacts related to the historical resource, the *El Grito (The Cry)* Mural, the Los Angeles Plaza Historic District, and The Winery, would be reduced to less than significant under the proposed Project.

Upon implementation of Mitigation Measures CUL-A through CUL-F, potentially significant impacts related to archaeological resources would be reduced to less than significant under the proposed Project.

Upon implementation of Mitigation Measure CUL-A, potentially significant impacts related to human remains would be reduced to less than significant under the proposed Project.

This page intentionally left blank.

3.6 Energy

This section evaluates the impacts on energy demand from construction and operation of the proposed Project. The information contained in this section is summarized from the *Los Angeles Aerial Rapid Transit Project Energy Technical Report* (Appendix H of this Draft EIR). Presented below is an overview of the federal, State, and local laws and regulations pertaining to energy; an overview of California's energy production, supply, and consumption; and the methodology used to evaluate energy resources related to the Project. The analysis evaluates the potential impacts on those energy resources as a result of implementation of the Project.

3.6.1 Regulatory Framework

3.6.1.1 Federal

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 established the first fuel economy standards for on-road motor vehicles in the United States. The act requires that all vehicles sold in the United States meet certain fuel economy goals, known as the Corporate Average Fuel Economy (CAFE) standards. The National Highway Traffic Safety Administration (NHTSA) of the U.S. Department of Transportation administers the CAFE program, and the U.S. Environmental Protection Agency (USEPA) provides the fuel economy data.

In 2007, the USEPA, the U.S. Department of Transportation, and the U.S. Department of Energy established regulations that reduced greenhouse gas (GHG) emissions from motor vehicles, non-road vehicles, and non-road engines. In 2009 and 2010, the NHTSA and USEPA issued final rules regulating fuel efficiency and GHG emissions for cars and light-duty trucks for model years 2011–2016.

Federal Vehicle Standards were established in 2010 for additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response, the USEPA and NHTSA proposed and adopted stringent, coordinated federal GHG and fuel economy standards for model year 2017–2025 light-duty vehicles. In 2011, the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018.[1] The standards for carbon dioxide (CO_2) emissions and fuel consumption were tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. In August 2016, the USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion metric tons (MT) and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program.

In 2019, the USEPA and NHTSA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One, which revoked California's authority to set its own GHG standards and set zero emission vehicle mandates in California.[2] The SAFE Rule (Part One) freezes requirements for

1 USEPA and NHTSA. 2016. Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium and Heavy-Duty Engines and Vehicles – Phase 2. Available at: https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed April 2022.

2 USEPA and NHTSA. 2019. Federal Register, Vol. 84, No. 188, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. September 27. Available at: https://www.govinfo.gov/content/pkg/FR-2019-09-27/pdf/2019-20672.pdf. Accessed April 2022.

new zero emission vehicles (ZEV) sales at model year 2020 levels for year 2021 and beyond. The rule will likely result in a lower number of future ZEVs and a corresponding greater number of future gasoline internal combustion engine vehicles. The SAFE Rule is subject to ongoing litigation and on February 8, 2021, the D.C. Circuit Court of Appeals granted the Biden Administration's motion to stay litigation over Part 1 of the SAFE Rule. On April 22 and April 28, 2021, respectively, NHTSA and USEPA formally announced their intent to reconsider the Safe Rule (Part One).[3] [4] In December 2021, after reviewing the public comments submitted on NHTSA's April 2021 Notice of Proposed Rulemaking, NHTSA finalized the CAFE Preemption rulemaking to withdraw its portions of the SAFE Rule (Part One).[5] Also in December 2021, USEPA finalized revised national GHG emissions standards for passenger cars and light trucks for model years 2023–2026.[6] On March 9, 2022, USEPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and ZEV sales mandate and entirely rescinded the SAFE Rule (Part One).

Energy Policy Act and Energy Independence and Security Act

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provides incentives for reducing demand on non-renewable energy resources. It established the first renewable fuel volume mandate in the United States. The original Renewable Fuel Standard program required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the Energy Independence and Security Act of 2007, the Renewable Fuel Standard program was expanded to include diesel and to increase the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.

American Recovery and Reinvestment Act

The American Recovery and Reinvestment Act of 2009 sought to maintain existing jobs and create new jobs in response to the economic crisis of the late 2000s. The secondary objectives of the act were to invest in green energy programs, including funding through grants, loans, or other mechanisms of the following: private companies developing renewable energy technologies; local and State governments implementing energy efficiency and clean energy programs; research in renewable energy, biofuels, and carbon capture; and development of high-efficiency or electric vehicles.[7]

Intermodal Surface Transportation Efficiency Act

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 promotes the development of intermodal transportation systems, that is, systems that use two or more modes of

---

3 NHTSA. 2021. NHTSA Advances Biden-Harris Administration's Climate & Jobs Goals. April 22. Available at: https://www.nhtsa.gov/press-releases/nhtsa-advances-biden-harris-administrations-climate-jobs-goals. Accessed April 2022.

4 USEPA. 2021. Federal Register, Vol. 86, No. 80, California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a previous Withdrawal of a Waiver of Preemption; Opportunity for Public Hearing and Public Comment. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/notice-reconsideration-previous-withdrawal-waiver. Accessed April 2022.

5 NHTSA. 2021. NHTSA Repeals SAFE I Rule. December 21. Available at: https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy. Accessed: April 2022.

6 USEPA. 2021. Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed April 2022.

7 USEPA. 2009. Recovery: EPA Gets Involved. Available at: https://archive.epa.gov/recovery/web/html/. Accessed April 2022.

transportation, to maximize mobility and address national and local interests in energy and air quality. ISTEA guides metropolitan planning organizations (MPOs), such as the Southern California Association of Governments (SCAG), on factors to address when developing transportation plans and programs. To meet the ISTEA requirements, MPOs have adopted explicit policies defining the social, economic, and environmental values that guide transportation decisions. MPOs must also consider the consistency of transportation planning with federal, State, and local energy goals. With this requirement, energy consumption, cost, and other values are expected to be determining factors when choosing the best transportation solutions.

Transportation Equity Act for the 21st Century

The Transportation Equity Act for the 21st Century (TEA-21), enacted in 1998, builds on the initiatives established in the previously mentioned ISTEA. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to benefit the environment, and focus on a strong planning process, as the foundation of efficient transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through processes such as the deployment of Intelligent Transportation Systems to help improve operations and management and vehicle safety.

Executive Order 14008

On January 27, 2021, President Biden issued an Executive Order on Tackling the Climate Crisis at Home and Abroad (Executive Order 14008).[8] Part I of the order highlights placing the climate crisis at the center of United States foreign policy and national security. Addressing the climate crisis will require significant short-term global reductions in GHG emissions and net-zero global emissions by mid-century or sooner. The United States will pursue green recovery efforts and initiatives to advance the clean energy transition.

Part II of the order relays the government-wide approach to the climate crisis, which involves reducing climate pollution in every sector of the economy, especially through innovation, commercialization, and deployment of clean energy technologies and infrastructure. A National Climate Task Force is established to focus on addressing the climate crisis through key federal actions to reduce climate change impacts. A 100 percent carbon pollution-free electricity sector is targeted by no later than 2035 and a net-zero emissions economy is to be achieved by no later than 2050. Offshore wind is aimed to be doubled by 2030.

3.6.1.2 State

Assembly Bill 32 and Senate Bill 32

The California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) instructed the California Air Resources Board (CARB) to develop and enforce regulations for the reporting and verification of statewide GHG emissions. Carbon dioxide that results from fossil fuel consumption makes up the bulk of GHG emissions in California. Therefore, reduced fuel and increased energy

8 White House Briefing Room. 2021. Executive Order on Tackling the Climate Crisis at Home and Abroad. Available at: https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/. Accessed April 2022.

efficiency typically corresponds with a reduction in GHG emissions. The bill directed CARB to set a statewide limit for GHG emissions based on 1990 levels, to be achieved by 2020.

AB 32 requires CARB to adopt rules and regulations in an open public process to achieve the maximum potential in technologically feasible and cost-effective GHG reductions. In December 2008, CARB adopted its Climate Change Scoping Plan: A Framework for Change (Scoping Plan), which includes the State's strategies for achieving AB 32's reduction targets. These strategies are implemented with additional rules and regulations regarding energy analysis, such as the Advanced Clean Cars Program, the low carbon fuel standard, the Title 24 building efficiency standards, and the Renewable Portfolio Standard (RPS). These are discussed further below. In 2014, CARB adopted the *First Update to the Climate Change Scoping Plan: Building on the Framework* (2014 First Update).[9] The stated purpose of the 2014 First Update is to "highlight … California's success to date in reducing its GHG emissions and lay … the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050."[10] In November 2017, CARB published California's 2017 Climate Change Scoping Plan (2017 Scoping Plan), which was subsequently adopted by CARB's Board in December 2017.[11] The 2017 Scoping Plan identifies CARB's strategy for achieving the State's 2030 GHG target as established in SB 32. The strategy includes continuation of the Cap-and-Trade Program through 2030 and incorporates a Mobile Source Strategy that includes strategies targeted to increase zero emission vehicle fleet penetration and a more stringent target for the Low Carbon Fuel Standard by 2030. The 2022 Scoping Plan Update, which is currently under review, assesses progress toward the statutory 2030 target while laying out a path to achieving carbon neutrality no later than 2045.[12]

Senate Bill (SB) 32 was enacted in 2016 to expand on AB 32. SB 32 codifies a 2030 GHG emissions reduction goal and requires that CARB ensures that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. Similar to AB 32, a reduction in GHG emissions typically corresponds with a reduction in energy usage, as the bulk of GHG emissions results from fossil fuel combustion.

Integrated Energy Policy Report Update

The Integrated Energy Policy Report (IEPR) Update provides an assessment of major energy trends and issues for a variety of energy sectors as well as policy recommendations.[13] Prepared by the California Energy Commission (CEC), this report details the key energy issues facing California and develops potential strategies to address these issues. The 2020 IEPR Update includes a discussion of several strategies and recommendations to reduce climate change impacts and energy consumption, such as California's transportation future, the transition to zero-emission vehicles, and the potential of microgrids to contribute to a clean and resilient energy

9 Health & Safety Code Section 38561(h) requires CARB to update the Scoping Plan every five years.

10 CARB. 2014. First Update to the Climate Change Scoping Plan: Building on the Framework. May. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2013-scoping-plan-documents. Accessed April 2022.

11 CARB. 2017. California's 2017 Climate Change Scoping Plan. November. Available at: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed April 2022.

12 CARB. 2022. 2022 Scoping Plan Documents. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents#:~:text=The%202022%20Scoping%20Plan%20Update%20focuses%20on%20outcomes%20needed%20to,economic%2C%20environmental%2C%20energy%20security%2C. Accessed June 2022.

13 CEC. Integrated Energy Policy Report - IEPR. Available at: https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report. Accessed April 2022.

system. The CEC will use the assessments and forecasted energy demand within the IEPR to develop future energy policies.

Title 24 Building Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24 California Code of Regulations Part 6, were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy-efficiency technologies and methods for building features such as space conditioning, water heating, lighting, and whole envelope. The 2005, 2008, 2013, and 2016 updates to the efficiency standards included provisions such as cool roofs on commercial buildings; increased use of skylights; and higher-efficiency lighting, heating, ventilation, and air conditioning (HVAC) and water-heating systems.

The 2019 Title 24 standards are the currently applicable building energy-efficiency standards, and they became effective on January 1, 2020. The 2019 updates include a requirement for solar photovoltaic systems for new homes, requirements for newly constructed healthcare facilities, additional high-efficiency lighting requirements, high-performance attics and walls, higher-efficiency water and space heaters, and high-efficiency air filters.

The California Public Utilities Commission (CPUC), CEC, and CARB also have a shared, established goal of achieving Zero Net Energy (ZNE) for new construction in California. The ZNE goal generally means that new buildings must use a combination of improved efficiency and renewable energy generation to meet 100 percent of their annual energy need, as specifically defined by the CEC. The CEC has more recently focused on grid harmonization strategies to bring maximum benefits to the grid, the environment, and occupants and GHG emissions reductions.[14]

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24), which is commonly referred to as CalGreen Building Standard (CalGreen), establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. Like Part 6 of Title 24, the CalGreen standards are periodically updated, with increasing energy savings and efficiencies associated with each code update.

Renewables Portfolio Standard

SB 1078 (2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to obtain at least 20 percent of their energy supply from renewable sources by 2017. SB 107 (2006) updated the target date to 2010. In November 2008, then-Governor Schwarzenegger signed Executive Order S-14-08, which expanded the State's RPS to 33 percent renewable power by 2020. In April 2011, then-Governor Brown signed SB 2X, which legislated the prior Executive Order S-14-08's RPS. SB 350 (2015) set an additional RPS goal of 50 percent renewable power by 2030. SB 100 (2018) accelerated and extended the goal, requiring achievement of a 50 percent RPS by 2026 and a 60 percent RPS by 2030. SB 100 also established a State policy goal to achieve 100 percent carbon-free electricity by 2045, a goal that

[14] CEC. 2018. California's Pioneering Policies for New Homes: Greater Efficiency with Required Solar Energy. Available at: https://www.cesa.org/wp-content/uploads/CESA-webinar-slides-9.11.2018.pdf. Accessed April 2022.

was accompanied by Executive Order B-55-18 (2018), which established a goal to achieve carbon neutrality as soon as possible, and no later than 2045 achieve and maintain net negative GHG emissions thereafter.[15]

Senate Bill 743

Public Resources Code Section 21099(c)(1), as codified through SB 743, was enacted to change the focus of transportation analyses conducted under the California Environmental Quality Act (CEQA). SB 743 reflects a legislative policy to balance the needs of congestion management with Statewide goals related to infill development, promotion of public health through active transportation, and reduction of GHG emissions. As finalized in December 2018, amendments to the State CEQA Guidelines adopted in furtherance of SB 743 establish vehicle miles traveled (VMT), in lieu of level of service (LOS), as the new metric for transportation analysis. Implementation of SB 743 is anticipated to reduce transportation fuel consumption.

Senate Bill 375

SB 375, the Sustainable Communities and Climate Protection Act, coordinates land use planning, regional transportation plans, and funding priorities to reduce GHG emissions from passenger vehicles through improving regional transportation, land use, and housing planning to provide easier access to jobs, services, public transit, and active transportation options. SB 375 requires that the MPO for the Project area include a Sustainable Communities Strategy (SCS) in its Regional Transportation Plan (RTP) that will achieve CARB's GHG emission reduction targets by reducing VMT from light-duty vehicles by developing more compact, complete, and efficient communities. SB 375's targets for the Southern California region under SCAG's jurisdiction in 2020 and 2035 are reductions in per capita GHG emissions of 8 percent and 19 percent, respective to 2005.[16] As part of SCAG's 2020–2045 RTP/SCS, the SCS called Connect SoCal was prepared to comply with the emission reduction targets established by CARB. Connect SoCal meets the requirements of SB 375 by achieving GHG emission reductions at 8 percent below 2005 per capita emissions levels by 2020 and 19 percent below 2005 per capita emissions levels by 2035.

Advanced Clean Cars Program

The Advanced Clean Cars Program established an emissions control program for cars and light-duty trucks (such as sport utility vehicles [SUVs], pickup trucks, and minivans) of model years 2017–2025. With future implementation of the program, new vehicles would emit 75 percent less smog-forming pollutants than the current new car, and GHG emissions would be reduced by nearly 35 percent. The Advanced Clean Cars Program would help reduce fossil fuel consumption for internal combustion engine–powered vehicles. In 2018, the USEPA and NHTSA proposed to amend certain existing CAFE standards for passenger cars and light trucks and to establish new standards for model years 2021–2026. The proposal would increase U.S. fuel consumption compared to maintaining the post-2020 standards now in place.[17]

---

15 California Executive Department. 2018. Executive Order B-55-18 to Achieve Carbon Neutrality. Available at: https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf. Accessed June 2022.

16 CARB. SB 375 Regional Plan Climate Targets. Available at: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed April 2022.

17 Federal Register. 2018. The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks. Available at: https://www.federalregister.gov/documents/2018/08/24/2018-

Commercial Motor Vehicle Idling Regulation

In July 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to limit the idling of diesel-fueled commercial motor vehicles (it has since been amended). The ATCM, set forth in Title 13 California Code of Regulations Section 2485, requires drivers of diesel-fueled commercial motor vehicles with gross vehicle weight ratings greater than 10,000 pounds, including buses and sleeper berth equipped trucks, to refrain from idling the vehicle's primary diesel engine for longer than five minutes at any location. This anti-idling regulation helps to reduce fuel consumption by reducing engine usage. The ATCM also requires owners and motor carriers that own or dispatch these vehicles to be compliant. The regulation consists of new engine and emission performance requirements for technologies used as alternatives to idling the truck's main engine. Under the new engine requirements, model years starting from 2008 with heavy-duty diesel engines need to be equipped with a non-programmable engine shutdown system that would automatically shut down the engine after five minutes of idling or optionally meet a stringent idling emission standard for oxides of nitrogen.

In-Use Off-Road Diesel Fueled Fleets Regulation

In May 2008, CARB approved the In-Use Off-Road Diesel Fueled Fleets Regulation (Off-Road Regulation), which was subsequently amended. The purpose of the Off-Road Regulation is to reduce emissions of oxides of nitrogen (NO_X) and particulate matter (PM) from off-road diesel vehicles operating in California. The regulation applies to all self-propelled off-road diesel vehicles with 25 horsepower or greater and most two-engine vehicles. The Off-Road Regulation includes the following requirements:

- Limits on vehicle idling, a written idling policy, and a disclosure when selling vehicles
- All vehicles are to be reported to CARB (using the Diesel Off-Road Online Reporting System [DOORS]) and labeled
- Restrictions on older vehicles being added into fleets starting on January 1, 2014
- Fleets are to reduce their emissions by retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies

The anti-idling component of this Off-Road Regulation helps to reduce fuel consumption by limiting engine usage.

Tractor-Trailer Greenhouse Gas Regulation

CARB's Tractor-Trailer Greenhouse Gas regulation was approved in 2008 to reduce the energy consumption of large trucks.[18] CARB developed this regulation to create more fuel-efficient heavy-duty tractors. The tractors and trailers subject to this regulation must either use USEPA's SmartWay certified tractors and trailers or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers and the heavy-duty tractors that pull these trailers. These owners are responsible for replacing or

16820/the-safer-affordable-fuel-efficient-safe-vehicles-rule-for-model-years-2021-2026-passenger-cars-and. Accessed April 2022.

18 CARB. Tractor-Trailer Greenhouse Gas Regulation. Available at: https://ww2.arb.ca.gov/our-work/programs/ttghg#:~:text=The%20California%20Air%20Resources%20Board,Regulation%20took%20effect%20in%202010. Accessed April 2022.

retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. All owners, regardless of where their vehicle is registered, must comply with the regulation when they operate their affected vehicles on California highways. In addition, drivers, motor carriers, California-based brokers, and California-based shippers that operate or use these vehicles must be compliant with the regulation.

Advanced Clean Trucks

The Advanced Clean Trucks regulation was approved in June 2020. The main objectives of this regulation include a manufacturer's ZEV sales requirement and a one-time reporting requirement for large entities and fleets.[19] Other goals include reducing NO_X and GHG emissions through advanced clean technology and increasing the implementation of zero-emission heavy-duty technology into relevant applications.

Executive Order N-79-20

On September 23, 2020, California Governor Gavin Newsom issued Executive Order N-79-20, which requires all new passenger vehicles sold in California and all off-road vehicles and equipment be zero-emission where feasible by 2035, while all medium- and heavy-duty vehicles be zero-emission where feasible by 2045. Governor Newsom ordered extensive inter-agency efforts to support the order, including evaluations of technological feasibility and cost-effectiveness, expansion of electric vehicle charging options and affordable fueling, and identification of near-term strategies to increase zero-emission public transportation options.

The Executive Order was aimed at transitioning away from fossil fuel dependence in the state, with emphasis on transportation initiatives. However, Governor Newsom addressed efforts to repurpose oil production facilities and extraction sites while continuing the State's existing goals to reduce the carbon intensity of fuels.

2020 Mobile Source Strategy

CARB staff is developing the 2020 Mobile Source Strategy to take an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve California's targets. The 2020 Mobile Source Strategy was heard by the CARB Board on October 28, 2021, and will be forwarded to the appropriate policy and fiscal committees of the California Legislature as required by SB 44 (Skinner). The 2020 strategy continues the multi-pollutant planning approach to illustrate the pathways forward for the various mobile sectors that are necessary to achieve California's numerous goals and targets over the next 30 years. As specified in SB 44, the 2020 strategy includes scenarios and programmatic concepts that comprehensively address the mechanisms needed to provide for the deployment of clean medium- and heavy-duty on-road vehicles.[20]

3.6.1.3 Regional

2019 Metro Climate Action and Adaptation Plan

First published and approved by the Los Angeles County Metropolitan Transportation Authority (Metro) Board in June 2012, the Climate Action and Adaptation Plan (CAAP) establishes a

---

19 CARB. Advanced Clean Trucks. Available at: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks. Accessed April 2022.

20 CARB. 2020 Mobile Source Strategy. Available at: https://ww2.arb.ca.gov/resources/documents/2020-mobile-source-strategy. Accessed April 2022.

framework to identify the areas of greatest opportunity for Metro to reduce GHG emissions and evaluates opportunities based on their cost and the volume of emissions reduction. Metro's influence on GHG emissions extends to all of Los Angeles County's transportation systems.

The 2019 CAAP outlines how Metro will reduce operational GHG emissions and protect riders from climate change. Since the adoption of the first CAAP, Metro has reported that its GHG emissions have decreased by 12 percent, despite an increase in service of 4 percent.[21] The CAAP includes a GHG emissions inventory for Metro activities from 2017 and demonstrates how these emissions are expected to change by 2030 and 2050. Metro outlines 13 GHG reduction measures in the CAAP that will enable Metro to achieve a goal of 79 percent reduction in emissions relative to 2017 levels by 2030 and 100 percent by 2050. The CAPP also includes climate adaptation actions to protect Metro infrastructure, along with Metro staff and riders.

Metro Vision 2028 Strategic Plan

Metro approved the Vision 2028 Strategic Plan ("Vision 2028") in June 2018 following the passage of Measure M in November 2016, a voter-approved sales tax anticipated to add $120 billion in transportation funds to the Los Angeles Metropolitan area over the next 40 years. By 2028, Metro intends to double the percentage of use of transportation modes outside of passenger vehicles, which generate the highest GHG emissions per person per trip. Vision 2028 aims to accomplish the following: ensuring that County residents have access to high-quality mobility options within a 10-minute distance from home, reducing trip wait to a maximum of 15 minutes at any time, improving average travel speeds on the County's bus network by 30 percent, and providing reliable and convenient options to avoid congestion.

Metro Green Construction Policy

Metro adopted a Green Construction Policy in August 2011 and committed to using more sustainable construction equipment and vehicles for all construction projects performed on Metro properties and in Metro rights-of-way. The Green Construction Policy also committed to implementing best practices to reduce emissions. Under the policy, all off-road diesel-powered construction equipment of greater than 50 horsepower is required to meet Tier-4 off-road emissions standards. In addition, idling of construction equipment shall be restricted to 5 minutes unless certain exemptions apply, and construction equipment shall incorporate, where feasible, emissions-reduction technologies such as hybrid drives and specific fuel economy standards.

Metro Moving Beyond Sustainability Strategic Plan

In September 2020, the Metro Board of Directors approved Moving Beyond Sustainability, a plan outlining a comprehensive strategy for the next decade to make Metro facilities greener, reduce air pollution and trash from construction, and reduce smog and GHGs across Los Angeles County. The plan has goals tied to water quality and conservation, solid waste, materials, construction and operations, energy resource management, emissions and pollution control, resilience and climate adaptation, and economic and workforce development. Moving Beyond Sustainability will be updated every five years with formal progress reports every two years and annual performance updates. It is also designed to align with and support parallel efforts and

21 Metro. 2019. Metro Climate and Adaptation Plan 2019. Available at: https://media.metro.net/projects_studies/sustainability/images/Climate_Action_Plan.pdf. Accessed April 2022.

plans under way at the City of Los Angeles (City) and Los Angeles County, including the Green New Deal and Our County.[22]

3.6.1.4 Local

Sustainable City pLAn and Los Angeles' Green New Deal

The Sustainable City pLAn (pLAn), first introduced by Mayor Eric Garcetti in April 2015, identifies goals and strategies to improve sustainability for the city within the areas of environment, economy, and equity. In April 2019, Mayor Garcetti released the Los Angeles Green New Deal, which provided greater detail to the former pLAn, and proposed new goals and accelerated targets, inspired by the initiatives set forth in the 2017 Paris Climate Agreement.[23] With respect to energy consumption, the Green New Deal committed to increasing solar power generation and energy efficiency, and accelerated the City's commitment to attaining GHG reductions, with goals of reducing levels by 50 percent by 2025, 73 percent by 2035, and 100 percent by 2050 in comparison to the 1990 baseline emissions. Other targets include a 13 percent reduction in VMT per capita by 2025 and a 39 percent reduction by 2035 as well as increasing the percentage of trips made by walking, biking, or transit to 35 percent by 2025, 50 percent by 2035, and maintaining a percentage of at least 50 percent by 2050.

LADWP 2017 Strategic Long-Term Resource Plan

The Los Angeles Department of Water and Power (LADWP) Strategic Long-Term Resource Plan (SLTRP) was first developed in 2017 as an expansion of the existing Power Integrated Resource Plan (IRP). The SLTRP provides an in-depth analysis of 11 different energy portfolio case scenarios that extend through 2050. The recommended scenario most effectively balances economic feasibility, risk, reliability, and environmental priorities with the city's future energy demands. LADWP determined that the recommended scenario (Case 8MLS) would rely on measures such as coal power replacement by 2025, 1,500 megawatts (MW) of solar energy by 2035, and high electrification of the transportation sector.

Central City Community Plan

The Central City Community Plan addresses the need to improve transportation and circulation, and identifies the opportunity for a network of rail, bus, and freeways to provide multimodal and comprehensive geographic access. Although the community plan does not include any directly applicable goals and objectives related to energy, the community plan sets objectives and policies to address issues with congestion within the regional transportation network such as keeping downtown as the focal point of the regional mobility system (Objective 11-1) and providing an internal circulation system with a focus of connecting specific pairs of activity centers to a system that provides greater geographic coverage of downtown, thus giving the downtown traveler more choices and more flexibility (Objective 11-3), which inherently have an energy nexus. These improvements in transportation and circulation would affect energy use.

Central City North Community Plan

The Central City North Community Plan includes programs using Transportation Demand Management strategies to encourage vehicular trip reduction that would inherently have an

[22] Ibid.

[23] City of Los Angeles. L.A.'s Green New Deal: Sustainable City pLAn. Available at: https://plan.lamayor.org/sites/default/files/pLAn_2019_final.pdf. Accessed April 2022.

energy nexus. These strategies include implementing Clean Air Program projects for ridesharing and transit ridership, using market incentives to achieve regional levels of trip reduction as mandated by the State and federal Clean Air Acts, and encouraging regional agencies to consider further measures such as carpooling and commute assistance for work trips. These programs tie into the overall goals of the community plan to encourage alternative modes of transportation; maintain a safe, efficient freeway and street network; and to develop a public transit system that improves mobility, which in turn would affect energy use. Specifically, Goal 10 calls to develop a public transit system that improves mobility with convenient alternatives to automobile travel. Goal 12 calls for pursuit of transportation management strategies that can maximize vehicle occupancy, minimize average trip length, and reduce the number of vehicle trips.

Silver Lake–Echo Park–Elysian Valley Community Plan

The Silver Lake–Echo Park–Elysian Valley Community Plan addresses the need to improve transportation and circulation and identifies the opportunity to encourage the implementation of regional transportation solutions that will minimize the impact of commuter traffic on the plan area. Although the community plan does not include any directly applicable goals and objectives related to energy, the community plan sets objectives and policies to address issues with transportation such as to develop a public transportation system that improves mobility with convenient alternatives to the automobile (Goal 10) and to encourage alternative modes of transportation to the use of single-occupant vehicles to reduce vehicular trips (Goal 11), which inherently have an energy nexus. These improvements in transportation would affect energy use.

Proposed DTLA 2040 Community Plan

The City of Los Angeles is currently in the process of updating the Central City and Central City North Community Plans through the Downtown Los Angeles 2040 Draft Community Plan. Because it is unknown when the new community plan would be adopted and its EIR certified, the analysis in this section is based on the current Community Plans.

3.6.2 Environmental Setting

3.6.2.1 California's Energy Production and Natural Gas Supply

Among U.S. states, California ranks seventh in the nation in production of crude oil, fourteenth in the production of natural gas, fourth in generation of hydroelectric power, and first as a producer of electricity from biomass, geothermal, and solar energy.[24] Approximately 10 percent of the natural gas produced by California is used in the state, while approximately 90 percent is imported from Canada, the Southwest, and the Rocky Mountains region of the United States. Over half of the crude oil refined in California is imported from foreign countries, including Saudi Arabia, Ecuador, and Colombia. Additional crude oil is imported from Alaska. Over a quarter of California's electricity is from regions in the Pacific Northwest and the Southwest.[25]

The production of electricity requires the combustion, consumption, or conversion of other energy resources, including water, wind, oil, natural gas, coal, solar, geothermal, and nuclear. Of the electricity that is generated within the state, 48 percent is generated by natural-gas-fired power

[24] U.S. Energy Information Administration. 2022. California State Profile and Energy Estimates: Profile Overview. Available online at: http://www.eia.gov/state/?sid=CA. Accessed April 2022.

[25] *Ibid*.

plants, 9 percent by nuclear power plants, 9 percent by hydroelectric, and 33 percent by other renewables. [26]

Natural gas supplies the largest portion of California's electricity market, and natural gas-fired power plants in California meet approximately 37 percent of the in-state electricity demand.[27] Natural gas is also widely used for industrial, commercial, and residential heating. Most of the natural gas consumed in California comes from the Southwest, the Rocky Mountain region, and Canada, and the remainder is produced in California. Contractually, California can receive natural gas from any producing region in North America, but it can only take supplies from these three producing regions due to the current pipeline configuration.

For the City of Los Angeles, LADWP is the sole supplier of electricity to businesses and residents of the area. In 2020, approximately 37 percent of the energy delivered to LADWP's customers came from eligible renewable energy resources, while 28 percent came from natural gas power resources, 16 percent from coal power resources, and 14 percent from nuclear power resources.[28] The primary supplier of natural gas in the Los Angeles region is Southern California Gas Company.

Transportation Fuels Supply

In California, most of the petroleum fuel is refined for the use of on-road motor vehicles and to meet the State-specific formulations required by CARB. The major categories of petroleum fuels are gasoline and diesel for passenger vehicles, transit, and rail vehicles and fuel oil for industry and emergency electrical power generation. Other liquid fuels include kerosene, jet fuel, and residual fuel oil for marine vessels.

California's oil fields make the state the third-largest in the United States for oil-refining capacity, behind Texas and North Dakota.[29] Crude oil is transported within California through a network of pipelines that deliver it from both onshore and offshore oil wells to the refineries that are located in the San Francisco Bay Area, the Los Angeles area, and the Central Valley. Currently, 14 petroleum refineries operate in California, processing approximately 1.7 million barrels per day of crude oil.[30]

Other transportation fuel sources are alternative fuels, such as methanol and denatured ethanol (alcohol mixtures that contain no less than 70 percent alcohol), natural gas (compressed or liquefied), liquefied petroleum gas, hydrogen, and fuels derived from biological materials (i.e., biomass).

---

[26] California Energy Commission (CEC). 2021. 2020 Total System Electric Generation in Gigawatt Hours. Available online at: https://www.energy.ca.gov/almanac/electricity_data/total_system_power.html. Accessed April 2022.

[27] CEC. 2019. 2018 Total System Electric Generation in Gigawatt Hours. Available online at: https://www.energy.ca.gov/almanac/electricity_data/total_system_power.html. Accessed April 2022.

[28] LADWP. 2020. 2020 Power Content Label. October. Available at: https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-powercontentlabel?_adf.ctrl-state=pf527sf87_17&_afrLoop=419132207075050. Accessed April 2022.

[29] U.S. Energy Information Administration. 2022. California State Profile and Energy Estimates: Profile Overview. Available online at: http://www.eia.gov/state/?sid=CA. Accessed April 2022.

[30] U.S. Energy Information Administration. 2021. Petroleum & Other Liquids. Number and Capacity of Petroleum Refineries. Available online at: https://www.eia.gov/dnav/pet/PET_PNP_CAP1_DCU_SCA_A.htm. Accessed April 2022.

Energy Consumption

In 2020, California's population used 279,510 gigawatt hours (GWh) of electricity, of which Los Angeles County consumed 65,650 GWh.[31] [32] In the same year, California's population consumed 1,232,858,282 million British thermal units (MMBtu) of natural gas, of which Los Angeles County consumed 293,598,523 MMBtu.[33]

Transportation is the largest energy-consuming sector in California, accounting for approximately 39.3 percent of all energy use in the state in 2019. Energy consumption is connected to construction and maintenance of transportation infrastructure, such as streets, highways, freeways, rail lines, and airport runways. California's 30 million vehicles consume more than 16 billion gallons of gasoline and more than 3 billion gallons of diesel each year.[34]

3.6.3 Methodology

The proposed Project involves the construction of stations, a junction, and towers. The Project would result in a one-time energy demand due to construction and annual energy demands associated with Project operations. GHG emissions were evaluated for the following three scenarios:

1. Baseline/Existing – calculated existing conditions in year 2019;
2. Project Build-out – calculated projected emissions in year 2026, after completion of all construction activity; and
3. Horizon Year Projection – calculated projected emissions in year 2042

Methodology consistent with the California Emissions Estimator Model® (CalEEMod®) was used to estimate off-road construction equipment emissions based on an assumption that construction of the Project would begin in 2024, with full build-out expected by 2026. Complete emissions results are included in the appendices to the *Los Angeles Aerial Rapid Transit Project Greenhouse Gas Emissions Technical Report* (Appendix J) and *Los Angeles Aerial Rapid Transit Project Air Quality/Health Risk Assessment Technical Report* (Appendix D). Fuel consumption from off-road construction equipment was estimated by converting the total estimated CO_2 emissions from that equipment to gallons of fuel using conversion factors from The Climate Registry (TCR).

Fuel consumption from worker, vendor, haul trips, and shuttles are estimated by converting the total estimated CO_2 emissions from each source to gallons of fuel using conversion factors from TCR. Worker vehicles are assumed to include light-duty automobiles and trucks; vendor vehicles

31 A watt hour is a unit of energy equivalent to one watt of power expended for one hour. For example, a typical light bulb is 60 watts, meaning that if it is left on for one hour, 60-watt hours have been used. One kilowatt equals 1,000 watts. The consumption of electrical energy by homes and businesses is usually measured in kilowatt hours (kWh). Some large businesses and institutions also use megawatt hours (MWh), where one MWh equals 1,000 kWh. One gigawatt equals one thousand (1,000) megawatts, or one million (1,000,000) kilowatts. The energy output of large power plants over long periods of time, or the energy consumption of jurisdictions, can be expressed in gigawatt hours (GWh).

32 Electricity data for Los Angeles County and the State of California in 2020 are obtained from the CEC, electricity consumption by county. Available at: https://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed April 2022.

33 Natural gas data for Los Angeles County and the State of California in 2020 are obtained from the CEC, gas consumption by county. Available at: https://ecdms.energy.ca.gov/gasbycounty.aspx. Accessed April 2022.

34 CEC. 2016. Summary of California Vehicle and Transportation Energy. Available online at: http://www.energy.ca.gov/almanac/transportation_data/summary.html#vehicles. Accessed April 2022.

are assumed to include an equal mix of medium-heavy duty trucks and heavy-heavy duty trucks; hauling vehicles are assumed to be heavy-heavy duty trucks. The vehicle class assumed for the worker shuttles is based on Project-specific information.

In addition, there are existing on-road mobile emissions associated with Dodger Stadium that result from passengers in vehicles traveling to and from Dodger games and stadium events (i.e., total VMT). The Project would decrease the number of people traveling to Dodger Stadium (and surrounding areas) in passenger vehicles and increase the number of people using public transit, thereby reducing total VMT and vehicle idling time in and around Dodger Stadium associated with passenger vehicles, and by proxy, associated emissions and fuel use. The anticipated reduction in on-road mobile fuel consumption from existing conditions was estimated by calculating the net difference in VMT between the baseline year (2019) and the Project build-out year (2026) and the horizon year (2042) and using those data to estimate the associated reduction in CO_2 emissions. These estimated reductions in CO_2 emissions were then converted to gallons of fuel using conversion factors from TCR.

Appendix F, Energy Conservation, of the CEQA Guidelines states that the goal of conserving energy implies the wise and efficient use of energy, to be achieved by decreasing overall per capita energy consumption; decreasing reliance on fossil fuels; and increasing reliance on renewable energy resources. To ensure that energy implications are considered in project decisions, CEQA requires that Environmental Impact Reports include a discussion of the following factors:

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project, including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed.

2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.

3. The effects of the project on peak and base period demands for electricity and other forms of energy.

4. The degree to which the project complies with existing energy standards.

5. The effects of the project on energy resources.

6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

For the first threshold under "Energy" in Appendix G of the CEQA Guidelines, the analysis below assesses whether the Project would result in a potentially significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources by evaluating the Project's electricity, natural gas, and fossil fuel use during construction and operation while considering the six Appendix F factors above. For the second threshold under "Energy" in Appendix G of the CEQA Guidelines, this analysis evaluates whether the Project would conflict with or obstruct applicable State or local plans related to renewable energy and energy efficiency.

Thresholds of Significance

For purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on energy if it would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or,

- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

3.6.4 Environmental Impacts

ENE-1: ***Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?***

Less Than Significant Impact. The following analysis discusses short-term (construction) and long-term (operational) use of electricity, fuel, and natural gas.

3.6.4.2 Electricity

Construction

Less Than Significant Impact. Construction of the proposed Project would require electricity for construction trailers, construction equipment, and lighting, which would require an increase in the use of electricity at the proposed Project component sites during construction. Electricity to the proposed Project component sites during construction would be provided by LADWP and supplied by the grid. Construction of the proposed Project would result in a demand of approximately 864,544 kWh of electricity from the grid. This demand would be temporary, and in some cases would supplant electricity otherwise provided by another energy source, such as diesel generators. All electric equipment operating during this period would comply with applicable standards and codes.

The proposed Project's anticipated electricity usage during construction is anticipated to be approximately 0.9 GWh in total or 0.45 GWh/year, which would constitute approximately 0.00014 percent to 0.00016 percent of the projected statewide demand from 2019 to 2026. The Project's construction electricity use represents a small percentage of regional estimates for LADWP. The CEC estimates that energy demand in the LADWP planning area will increase to approximately 27,000 to 28,000 GWh in the 2024 to 2026 timeframe,[35] meaning that the proposed Project's demand contribution in that period would be approximately 0.002 percent of the projected demand.

In addition, the proposed Project's peak electricity demand during construction is estimated to reach approximately 2.0 MW of power, which may occur during either high-peak or low-peak energy demand periods. The peak demand in the LADWP planning area is expected to reach 6,400 to 6,500 MW in the 2024 to 2026 time frame. As a result, construction of the proposed Project would have a negligible effect on LADWP peak demands, and the proposed Project would be consistent with planned electricity usage during peak periods. The remaining equipment and activity associated with the proposed Project's construction would be powered by diesel fuel, as further discussed below. In addition, the temporary energy consumption associated with the

[35] *Ibid.*

proposed Project's construction would allow for a long-term reduction in energy consumption associated with proposed Project operations, as under the operational analysis below. Therefore, construction of the proposed Project would result in a less than significant impact related to wasteful, inefficient, or unnecessary consumption of electricity.

Operation

Less Than Significant Impact. The proposed Project would incorporate energy-efficient features, such as open-air stations and high-efficiency lighting, which would lower the energy needs of the proposed Project by allowing for passive ventilation strategies and natural daylight and using state-of-the-art gondola technologies, such as automated controls and contactless fare checking. Also, the proposed Project would be designed to comply with all applicable State and local codes, including conformance with the City of Los Angeles Green Building Ordinance.

The electrical power for the proposed Project's operations of the aerial gondola system and associated stations, junction, and towers would be supplied by LADWP through the utility's Green Power Program. Accordingly, the primary electricity usage associated with the proposed Project would come from renewable resources. A small portion (i.e., less than 0.5 percent) of the proposed Project's electricity usage would be related to the Los Angeles State Historic Park's operation of park amenities at the Chinatown/State Park Station, which would be operated by the Los Angeles State Historic Park. This electricity would be supplied by LADWP's standard electricity portfolio. When operating near capacity, normal operations are estimated to require approximately 2.5 MW of power, which may occur during either high-peak or low-peak energy demand periods. The peak demand in the LADWP planning area is expected to be 6,500 MW at Project build-out (2026). As a result, the proposed Project would have a negligible effect on LADWP peak demands, and the proposed Project would be consistent with planned electricity usage during high-peak periods.

The proposed Project's estimated electricity demand is shown in Table 3.6-1.

Table 3.6-1: Operational Electricity Demand

Operations	Source	Power Needed
Aerial gondola system and associated stations, junction, and towers	LADWP Green Power Program	2.5 megawatts
Park amenities[1]	LADWP standard electricity portfolio	<0.5% of Project total

[1] These amenities would include approximately 740 square feet of concessions, 770 square feet of restrooms, and a 220-square-foot covered breezeway connecting the concessions and restrooms.
Source: Ramboll. 2022. *Los Angeles Aerial Rapid Transit Project Energy Technical Report* (Appendix H).

The proposed Project's use of electricity would not have a substantial effect on statewide or regional energy resources. In 2020, total in-state electric consumption was 279,510 GWh.[36] The CEC estimates that statewide energy demand will increase to approximately 324,000 GWh by 2026.[37] Once fully operational (2026), the proposed Project would result in electricity demand of approximately 6.9 GWh/year, which would constitute approximately 0.002 percent of the projected statewide demand in that year. Given that the annual growth rate for the state is estimated at

36 CEC. 2020. Electricity consumption by county. Available at: https://ecdms.energy.ca.gov/elecbycounty.aspx Accessed April 2022.
37 CEC. 2018. California Energy Demand 2018-2030 Revised Forecast. Available online at: https://efiling.energy.ca.gov/getdocument.aspx?tn=223244. Accessed April 2022.

1.27 percent for 2016–2030, the anticipated statewide energy demand for 2042 will likely be greater than that in 2026. Thus, the proposed Project's relative percentage contribution to the statewide energy demand would be even less, and the proposed Project would be consistent with planned long-term electricity usage. The proposed Project's electricity use projections also represent an extremely small percentage of regional estimates for LADWP. The CEC estimates that energy demand in the LADWP planning area will increase to approximately 28,000 GWh in 2026,[38] meaning that the proposed Project's contribution in that time frame would be approximately 0.025 percent of the projected demand, and the proposed Project would be consistent with planned long-term electricity usage. Accordingly, the proposed Project would not require new statewide or local generation capacity. Therefore, operation of the proposed Project would result in a less than significant impact related to wasteful, inefficient, or unnecessary consumption of electricity.

3.6.4.3 Fuel

Construction

Less Than Significant Impact. Construction of the proposed Project would use transportation fuel, including gasoline and diesel for off-road construction equipment, haul trucks, vendor trucks, construction worker vehicles, and worker shuttles. The VMT associated with the transportation of construction materials and construction worker commutes would also result in fuel consumption. The construction activities would comply with State requirements designed to minimize idling and associated emissions, which also minimize the use of fuel. Specifically, idling of commercial vehicles and off-road equipment would be limited to five minutes in accordance with the Commercial Motor Vehicle Idling Regulation and the Off-Road Regulation, and the trucks used would be compliant with the requirements of the Tractor-Trailer Greenhouse Gas Regulation.

The estimated total fuel usage from the on-road vehicle trips associated with the construction of the Project is 77,333 gallons of gasoline and 95,529 gallons of diesel. The estimated total fuel usage from off-road construction equipment associated with the construction of the proposed Project is approximately 171,998 gallons of diesel fuel. The total combined on-road and off-road fuel usage is listed in Table 3.6-2. Project construction equipment would conform to applicable emissions standards and fuel efficiencies.

Table 3.6-2 presents the proposed Project's estimated construction fuel consumption on a per year basis for comparison to the respective consumption of the City of Los Angeles and the State of California as a whole.

According to these estimates, construction of the proposed Project would equate to approximately 0.19 percent of the annual amount of diesel and approximately 0.009 percent of the annual amount of gasoline that would be used citywide during construction. Construction would equate to less than approximately 0.004 percent of the annual amount of diesel and approximately 0.0003 percent of the annual amount of gasoline that would be used statewide during construction.

38 CEC. 2016. Summary of California Vehicle and Transportation Energy. Available online at: http://www.energy.ca.gov/almanac/transportation_data/summary.html#vehicles. Accessed April 2022.

Table 3.6-2: Construction Annual Fuel Consumption

Energy Resource	Project Construction Annual Fuel Consumption[1]	City of Los Angeles		California	
		Annual Fuel Consumption	Project's Contribution (%)	Annual Fuel Consumption	Project's Contribution (%)
Gasoline (gallons/year)[2,3]	38,666	422,523,977	0.009%	13,822,186,081	0.0003%
Diesel (gallons/year)[4,5]	133,764	72,053,372	0.186%	3,141,798,776	0.0043%

1 Project fuel consumption data derived from the estimated CO2 emissions for on-road vehicles and off-road equipment using conversions factor from The Climate Registry and normalized over the approximate duration of the construction (i.e., 2 years).

2 Gasoline data for the city is calculated based on the metric tons of CO2 emissions for fuel combustion from on-road and off-road transportation occurring in the city as reported in the 2017 Community-Wide Greenhouse Gas Emissions Inventory. Available at: https://data.lacity.org/A-Livable-and-Sustainable-City/2017-Community-Wide-Greenhouse-Gas-Emissions/kkrh-b4e3/data. Accessed April 2022.

3 Gasoline data for the state is for 2021 and was obtained from the California Department of Tax and Fee Administration (CDTFA). Available at: https://www.cdtfa.ca.gov/taxes-and-fees/MVF-10-Year-Report.xlsx. Accessed April 2022.

4 Diesel data for the city is calculated based on the metric tons of CO2 emissions for fuel combustion from on-road and off-road transportation occurring in the city as reported in the 2017 Community-Wide Greenhouse Gas Emissions Inventory. Available at: https://data.lacity.org/A-Livable-and-Sustainable-City/2017-Community-Wide-Greenhouse-Gas-Emissions/kkrh-b4e3/data. Accessed April 2022.

5 Diesel data for the state is for 2021 and was obtained from CDTFA. Available at: https://www.cdtfa.ca.gov/taxes-and-fees/Diesel-10-Year-Report.xlsx. Accessed April 2022

Fuel use during construction would be considered negligible when evaluated on a local and regional scale and would not adversely impact local or regional energy supplies or require additional capacity. In addition, the temporary energy consumption associated with the proposed Project's construction would allow for a long-term reduction in energy consumption associated with the proposed Project's operations related to reduced VMT, along with a decreased reliance on fossil fuels, as discussed below. Therefore, construction of the proposed Project would result in a less than significant impact related to wasteful, inefficient, or unnecessary consumption of fuel.

Operation

Less Than Significant Impact. Operation of the proposed Project would decrease the number of people traveling to Dodger Stadium and the surrounding area in passenger vehicles and increase the number of people using public transit. The overall shift in transportation mode is anticipated to reduce total VMT and vehicle idling time in and around Dodger Stadium associated with passenger vehicles, therefore reducing associated emissions and fuel use. Table 3.6-3 presents the proposed Project's estimated operational on-road fuel consumption.

Table 3.6-3: Operational Annual On-Road Fuel Consumption

Year	Net Annual VMT [1]	Net Annual Trips [2]	Net Mobile Emissions (MT/year) [3]	Annual Fuel Consumption (gallons/year) [4, 5]	
			CO_2	Gasoline	Diesel
2026	-2,942,000	-132,047	-850	-95,086	-115
2042	-6,511,000	-292,235	-1,596	-178,575	-215

1 The net annual VMT estimates were developed by Fehr & Peers and represent the difference from existing conditions (2019) in VMT from the travel associated with those going to and from major events at Dodger Stadium (i.e., Dodger games and concerts). This estimate also includes the VMT associated with LA ART employees and Dodger employees traveling to/from the stadium.

2 The annual trip estimate was calculated using an average trip length value derived from Fehr & Peers data. Trip Length (mi) 22.3

3 Net mobile emissions were calculated using annual VMT and trip estimates along with emission factors in g/VMT and g/trip derived from EMFAC2021 for light duty vehicles.

4 Diesel and gasoline consumption is derived from the estimated net CO2 emissions from this source category using conversion factors from The Climate Registry.

5 The breakdown of diesel versus gasoline was derived from EMFAC2021 by querying fuel consumption by vehicle class and fuel type and proportioning it out according to the assumed fleet mix.

When compared against existing conditions, the proposed Project would reduce fuel usage from on-road mobile sources by 95,086 gallons of gasoline and 115 gallons of diesel in 2026, respectively, and 178,575 gallons of gasoline and 215 gallons of diesel in 2042, respectively. Therefore, operation of the proposed Project would result in a less than significant impact related to wasteful, inefficient, or unnecessary consumption of fuel.

3.6.4.4 Natural Gas

Construction

Less Than Significant Impact. Construction of the proposed Project would involve the use of transportation fuel, including natural gas use in off-road construction equipment, haul trucks, vendor trucks, construction worker vehicles, and worker shuttles.

The estimated total natural gas consumption from vehicle trips associated with the construction of the proposed Project is 6,474 gallons of natural gas. The proposed Project's construction equipment would conform to applicable emissions standards and fuel efficiencies.

Table 3.6-4 presents the proposed Project's estimated natural gas consumption during construction on a per year basis for comparison to the respective consumption of the City of Los Angeles and the State of California as a whole.

According to these estimates, construction of the proposed Project would equate to approximately 0.03 percent of the annual amount of natural gas that would be used citywide during construction. Construction of the proposed Project would equate to less than approximately 0.001 percent of the annual amount of natural gas that would be used statewide during construction.

Table 3.6-4: Construction Total Natural Gas Consumption

Energy Resource	Project Construction Fuel Consumption	City of Los Angeles		California	
		Fuel Consumption	Project's Contribution (%)	Fuel Consumption	Project's Contribution (%)
Natural Gas (gallons/year) [1, 2]	3,237 [3]	10,681,597	0.030%	306,305,979	0.0011%

[1] Natural gas data for the city is calculated based on the metric tons of CO2 emissions for fuel combustion from on-road and off-road transportation occurring in the city as reported in the 2017 Community-Wide Greenhouse Gas Emissions Inventory. Available at: https://data.lacity.org/A-Livable-and-Sustainable-City/2017-Community-Wide-Greenhouse-Gas-Emissions/kkrh-b4e3/data. Accessed April 2022.

[2] Natural gas data associated with vehicle fuel for the state is for 2021 and was obtained from the U.S. Energy Information Administration. Available at: https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm. Accessed April 2022.

[3] The proposed Project's total estimated natural gas consumption is 6,474 gallons over two years. For comparison purposes in this table the consumption level is provided in gallons per year.

As such, natural gas use during construction would be considered negligible when evaluated on a local and regional scale and would not adversely impact local or regional energy supplies or not require additional capacity. In addition, the temporary energy consumption associated with construction would allow for a long-term reduction in energy consumption. Therefore, construction of the proposed Project would result in a less than significant impact related to wasteful, inefficient, or unnecessary consumption of natural gas.

Operation

No Impact. Operation of the proposed Project would not require the use of natural gas. Therefore, operation of the proposed Project would result in no impact related to wasteful, inefficient, or unnecessary consumption of natural gas.

ENE-2: *Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?*

Less Than Significant Impact. As CO_2 that results from fossil fuel consumption makes up the bulk of GHG emissions in California, reduced fuel and increased energy efficiency typically corresponds with a reduction in GHG emissions. As a result, California's energy policy and local energy policies are rooted in achieving GHG emissions reductions. GHG reduction plans, such as the CARB Scoping Plan and SCAG's 2020–2045 RTP/SCS, are premised on achieving long-term reductions in GHG emissions even as sectors of the economy continue to emit GHGs. These strategies are implemented with additional rules and regulations regarding energy analysis, such as the Advanced Clean Cars Program, the low carbon fuel standard, the Title 24 building efficiency standards, and the Renewable Portfolio Standard. Because the proposed Project would result in a net decrease of GHG emissions and fuel usage, the proposed Project is consistent with applicable renewable energy and energy efficiency plans, policies, and regulations.

To provide additional analysis of the proposed Project's consistency with specific elements of applicable State, regional, and local renewable energy and energy-efficiency plans, policies, and regulations, the proposed Project's potential to conflict with those plans was evaluated (refer to Appendix A of the *Los Angeles Aerial Rapid Transit Project Energy Technical Report* (Appendix H), including: California Renewables Portfolio Standard and SB 350; California Code of Regulations, Title 24, Parts 6 and 11; AB 1109 (Lighting Efficiency and Toxics Reduction Act);

AB 1493 (Pavley Regulations); Low Carbon Fuel Standard; Advanced Clean Cars Program; and SB 375. In addition, the proposed Project's consistency with the 2019 Metro CAAP, which commits Metro to reducing its GHG emissions by 79 percent relative to 2017 levels by 2030 and 100 percent (i.e., zero emissions) by 2050, was analyzed.

As described in Appendix A of the *Los Angeles Aerial Rapid Transit Project Energy Technical Report* (Appendix H), the proposed Project would be consistent with all applicable renewable energy and energy-efficiency plans, policies, and regulations. The proposed Project is an innovative transportation alternative that would reduce VMT and increase the number of people using public transit, resulting in decreased use of fossil fuels for passenger vehicles. The electrical power for the operation of the proposed Project's aerial gondola system and associated stations, junction, and towers would come from renewable resources as supplied by the LADWP's Green Power Program. The proposed Project would incorporate energy-efficient features, such as open-air stations and high-efficiency lighting. The proposed Project aligns with local- and State-level plans for increased renewable energy or energy efficiency through reducing VMT and reliance on fossil fuels while incorporating battery storage. The proposed Project would be designed to comply with all applicable State and local codes, including conformance with the City of Los Angeles Green Building Ordinance. In addition, pursuant to SB 743, the proposed Project would reduce VMT and increase the number of people using public transit, resulting in decreased use of fossil fuels for passenger vehicles. Therefore, the proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. The impact would be less than significant.

3.6.5 Mitigation Measures

The proposed Project would result in less than significant impacts to energy resources. No mitigation measures would be required.

3.6.6 Level of Significance after Mitigation

The proposed Project would result in less than significant impacts to energy resources.

This page intentionally left blank.

3.7 GEOLOGY AND SOILS

This section evaluates the proposed Project's impacts in relation to existing geology, soils, and seismic conditions in the Project study area. Information contained in this section is summarized from the *Los Angeles Aerial Rapid Transit Geotechnical Document in Support of the Environmental Impact Report* (Appendix I of this Draft EIR), the *Archaeological and Paleontological Resources Assessment for the Los Angeles Aerial Rapid Transit Project* (Appendix F of this Draft EIR), and other published sources.

3.7.1 Regulatory Setting

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. Under the Alquist-Priolo Act, the California State Geologist identifies areas in the state that are at risk from surface fault rupture. The primary purpose of the Alquist-Priolo Act is to prevent the construction of buildings used for human occupancy on the surface traces of active faults. The act addresses only the hazard of surface fault rupture, and is not directed toward other earthquake hazards. The law requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones or Alquist-Priolo Zones) around the surface traces of active faults, and issue appropriate maps. The maps are distributed to all affected cities, counties, and State agencies for their use in planning and controlling construction. Local agencies must regulate most development projects within the zones. Projects include land divisions and most structures for human occupancy. Local agencies can be more restrictive than State law requires.[1]

Before a project can be permitted, a geologic investigation is required to demonstrate that proposed buildings would not be constructed across active faults capable of surface fault rupture. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault capable of surface fault rupture is found, a structure for human occupancy cannot be placed over the trace of the fault, and must be set back from the fault (generally 50 feet).[2] Because no active faults capable of surface rupture cross the Project alignment, a fault investigation is not required. The fault closest to the Project alignment is the Elysian Park fault. The Upper Elysian Park fault is a north-to-northeast–dipping fault that underlies the northern Los Angeles basin from Griffith Park to Garvey Reservoir. However, the Elysian Park fault is a blind thrust fault, which means it is not capable of surface fault rupture, and therefore is not subject to the conditions of the Alquist-Priolo Act.

Seismic Hazards Mapping Act of 1990

The California State Seismic Hazards Mapping Act of 1990 addresses earthquake hazards other than surface fault rupture, including liquefaction and seismically induced landslides. Through the act, the State establishes city, county, and State agency responsibilities for identifying and mapping seismic hazard zones and mitigating seismic hazards to protect public health and safety. It requires the California Department of Conservation, Division of Mines and Geology, to map

---

1 California Legislative Information. Public Resources Code. Division 2, Geology, Mines and Mining [2001-2815], Chapter 7.5, Earthquake Fault Zoning [2621-2630], Alquist-Priolo Earthquake Fault Zoning Act.

2 Ibid.

seismic hazards, and establishes specific criteria for project approval that apply in seismic hazard zones, including the requirement for a geological technical report. The California Department of Conservation has mapped seismic hazards, or established specific criteria for the area that includes the Project site.[3]

California Building Code

The California Code of Regulations, Title 24 (California Building Code [CBC]) applies to applications for building permits. The CBC (also called the California Building Standards Code) has incorporated the Uniform Building Code (first enacted by the International Conference of Building Officials in 1927, and updated approximately every 3 years since that time). The current version of the CBC (2019) became effective in 2020. The next update of the entire CBC is expected in 2023.[4]

Local agencies must ensure that development in their jurisdictions complies with guidelines contained in the CBC. Cities and counties can, however, adopt building standards beyond those provided in the code.

Local

City of Los Angeles General Plan

The City of Los Angeles General Plan (General Plan) includes policies related to geology and soils in the Safety Element, as required by State law[5]. Chapter II of the Safety Element provides a discussion of the existing conditions, hazards, and a history of mitigation in the City of Los Angeles. Chapter III of the Safety Element includes the goals, objectives, and policies related to safety, including Goal 1: Hazard Mitigation, which establishes the standard that the City of Los Angeles will be a place where “potential injury, loss of life, property damage and disruption of the social and economic life… due to… [a] seismic event [and existing] geologic conditions… is minimized.” In addition, the Safety Element includes a discussion of hazardous materials, including methane gas from naturally occurring deposits found in the Los Angeles area. Section 11 of the Conservation Element of the General Plan also addresses “Geologic Hazards,” but primarily references the Safety Element as the relevant General Plan component with respect to protecting people and property from problems related to geology, seismicity, and liquefaction.

Silver Lake-Echo Park-Elysian Valley Community Plan

The following Silver Lake-Echo Park-Elysian Valley Community Plan policy is applicable to the proposed Project:

- Policy 1-6.3: Consider the steepness of the topography and suitability of the geology in any proposal for development within the Plan area.

---

[3] California Department of Conservation, California Geological Survey. 1998. Seismic Hazard Zone Report for the Los Angeles 7.5-Minute Quadrangle, Los Angeles County, California, Seismic Hazard Zone Report 029.

[4] California Building Standards Commission. 2019. California Building Standards Code, Title 24, Part 2, Vol. 1 and 2. Publicly available at: https://codes.iccsafe.org/content/CBC2019P4. Please note that this material is either covered under a NDA, otherwise confidential, and/or copywritten. Due to copyright agreements, this document is unable to be downloaded as a pdf, though it is available for viewing online.

[5] City of Los Angeles Department of City Planning. 1996. Safety Element of the Los Angeles City General Plan. Available at: https://planning.lacity.org/odocument/31b07c9a-7eea-4694-9899-f00265b2dc0d/Safety_Element.pdf. Accessed July 2021.

City of Los Angeles Municipal Code

The City of Los Angeles Municipal Code includes regulations related to geology and soils in Chapter IX (Building Regulations), Article 1 (Buildings). The City of Los Angeles adopted the majority of the CBC, but Chapter IX, Article 1 of the Los Angeles Municipal Code documents amendments to specific sections of the CBC. Three divisions in Article 1 include amendments to CBC sections applicable to the Project.

Preliminary design concepts for the Project include deep foundations extending into bedrock. Division 18 (Soils and Foundations) provides direction on geotechnical explorations for foundations extending into bedrock, and limits deep foundation design values without explicit approval from the Los Angeles Department of Building and Safety. The Los Angeles Department of Building and Safety may approve higher deep-foundation design limits based on geotechnical explorations or load testing completed in accordance with the CBC.

Division 70 (Grading, Excavations, and Fills) includes regulations identifying project types requiring geologic or soils reports, and what content must be included. Los Angeles Municipal Code Section 91.7006.2 directs soil/geologic reports be submitted to evaluate the liquefaction risk for projects in areas identified as having liquefaction potential.

3.7.2 Environmental Setting

The environmental setting for this section presents the existing conditions for the Project area and vicinity, including the regional and local geology, site topography, soils, and the regional and local faulting and seismicity.

3.7.2.1 Regional Geology

The proposed Project is located in the City of Los Angeles, situated northeast of downtown Los Angeles. The proposed Project is situated along the southern boundary of the Transverse Ranges Geomorphic Province adjacent to the northern boundary of the Los Angeles Basin. The Los Angeles Basin occupies an area at the intersection between the east-west–trending Transverse Ranges Geomorphic Province and the north-northwest–trending Peninsular Ranges Geomorphic Province.

The Transverse Ranges are characterized by east-west–trending mountain ranges formed by localized contractional deformation and transpressional reverse faulting along the transform boundary between the North American and Pacific Plates. The localized compressional forces along the plate boundary are often attributed to a restraining bend along the San Andreas Fault Zone referred to as the “Big Bend.” The Transverse Ranges are also characterized by thick Cenozoic sediments that have been folded and faulted with rapid uplift rates.

The Peninsular Ranges Geomorphic Province is characterized by a series of north-northwest–trending mountain ranges and intervening alluviated valleys extending from Baja California to Los Angeles. The Peninsular Ranges are bounded on the east by the Salton Trough, and on the west by deeper parts of the Pacific Ocean beyond Catalina Island. The basement rocks in the Peninsular Ranges are predominantly characterized by Jurassic and Cretaceous plutonic rocks of the Peninsular Ranges Batholith, with zones of variably metamorphosed rocks.

The Los Angeles Basin is an alluviated coastal lowland plain within the Peninsular Ranges Geomorphic Province that slopes gradually southwestward towards the coast. The Los Angeles Basin is 50 miles long and 20 miles wide, and bounded by mountains and hills on the north, northeast, east, and southeast. The basin is underlain by a deep structural depression filled with a thick sequence of marine and non-marine sediments that were deposited during a time period that spanned from the early Cenozoic era through the present day as the basin subsided. The sedimentary bedrock underlying the Los Angeles Basin is a major source of hydrocarbons. Many of the bedrock formations contain naturally occurring methane, tar, and hydrogen sulfide. These products migrate upward along bedding, and from the deeper formations along discontinuities (fractures and faults) in bedrock and through the soils.

3.7.2.2 Local Geology

Most of the proposed Project alignment is underlain by quaternary alluvium associated with the Los Angeles River, located approximately 0.5 mile east of the Project site. Alluvial fan deposits and a substantial volume of artificial fill are present along the approach to and at the Dodger Stadium Station. Bedrock underlying the alluvium and fills in the vicinity of Dodger Stadium is composed of marine sedimentary rocks of the early Pliocene and late Miocene Puente Formation.[6] Figure 3.7-1 shows the regional geology of the Project area.

Artificial Fill

The northern portion of the proposed Project alignment near Stadium Way and the Downtown Gate E is underlain by artificial fill placed during construction of Dodger Stadium. This area includes the Dodger Stadium Station and potentially the Stadium Tower, because the tower location is near the cut-fill transition, and therefore may have artificial fill at that site. Based on a comparison of historic topographic maps and current topography, fills up to approximately 100 feet thick are present along the alignment between SR-110 and the proposed Dodger Stadium Station. Historical aerial photographs from 1960, taken during grading for the stadium, suggest that the fills were derived from on-site cuts for the stadium. The proposed Stadium Tower appears to be located very close to the cut-fill transition, and therefore may be underlain by relatively thin deposits of artificial fill.

Alluvial Fan Deposits

West of North Broadway, the proposed Project alignment is underlain by Holocene to Pleistocene alluvial fan deposits (Qyf1) fed by southeast-trending drainages including Chavez Ravine, emanating from the highlands of the Elysian Park area (See Figure 3.7-1). According to geologic

[6] Campbell, R.H. 2014. Preliminary Geologic Map of the Los Angeles 30’x 60’ Quadrangle, California. California Geological Survey.

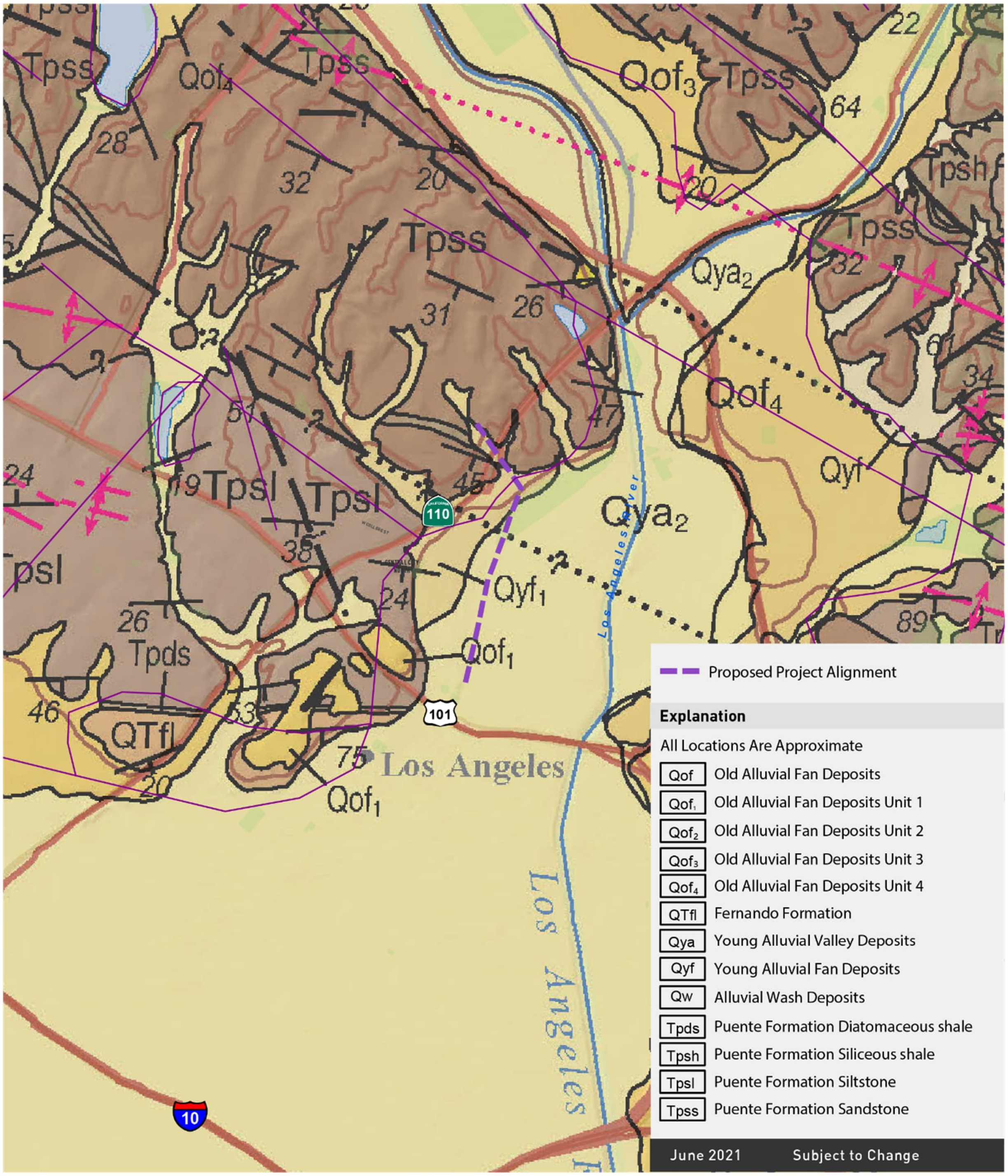


Figure 3.7-1: Regional Geology of the Project Area

mapping, the alluvial fan deposits are composed of unconsolidated gravel, sand, and silt, with boulders common along hill fronts.[7] This geologic unit was deposited primarily from flood deposits and debris flows.

Flood and Stream Channel Deposits

According to geologic mapping (See Figure 3.7-1), the proposed Project alignment from the southern end to where it crosses North Broadway is underlain by late Pleistocene alluvium (Qya_2).[8] The alluvium generally is composed of unconsolidated sands with occasional gravel and cobble lenses deposited across the flood plain. This geologic unit was deposited primarily from flood and stream channel deposits.

Puente Formation

Bedrock units underlying the surface deposits along the Project alignment are composed of marine sedimentary rocks of the early Pliocene and late Miocene Puente Formation. Previous subsurface explorations in the vicinity of the Project alignment indicate that the bedrock lies beneath the alluvium at a depth of approximately 25 to 50 feet below the ground surface. The Puente Formation in the vicinity of the Project alignment generally is composed of well-bedded, interbedded siltstone and sandstone, massive silty sandstone, and sandstone with scattered cobbles.[9] The rock units generally are poorly to moderately cemented and vary in color from yellowish-gray to gray, and bluish-gray to dark brown. The Puente Formation is petroliferous in the area, and occasional natural oily stains and hydrocarbon odor are reported from borings in the area.

The geologic structure in the Project area is characterized by the northeast-southwest–trending Elysian Park Anticline and the underlying Elysian Park Blind Thrust fault. The Project area is situated over the southern limb of the anticline. Bedding in the Puente Formation in the area generally dips from 25 to 50 degrees towards the south-southwest.

3.7.2.3 Site Topography

The majority of the proposed Project alignment occupies a gentle, south-sloping alluvial plain approximately 0.5 mile west of the Los Angeles River. The northern end of the proposed Project alignment slopes up more steeply towards the Dodger Stadium property and Elysian Park. Elevations along the gently sloping portion of the proposed Project alignment range from approximately 280 feet near Los Angeles Union Station to approximately 300 feet at the Los Angeles State Historic Park, where the proposed Project alignment heads northwest towards Dodger Stadium. Elevations along the northern portion of the proposed Project alignment climb gradually up to approximately 515 feet at the northern terminus at Dodger Stadium.

3.7.2.4 Native Soils

The Project area is in an urbanized and developed portion of the City of Los Angeles; therefore, the native soils along the Project alignment have been disturbed by grading related to previous land uses. Undisturbed native soils are not anticipated to be present at surficial or shallow depths along the Project alignment.

---

[7] Ibid.
[8] Ibid.
[9] Ibid.

Expansive Soils

Expansive soils are clay-based soils that tend to expand (increase in volume) as they absorb water, and shrink (lessen in volume) as water is drawn away. Expansive soils can result in damage to structures, slabs, pavements, and retaining walls if wetting and drying of the soil are not controlled. Expansive soils are those that are high in expansive clay or silt content. On-site alluvium consists of silt, sand, and gravel. Therefore, the on-site alluvial deposits west of North Broadway and along the approach to Dodger Stadium with high silt contents have the potential to be expansive.

Soil Corrosivity

Soil corrosivity is the potential for corrosion on concrete and steel caused by contact with some types of soil under certain environmental conditions. Knowledge of soil corrosivity is critical for effective design of buried concrete or steel. Several factors affect the response of concrete and steel to soil corrosion, and include soil composition, soil and pore water chemistry, moisture content, and pH. Soils with high moisture content, high electrical conductivity, high acidity, high sulfates, and high dissolved salt content are most corrosive. In general, sandy and silty-sandy soils have high resistivities and are the least corrosive. Clay soils, including those that contain interstitial saltwater, can be highly corrosive. The Project area comprises alluvial deposits and artificial fill that mainly consist of silty, sandy, and gravelly soils. These sandy and silty soils generally have a low potential for soil corrosion, but there is the potential for corrosive soil to be encountered during site-specific investigations. The Puente Formation bedrock, which could be encountered by pile foundations, can have low to high potential for corrosivity.

3.7.2.5 Regional Seismic Hazards

The unique topography that includes the geomorphic provinces described previously is a result of several major faults in the area that bound large blocks of the Earth’s crust. The San Andreas is the primary fault in an intricate network that cuts through rocks of the California coastal region. The entire San Andreas Fault system is more than 800 miles long, and extends to depths of approximately 10 miles within the earth.[10] The predominant fault system affecting the Project area is the Transverse Ranges fault system, which trends east-west and relieves strain primarily through reverse-slip, and left-lateral, strike-slip displacement.

Movements along faults (usually accompanied by earthquakes) are an important factor in the Southern California environment. When earthquakes are experienced, it is mostly the secondary effects that are noticed. Few people are directly affected by the rupture of the faults or the displacement of the land around the fault. They are more likely to experience ground shaking, often many miles from the actual fault. Other secondary effects include liquefaction, differential settlement, landslides, or earthquake-caused waves in bodies of standing water (seiches).

Faulting

The Project site is in a seismically active area of Southern California. Numerous small earthquakes occur every year in Southern California, and larger earthquakes have been recorded and can be expected to occur in the future.

[10] Wallace. Robert. ed. 1980. The San Andreas Fault System, California: U.S. Geological Survey Professional Paper 1515, p. 283.

The southern California area contains numerous active and potentially active earthquake faults. According to California Geologic Survey Special Publication 42, an active fault is defined as one that has had surface displacement within Holocene time (the last 11,700 years).[11] A Pre-Holocene fault is defined as a fault for which the most recent movement is older than 11,700 years, and therefore does not meet the criteria of Holocene-active faults as defined in the State Mining and Geology Board regulations.[12] The Project site is not in a State of California Earthquake Fault Zone for known Holocene active faults capable of fault surface rupture, or in an Alquist-Priolo Earthquake Fault Zone.[13]

The fault closest to the Project site is the Elysian Park fault. According to the U.S. Geological Survey Quaternary fault and fold database, the location of the Upper Elysian Park fault is inferred to cross under the alignment. The Upper Elysian Park fault is a north-to-northeast–dipping fault that underlies the northern Los Angeles basin from Griffith Park to Garvey Reservoir. However, the Elysian Park fault is a blind thrust fault, which means it is not capable of surface fault rupture, and therefore is not subject to the conditions of the Alquist-Priolo Act. The Elysian Park thrust fault is considered to be seismogenic (capable of generating earthquakes) from a depth of approximately 2 miles below ground surface in the south-southwest, to approximately 10 miles below ground surface in the north-northeast.

Liquefaction

When loosely packed saturated soils in proximity to water (such as below the groundwater table) are subjected to seismic shaking, a process called liquefaction can occur. This phenomenon typically occurs in loose, saturated sediments of primarily sandy composition. During liquefaction, the sediments behave more like a liquid or semi-viscous substance, and can cause ground settlement, foundation failures, and the buoyant rise of buried structures. When soil liquefies, loss of bearing strength may occur beneath a structure, possibly causing the structure to settle or tilt. Liquefaction is known generally to occur in saturated or near-saturated cohesionless soils at depths shallower than 50 feet below the ground surface. Factors known to influence liquefaction potential include composition and thickness of soil layers, grain size, relative density, groundwater level, degree of saturation, and both intensity and duration of ground shaking.

Groundwater is present in the alluvial sediments underlying the proposed Project alignment. The southern portion of the Project area overlies the Gaspur aquifer, which occupies the alluvial sediments overlying the bedrock in the area.[14] Recorded groundwater levels in the area generally range from approximately 20 to 60 feet below the ground surface, with the shallower levels in the southern portion of the Project area. The depth to groundwater increases to 60 feet or more below the ground surface in the vicinity of the intersection of North Broadway and Bishops Road, and north to Dodger Stadium.[15] The alluvial deposits are generally coarse grained, and will likely yield large water volumes during excavation and drilling below the depth of groundwater.

---

11 California Department of Conservation, California Geological Survey. Revised 2018. Special Publication 42 (SP 42), Earthquake Fault Zones, A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California.

12 Ibid.

13 California Department of Conservation, California Geological Survey. 2017. Earthquake Fault Zones, Los Angeles Quadrangle, Revised Official Map. June.

14 California Department of Water Resources. 1961. Bulletin No. 104. Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County, Appendix A Ground Water Geology.

15 Arcadis. February 2019. 2018 Annual Groundwater Monitoring Report and Request for No Further Action, Union Pacific Railroad, Los Angeles, CA, Lease Site, Cornfield.

The sediment and groundwater conditions along a majority of the proposed Project alignment overlying alluvial deposits have the potential for liquefaction. The Alameda Station, Alameda Tower, Alpine Tower, Chinatown/State Park Station, and Broadway Junction are in an area mapped as potentially subject to liquefaction, as shown on Figure 3.7-2. The Stadium Tower and Dodger Stadium Station are approximately 20 feet and 70 feet from a mapped liquefaction zone, respectively. Liquefaction may result in ground failures such as lateral spreading, ground lurching, or seismically induced settlement.

Lateral Spreading

Lateral spreading can occur when liquefaction transforms a subsurface layer into a fluid-like mass, and gravity causes the earthquake to move the mass downslope or laterally. Lateral spreading can occur on gentle slopes or adjacent to a free face, and can displace the ground surface for many feet, potentially damaging pipelines, utilities, bridges, roads, and other structures. There is a moderate potential for lateral spreading to occur in the Project area, in the areas potentially subject to liquefaction, as shown in Figure 3.7-2.

Ground Lurching

Soft, saturated soils have been observed to move in a wave-like manner in response to intense seismic ground shaking, forming ridges or cracks on the ground surface. Areas underlain by a thick accumulation of colluvium and alluvium are typically the most susceptible to ground lurching. Under strong ground motion conditions, lurching can be expected in loose, cohesionless soils or in clay-rich soils with high moisture content. There is a moderate potential for ground lurching to occur in the Project area in those areas potentially subject to liquefaction, as shown in Figure 3.7-2.

Seismically Induced Settlement

Under certain conditions, strong ground shaking can cause the densification of soils, resulting in local or regional settlement of the ground surface. During strong shaking, soil grains become more tightly packed due to the collapse of voids and pore spaces. This type of ground failure typically occurs in loose, granular, cohesionless soils in either wet or dry conditions. Unconsolidated young alluvium is especially susceptible to this hazard. Artificial fills may also experience seismically induced settlement. Damage to structures typically occurs as a result of local differential settlements. Regional settlement can damage pipelines or change the flow gradient of water and sewers. Fracturing and offset of the ground can also occur as a result of settlement.

The portions of the proposed Project alignment that may be susceptible to seismically induced settlement are generally the same areas that may also be susceptible to liquefaction, as indicated in Figure 3.7-2.

Seismically Induced Slope Failure

Strong ground motions can worsen existing unstable slope conditions, particularly if coupled with saturated ground conditions. Seismically induced landslides can overrun structures, sever utility lines, and block roads, hindering rescue operations after an earthquake. The most widespread type of earthquake-induced landslides consists of generally shallow failures involving surficial soils, and the uppermost weathered bedrock in moderate to steep hillside terrain. Rockfalls and rockslides on very steep slopes are also common.

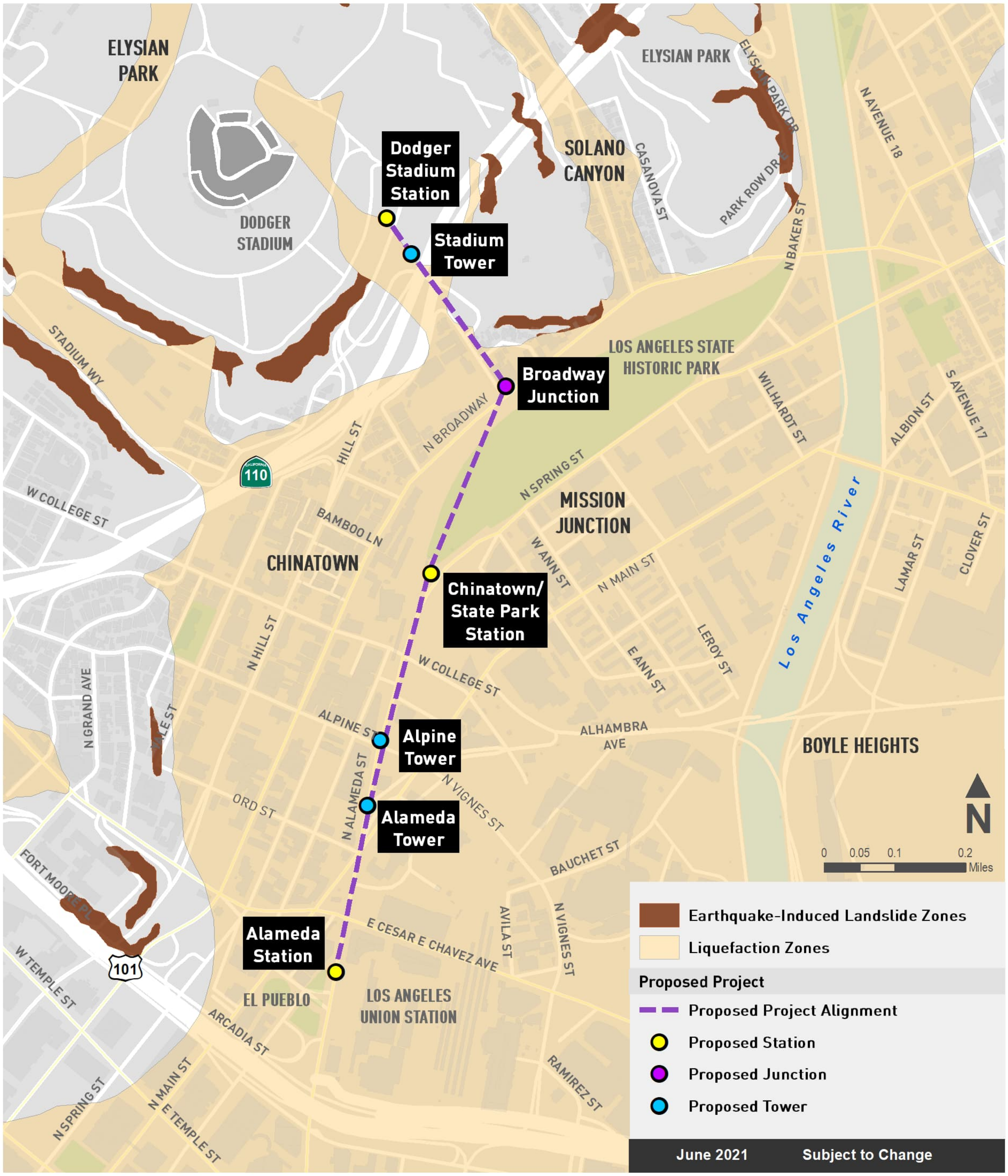


Figure 3.7-2: Seismic Hazards within the Project Area

A combination of geologic conditions leads to landslide vulnerability. These include high seismic potential, steep slopes and deeply incised canyons, highly fractured rock, and rock with inherent weaknesses. These conditions occur in the steeper portions of the Project area near the proposed Broadway Junction and the approach to Dodger Stadium Station. These portions of the Project alignment are adjacent to an area mapped as potential earthquake-induced landslide zones on the State of California Seismic Hazards Zones map, as shown on Figure 3.7-2. These structures are positioned at distances ranging from approximately 250 feet to 500 feet from mapped landslide zones. Additionally, the Stadium Tower and Dodger Stadium Station sites are in a City-designated hillside area, which increases the sites' potential susceptibility to landslides.[16] Because of the steep slopes and high seismicity in the vicinity of the proposed Stadium Tower and the Dodger Stadium Station, the potential for earthquake-induced slope failure could be considered moderate to high in the landslide hazard zone.

3.7.2.6 Subsidence

Subsidence is the loss of surface elevation due to the removal of subsurface support. Subsidence is caused by the reduction of pore space in the ground that was formerly occupied by a fluid such as water or oil, caused by activities that contribute to the loss of support materials within the underlying soils, such as agricultural practices or the overdraft of an aquifer. The existing alluvium of the Project area is susceptible to collapse or settlements; therefore, there is a moderate potential for subsidence to occur.

3.7.2.7 Paleontological Resources

A small portion of the Project area, near the terminus of the proposed Project alignment at Dodger Stadium, is associated with the Puente Formation and/or Monterey Formation. As previously discussed, this formation is also known as the Puente Formation. The formation is a marine deposit dating to the middle and late Miocene and early Pliocene epochs, deposited between approximately 17 million years and 5 million years ago. During the late Miocene through the Pleistocene, the sea subsided, and tectonic activity raised the rock deposits and formed the Elysian Hills, and eroded the Miocene/Pliocene rock formations. During the late Pleistocene and continuing until today, thick layers of alluvial gravels, sands, and silts have been deposited in the Los Angeles Basin.

The majority of the Project area is on the floodplain of the Los Angeles River and its tributaries: Cemetery Ravine, and Chavez Ravine. As shown in Figure 3.7-1, the geologic unit for the Project area is mapped as younger Quaternary alluvium, and consists of unconsolidated deposits of silt, sand, and gravel deposited relatively recently by the meandering Los Angeles River and its tributaries. The sediments were deposited during the Holocene, within the last approximately 11,700 years, and are therefore too young to typically contain significant fossil deposits. Along the Los Angeles River, the younger Quaternary deposits can be tens of feet thick.

However, older Quaternary alluvium typically underlies the younger Quaternary alluvium at varying depths. Older Quaternary alluvium was similarly deposited by the Los Angeles River and its tributaries, but dates to the terminal Pleistocene epoch, also known as the Last Glacial Period (approximately 115,000 to 11,650 years ago). Both Older Quaternary alluvium and the Monterey/Puente Formation have yielded significant vertebrate fossils in the Los Angeles Basin in the past.

[16] City of Los Angeles. Zone Information and Map Access (ZIMAS). Interactive map available at: http://zimas.lacity.org/. Accessed August 2022.

A paleontological records search conducted at the Natural History Museum of Los Angeles County (NHM) indicated that no known vertebrate fossils are in the vicinity of the proposed Project alignment. Additionally, the majority of the Project area consists of surficial deposits of younger Quaternary alluvium, which is not anticipated to contain considerable fossil remains in its uppermost layers because the sediment is too young to contain such fossils.

However, there are fossil localities nearby in older Quaternary alluvial deposits, which are anticipated to exist at varying depths below the younger Quaternary alluvium. Older Quaternary alluvium dated to the Pleistocene may contain significant fossils. Significant vertebrate fossils have been recovered from Pleistocene-age older Quaternary alluvial deposits, which are believed to underlie the Project vicinity at varying depths below the current ground surface. Significant fossils have also been recovered from the Miocene Monterey or Miocene-Pliocene Puente Formation, a marine rock formation that is anticipated to underlie the older Quaternary alluvium. Specifically, the Dodger Stadium property includes outcrops of the Monterey or Puente Formation.

The closest NHM fossil locality to the Project area in older Quaternary alluvium is LACM 2032, located near the intersection of Mission Road and Daly Street in the vicinity of I-5, approximately 1.2 miles southeast of the proposed Project alignment. LACM 2032 yielded fossil specimens of pond turtle (*Clemmys mamorata*), ground sloth (*Paramylodon harlani*), mastodon (*Mammut americanum*), mammoth (*Mammuthus imperator*), horse (*Equus*), and camel (*Camelops*) at depths of 20 to 35 feet below ground surface. Nearby locality LACM 1023, near the intersection of Workman Street and Alhambra Avenue, yielded fossil turkey (*Meleagris californicus*), sabre-toothed cat (*Smilodon fatalis*), horse (*Equus*), and deer (*Odocoileus*) at unrecorded depths. LACM 1023 is more than 1.1 miles southeast of the proposed Project alignment. Both fossil collections were scientifically important and resulted in publications.

There are also significant fossil deposits in the Miocene-Pliocene Puente Formation northeast of the proposed Project alignment. Near the intersection of North San Fernando Road and Humboldt Street, approximately 0.8 mile northeast of the proposed Project alignment, a fossil snake mackerel (*Thyrsocles kriegeri*) was recovered from locality LACM 7507 at a depth of approximately 100 feet below surface. At locality LACM 4967 in Elysian Park, an extinct fossil herring (*Clupea tiejei*) was recovered. Fossil fish and marine mammals are commonly found at localities in the Miocene-Pliocene Puente Formation near the Project area, which is considered to have a high sensitivity for fossil remains.

Accordingly, buried paleontological resources may exist in the Project area because the NHM records search and paleontological assessment indicate that Miocene deposits of the Puente/Monterey Formation and older Quaternary alluvial deposits, buried below the Project area near the Dodger Stadium Station, have the potential to contain significant vertebrate fossil remains. The rest of the Project area is on young Quaternary Alluvium underlain with older Quaternary Alluvium, then by Miocene-Pliocene Monterey or Puente Formation, where fossils have been encountered at depths ranging from 35 to 100 feet at locations southeast and northeast of the Project site. Therefore, construction activities requiring excavation to these depths would have the potential to encounter paleontological resources.

3.7.3 Methodology

The assessment of impacts concerning geology and soils is based on geological information collected from the City of Los Angeles General Plan, geologic maps, the U.S. Geological Survey, the California Building Code, the California Geologic Survey, and the Southern California Earthquake Center. Information was compared to Appendix G of the CEQA Guidelines to determine impacts related to earthquake ruptures, ground shaking, ground failure, landslides, soil erosion, unstable soil and expansive soil, soils supportive of wastewater disposal systems, and paleontological resources.

Thresholds of Significance

For purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been used as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on geology and soils if it would:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
  - Strong seismic ground shaking;
  - Seismic-related ground failure, including liquefaction;
  - Landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Section 1803.5.3 of the current CBC, creating substantial direct or indirect risks to life or property;[17]
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; or
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

[17] The definition of expansive soils is based on California Building Code Section 1803.5.3. 2019 California Building Code, Title 24, Part 2, Volume 2, Chapter 18, Section 1803.5.3. Available at: https://codes.iccsafe.org/content/CABCV22019JUL21S/chapter-18-soils-and-foundations. Please note that this material is either covered under a NDA, otherwise confidential, and/or copywritten. Due to copyright agreements, this document is unable to be downloaded as a pdf, though it is available for viewing online.

3.7.4 Environmental Impacts

GEO-1: *Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?*

Construction Impacts

Less Than Significant Impact with Mitigation. The Project area is in a seismically active region of southern California. An earthquake of moderate to high magnitude generated in the Los Angeles region could cause considerable ground shaking in the Project area, similar to that which has occurred in the past. However, the proposed Project alignment is not in a State of California Earthquake Fault Zone (Alquist-Priolo Earthquake Fault Zone) for known Holocene active faults capable of fault surface rupture. As discussed above, the Elysian Park fault traverses the Project area; however, it is a blind thrust fault, which means it is not capable of surface fault rupture. Accordingly, the risk of surface rupture due to faulting is considered low. Construction of the proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault. Impacts related to rupture of a known earthquake fault would be less than significant.

The Alameda Station, Alameda Tower, Alpine Tower, Chinatown/State Park Station, and Broadway Junction are in an area mapped as potentially subject to liquefaction, as shown on Figure 3.7-2. The Stadium Tower and Dodger Stadium Station are approximately 20 feet and 60 feet from a mapped liquefaction zone, respectively. Liquefaction-induced settlement can occur during a seismic event, but can also be exacerbated by increased loading during construction activities. Because there is potential for liquefaction-induced settlement and collapse during a strong to severe ground-shaking event, damage to on-site structures and infrastructure could occur during construction of the proposed Project. Therefore, impacts related to strong seismic ground shaking, seismic-related ground failure, and/or liquefaction during construction of the proposed Project would be potentially significant.

The proposed Project would be constructed in accordance with applicable standards, requirements, and building codes, which would ensure structural integrity and safe construction. Additionally, Mitigation Measure GEO-A, development of a site-specific geotechnical investigation and report to be approved by the City of Los Angeles, would be required. The geotechnical investigation and report would include geotechnical recommendations for project design and construction. With compliance to existing standards and codes and implementation of Mitigation Measure GEO-A, impacts related to the strong seismic ground shaking, seismic-related ground failure, and/or liquefaction during construction of the proposed Project would be reduced to less than significant.

The northeastern portion of the proposed Project alignment, including the sites for the Broadway Junction, Stadium Tower, and Dodger Stadium Station, is adjacent to areas mapped as a potential earthquake-induced landslide zone. Additionally, the Stadium Tower and Dodger Stadium Station sites are in a City-designated hillside area, which increases the sites’ potential susceptibility to landslides.[18] Therefore, impacts related to earthquake-induced slope failure could be considered moderately significant to significant. However, compliance with existing laws and regulations, and implementation of Mitigation Measure GEO-A, requiring the development and implementation of geotechnical recommendations to be incorporated into the design plans and specifications, including applicable site stabilization based on grading conditions and foundation capacities, would prevent instability of the slope during construction, and reduce impacts to less than significant under the proposed Project.

Operational Impacts

Less Than Significant Impact. Although the proposed Project would be in the seismically active region of southern California, it would not be in a State of California Earthquake Fault Zone (Alquist-Priolo Earthquake Fault Zone). The Alameda Station, Alameda Tower, Alpine Tower, Chinatown/State Park Station, and Broadway Junction would be in an area mapped as potentially subject to liquefaction. However, on completion of construction, the proposed Project would have complied with applicable standards, requirements, and building codes related to seismic-related ground shaking and seismic-induced ground failures (i.e., liquefaction and settlement), and landslides.

In addition, the proposed Project would adhere to its Emergency Operations Plan, as described in Chapter 2, Project Description. The Emergency Operations Plan would include emergency response protocols, and would state that in the event of a major earthquake, the system would be fully evacuated and shut down, and would not operate. The proposed Project would be designed and constructed in accordance with applicable building codes, and therefore would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides, and the impact would be less than significant.

***GEO*-2:** *Would the Project result in substantial soil erosion or the loss of topsoil?*

Construction Impacts

Less Than Significant Impact. Topsoil typically consists of the top 2 to 3 inches of soil, primarily composed of dark, decomposed organic material. The majority of the Project area consists of developed areas with disturbed soils, such as existing rights of way, paved areas, and developed properties, with the exception of the Stadium Tower and Dodger Stadium Station locations.

The Stadium Tower is on vegetated hillside on private property north of Stadium Way and west of SR-110, and would have a relatively small footprint (approximately 870 square feet) where the foundation of the tower intersects the ground. During construction, it is anticipated that an approximately 23,500-square-foot area around the tower base would be used for construction support activities.

The proposed Dodger Stadium Station would have a footprint of approximately 27,770 square feet at ground level; however, approximately 87,000 square feet would be used for construction support space. The Dodger Stadium Station would be partially situated on an existing parking lot, and partially over the existing vegetated slope.

---

[18] City of Los Angeles. Zone Information and Map Access (ZIMAS). Interactive map available at: http://zimas.lacity.org/. Accessed August 2022.

The potential for impacts relative to loss of topsoil is extremely low due to the urban nature of the Project area, the small foundation footprint of the proposed Stadium Tower, and the portion of the Dodger Stadium Station that extends onto a currently vegetated slope. Impacts to the loss of topsoil would be less than significant during construction of the proposed Project.

Project construction would involve general earthwork to prepare the foundations, which would temporarily expose bare soil, which would increase the potential for erosion. Additionally, exposed or stockpiled soils would also be susceptible to erosion. Sediments resulting from erosion might accumulate, blocking storm drain inlets and causing downstream sedimentation. However, the proposed Project would be required to comply with all applicable federal, State, regional, and local regulations, including the National Pollutant Discharge Elimination System (NPDES) General Construction Permit, City of Los Angeles Low Impact Development (LID) Ordinance, as applicable, the City of Los Angeles Municipal Code, and all other applicable regulations for construction activities that would be in place prior to the start of construction activities and during construction. With adherence to these regulations, impacts due to soil erosion would be less than significant during construction of the proposed Project.

Operational Impacts

Less Than Significant Impact. Once the proposed Project is constructed, no substantial surface area would be exposed that could be subjected to accelerated soil erosion during operations. The pavement, landscaping, and engineered fill around exposed foundation and structural elements would be returned to their original state; or improved, if disturbed. During operations, impacts related to substantial soil erosion or the loss of topsoil would be less than significant.

GEO-3: *Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

Construction Impacts

Less Than Significant Impact with Mitigation. The northern portion of the proposed Project alignment near Stadium Way and Downtown Gate E is underlain by artificial fill placed during construction of Dodger Stadium. This area includes the Dodger Stadium Station and the Stadium Tower, because the tower location is near the cut-fill transition, and therefore may have artificial fill at that site. Based on a comparison of historical topographic maps and current topography, artificial fill ranging between 10 feet and up to approximately 100 feet in thickness is present along the proposed Project alignment between SR-110 and the proposed Dodger Stadium Station. The additional load from the proposed Stadium Tower and Dodger Stadium Station can result in total and differential settlements in the artificial fill.

In general, settlement can be exacerbated along the entire alignment by increased loading during construction activities. Because the proposed Project would involve the construction of heavy structures, the Project site could be subject to settlement. Hydroconsolidation occurs when soil layers collapse (settle) as water is added under loads. Natural deposits susceptible to hydroconsolidation are typically aeolian, alluvial, or colluvial materials, with high apparent strength when dry. The existing alluvium may be susceptible to collapse and excessive settlements. Therefore, on-site hydroconsolidation could potentially occur.

The Alameda Station, Alameda Tower, Alpine Tower, Chinatown/State Park Station, and Broadway Junction are in an area mapped as potentially subject to liquefaction, as shown in

Figure 3.7-2. The Stadium Tower and Dodger Stadium Station are approximately 20 feet and 60 feet from a mapped liquefaction zone, respectively. Liquefaction may result in ground failures such as lateral spreading, ground lurching, or seismically induced settlement.

Construction includes foundations and concrete work, with piles to be installed at depths between 55 feet and 125 feet below ground surface. Bedrock in the vicinity of the proposed Project alignment lies beneath the alluvium at a depth of approximately 25 to 50 feet below the ground surface.

Damage to structures and infrastructure could result in the loss of property or risk to human health and safety due to settlements in the artificial fill and hydroconsolidation, subsidence in the alluvial deposits during construction activities, and liquefaction-induced ground failures. Additionally, because the Stadium Tower and Dodger Stadium Station sites are in a City-designated hillside area, they are potentially susceptible to landslides. Therefore, impacts related to lateral spreading, subsidence, liquefaction, or collapse during grading and construction of the Project components would be potentially significant.

The proposed Project would be constructed in accordance with applicable standards, requirements, and building codes, which would ensure structural integrity and safe construction. Additionally, Mitigation Measure GEO-A, development of a site-specific geotechnical investigation and report, would be required. The geotechnical investigation and report would include geotechnical recommendations for project design and construction based on grading conditions and foundation capacities, including an evaluation of risk of settlement in the fill, subsidence, hydroconsolidation, and liquefaction. Additionally, the geotechnical report would include recommended measures such as site stabilization to reduce potential impacts related to expansive soils and soil corrosivity, subsidence, liquefaction, differential settlement, slope instability, or other potential ground failures induced by the proposed Project. With compliance to existing standards and codes and implementation of Mitigation Measure GEO-A, impacts related to unstable soils, landslides, lateral spreading, subsidence, liquefaction, or collapse during construction of the proposed Project would be reduced to less than significant.

Operational Impacts

Less Than Significant Impact. Under the proposed Project, the Alameda Station, Alameda Tower, Alpine Tower, Chinatown/State Park Station, and Broadway Junction would be in an area mapped as potentially subject to liquefaction. The Stadium Tower and Dodger Stadium Station are approximately 20 feet and 70 feet from a mapped liquefaction zone, respectively. However, on completion of construction, the proposed Project would have complied with applicable standards, requirements, and building codes related to subsidence, liquefaction, and settlement. With the incorporation of the recommendations presented in the final geotechnical investigation per Mitigation Measure GEO-A, which would ensure soils would not become unstable as a result of the Project, and the adherence to the Operational Emergency Plan, which would include emergency response protocols, the operational impacts related to subsidence, liquefaction, and settlement would be less than significant under the proposed Project.

GEO-4: *Would the Project be located on expansive soil, as defined in Section 1803.5.3 of the current CBC, creating substantial direct or indirect risks to life or property?*

Construction Impacts

Less Than Significant Impact with Mitigation. The majority of the Project area is underlain by young alluvium (late Pleistocene alluvium) from the southern end at Alameda Station to where the proposed Project alignment crosses North Broadway. West of North Broadway, the Project area is underlain by young alluvial fan deposits (Holocene to Pleistocene alluvial fan deposits). Under the proposed Project, the Alameda Station, Alameda Tower, Alpine Tower, Chinatown/State Park Station, and Broadway Junction would be in an area underlain by young alluvium and alluvial fan deposits. The young alluvium consists of unconsolidated sand with occasional gravel and cobbles, and the alluvial fan deposits are composed of unconsolidated gravel, sand, and silt. Expansive soils are those that are high in expansive clays or silts. Therefore, the alluvial fan deposits with high silt contents have the potential to be expansive.

Expansive soils are soils that swell and shrink with wetting and drying, respectively. Shrinking and swelling can cause damage to foundations, concrete slabs, flatwork, and pavement. The proposed Project would be constructed in accordance with applicable standards, requirements, and building codes, including the current CBC, which contains provisions for construction on expansive soils. The CBC requirements include proper fill selection, moisture control, and compaction during construction, which prevent expansive soils from causing substantial damage. Expansive soils can be treated by removal (typically the upper three feet below finish grade) and replacement with low-expansive soils, lime treatment, and moisture conditioning. Mandatory compliance with applicable standards, requirements, and building codes would ensure structural integrity and safe construction, and the impact related to expansive soils would be less than significant under the proposed Project.

The Project area is composed of alluvial deposits and artificial fill. Although there is a low potential for soil corrosion to occur in sandy and silty-sandy soils, the proposed Project would be constructed in accordance with applicable standards, requirements, and building codes that would consider the corrosivity potential for foundation design and the site. Additionally, Mitigation Measure GEO-A would require soil samples be tested for corrosivity of the soil beneath the proposed Project to identify corrosion concerns for steel, iron, concrete, and buried metals during design geotechnical explorations, and provide recommendations to ensure structural integrity and safe construction. With compliance to existing standards and codes, impacts related to soil corrosion during construction would be less than significant under the proposed Project. Implementation of Mitigation Measure GEO-A, requiring soil samples be tested for corrosivity, would further reduce impacts related to soil corrosion under the proposed Project.

Operational Impacts

Less Than Significant Impact. The proposed Project would be in an area with the potential for expansive soil and soil corrosion. However, on completion of construction, the proposed Project would have complied with applicable standards, requirements, and building codes related to expansive soil and/or soil corrosion. Additionally, the implementation of Mitigation Measure GEO-A, the final geotechnical investigation which includes recommendations to protect against any potential expansive soil and/or soil corrosion would be required. With compliance to existing standards and codes and implementation of Mitigation Measure GEO-A, impacts related to expansive soil and/or soil corrosion would be reduced to less than significant under the proposed Project.

***GEO*-5:** *Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

Construction Impacts

No Impact. Where temporary wastewater disposal systems are required during construction, the systems would be above ground, and involve wastewater that would be transported to an appropriate off-site disposal facility or routed to the sanitary sewer system. Therefore, soils would not be needed to support the use of septic tanks or alternative wastewater disposal systems, and no impact would occur under the proposed Project.

Operational Impacts

No Impact. The proposed Chinatown/State Park Station would include separate facilities for concessions and restrooms, and Dodger Stadium Station would include restroom facilities for employees and passengers. Therefore, both sites would generate wastewater. The proposed stations would connect to local sanitary sewer infrastructure with wastewater treatment provided by the Los Angeles Sanitation and Environment Department. Therefore, the Project would not require the use of septic tanks or an alternative wastewater disposal system, and no impacts would occur.

GEO-6: *Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Construction Impacts

Less Than Significant Impact with Mitigation. Surface deposits in the majority of the proposed Project alignment and surrounding area consist of younger Quaternary alluvium deposited by the Los Angeles River. These deposits are younger than 10,000 years, and have a low probability of yielding scientifically significant fossils. However, these deposits are underlain with older Quaternary Alluvium and Miocene Monterey or Puente Formation, where fossils have been encountered at depths ranging from 35 feet to 100 feet at locations southeast and northeast of the Project site. An assessment of paleontological resources in the Project vicinity indicated that older Quaternary alluvium is expected to be present at differential depths in the Project area. Construction work is anticipated to reach up to 125 feet in depth for installation of the piles and an excavation depth of up to 10 feet, except for at the proposed Dodger Stadium Station, which has an excavation depth of 42 feet, and therefore may encounter paleontological deposits.

Construction of the subterranean area below the platform for storage and maintenance for the proposed Dodger Stadium Station would be excavated up to 42 feet. The Dodger Stadium property includes outcrops of the Monterey or Puente Formation, also known as the Puente Formation, a marine deposit dating to the middle and late Miocene epoch. Both Older Quaternary alluvium and the Monterey/Puente Formation have yielded considerable vertebrate fossils in the Los Angeles Basin in the past. However, as discussed above in Section 3.7.2.2, Artificial Fill, the northern portion of both the proposed Project alignment near Stadium Way and the Downtown Gate E are underlain by artificial fill placed during construction of Dodger Stadium. Based on a comparison of historic topographic maps and current topography, fills up to approximately 100 feet thick are present along the alignment between the SR-110 and the proposed Dodger Stadium Station.

The NHM records search and paleontological assessment indicated that paleontological resources may be encountered in the entire Project area because older Quaternary alluvium is expected to be present at different depths. However, the northern portion of the proposed Project near the approach to Dodger Stadium Station has a high potential to encounter paleontological resources, because the Miocene deposits of the Puente/Monterey Formation and older Quaternary alluvial deposits have the potential to contain significant vertebrate fossil remains. To avoid potentially high sensitivity areas for paleontological resources, or in the event paleontological resources are encountered, implementation of Mitigation Measure GEO-B would minimize impacts that would directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature. Mitigation Measure GEO-B would require the development of a Paleontological Resources Monitoring and Mitigation Plan (PRMMP) to provide direction on the identification of high-sensitivity areas and appropriate monitoring, excavation, and preservation processes during construction excavation activities. With the implementation of Mitigation Measure GEO-B, impacts related to paleontological resources would be reduced to less than significant.

Operational Impacts

No Impact. Ground disturbance activities would not occur during operation of the proposed Project, because the proposed Project would operate as an aerial gondola system. Therefore, the proposed Project would not directly or indirectly destroy a unique paleontological resource or geologic feature, and no impact would occur.

3.7.5 Mitigation Measures

The following mitigation measures are proposed to reduce significant impacts related to geology and soils to a level that is less than significant.

GEO-A: **Prepare a Site-Specific Final Geotechnical Report:** The Project Sponsor shall engage a California-registered geotechnical engineer to prepare and submit a site-specific final geotechnical investigation and report to the City of Los Angeles for review, consistent with the requirements of the CBC, applicable Los Angeles amendments, and California Geological Survey Special Publication 117 (as amended). A site-specific geotechnical exploration program, along with associated laboratory testing, is necessary to complete a design-level evaluation of the geologic hazards and conditions, seismic hazards, grading conditions, and foundation capacities. The site-specific final geotechnical report shall provide a description of the geological and geotechnical conditions at the site; the findings, conclusions, and mitigation recommendations for potential geologic and seismic hazards; and design-level geotechnical recommendations in support of grading and foundation design. Additionally, the geotechnical report shall include recommended measures to reduce potential impacts related to landslides, subsidence, liquefaction, differential settlement, expansive soils, soil corrosivity, or other potential ground failures induced by the proposed Project. The submittal and approval of the final geotechnical report shall be a condition of the grading and construction permits issued by the City of Los Angeles Department of Building and Safety. The Project Sponsor shall implement the recommendations contained in the approved report during project design and construction.

GEO-B: Prepare a Paleontological Resources Monitoring and Mitigation Plan (PRMMP): A PRMMP shall be developed by a qualified paleontologist meeting the criteria established by the Society for Vertebrate Paleontology. The plan shall apply to paleontologically sensitive deposits, including older Quaternary alluvium and Puente formation deposits, that may be impacted by the proposed Project, as determined by a qualified paleontologist in consultation with the construction team and guided by geotechnical coring. The qualified paleontologist shall supervise the paleontological monitor, who shall be present during construction excavations into older Quaternary alluvial deposits and Miocene Puente formation deposits. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains, and where appropriate, collecting wet or dry screened sediment samples of promising horizons for smaller fossil remains. The frequency of monitoring inspections shall be determined by the paleontologist, and shall be based on the rate of ground-disturbing activities, the material being excavated, and the depth of excavation; and if found, the abundance and type of paleontological materials. If any paleontological materials are found, the paleontological monitor shall temporarily divert or redirect ground-disturbing activities in the area of the exposed fossil to facilitate evaluation, and if necessary, salvage. The paleontologist shall assess the discovered material(s) and provide a recommendation(s), if necessary, for the preservation, conservation, or relocation of the resource, as appropriate. The Project Sponsor shall comply with the recommendations of the evaluating paleontologist, and ground-disturbing activities may resume once the paleontologist's recommendations have been implemented to the paleontologist's satisfaction. If paleontological materials are found, the paleontologist shall prepare a report identifying the resource and the recommendations proposed and implemented, within 1 year of completion of the fieldwork. A copy of the report shall be submitted to the Los Angeles County Natural History Museum.

3.7.6 Level of Significance after Mitigation

Implementation of Mitigation Measure GEO-A includes an evaluation of site-specific seismic hazards based on geological and geotechnical conditions, and recommended measures to reduce potential impacts related to seismic shaking, liquefaction, landslides, subsidence, differential settlement, soil corrosion, or other potential seismic-related ground failures. Implementation of Mitigation Measure GEO-B would include the preparation of a PRMMP to provide direction on the identification of high sensitivity areas for paleontological resources and appropriate monitoring, excavation, and preservation processes during construction activities. Upon implementation of Mitigation Measures GEO-A and GEO-B, significant impacts related to geology and soils would be reduced to less than significant.

This page intentionally left blank.

3.8 GREENHOUSE GAS EMISSIONS

This section evaluates the potential impacts to greenhouse gas (GHG) emissions from construction and operation of the proposed Project. Information contained in this section is summarized from the *Los Angeles Aerial Rapid Transit Greenhouse Gas Emissions Technical Report* (Appendix J of this Draft EIR). Presented below are the relevant federal, State, and local laws and regulations, an overview of the science of GHGs, and the methodology used to evaluate GHG emissions related to the Project. The analysis evaluates potential impacts related to those GHG emissions resulting from implementation of the proposed Project.

3.8.1 Regulatory Setting

Federal

Massachusetts v. Environmental Protection Agency

In April 2007, in *Massachusetts v. EPA*, the U.S. Supreme Court directed the Administrator of the U.S. Environmental Protection Agency (USEPA) to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the USEPA Administrator was directed to follow the language of Section 202(a) of the Clean Air Act (CAA). In December 2009, the Administrator of the USEPA signed a rule with two distinct findings regarding GHG emissions from new motor vehicles under Section 202(a) of the Clean Air Act (CAA):

- Endangerment finding: Elevated concentrations of GHGs—carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)—in the atmosphere threaten the public health and welfare of current and future generations.

- Cause or contribute finding: The combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare.

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the CAA. Regulation of GHG emissions from new motor vehicles achieves energy conservation through increased engine efficiency and the reduced consumption of petroleum-based fuels (e.g., gasoline).

Federal Vehicle Standards

In response to the Massachusetts v. EPA decision, in 2009 and 2010, the National Highway Traffic Safety Administration (NHTSA) and EPA issued final rules regulating fuel efficiency and GHG emissions for cars and light-duty trucks for model years 2011-2016.

Federal Vehicle Standards were established in 2010 for additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response, USEPA and NHTSA proposed and adopted stringent, coordinated federal GHG and fuel economy standards for model year 2017–2025 light-duty vehicles. In 2011, USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years

2014–2018.[1] The standards for CO_2 emissions and fuel consumption were tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. In August 2016, USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion metric tons (MT), and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.

In 2019, the USEPA and NHTSA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One, which revoked California's authority to set its own GHGs standards and set zero emission vehicle mandates in California.[2] The rule freezes the requirements for new zero emission vehicles (ZEV) sales at model year 2020 levels for year 2021 and beyond. The rule will likely result in a lower number of future ZEVs, and a corresponding greater number of future gasoline internal combustion engine vehicles. The SAFE Rule is subject to ongoing litigation, and on February 8, 2021, the D.C. Circuit Court of Appeals granted the Biden Administration's motion to stay litigation over Part 1 of the SAFE Rule. On April 22 and April 28, 2021, respectively, NHTSA and USEPA formally announced their intent to reconsider the Safe Rule (Part One).[3, 4] In December 2021, after reviewing all the public comments submitted on NHTSA's April 2021 Notice of Proposed Rulemaking, NHTSA finalized the CAFE Preemption rulemaking to withdraw its portions of the SAFE Rule (Part One).[5] Also in December 2021, USEPA finalized revised national GHG emissions standards for passenger cars and light trucks for Model Years 2023-2026.[6] On March 9, 2022, USEPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and ZEV sales mandate, and entirely rescinded the SAFE Rule (Part One).

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following actions:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy

1 USEPA and NHTSA. 2016. Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium and Heavy-Duty Engines and Vehicles – Phase 2. Available at: https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed April 2022.

2 USEPA and NHTSA. 2019. Federal Register, Vol. 84, No. 188, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. Available at: https://www.govinfo.gov/content/pkg/FR-2019-09-27/pdf/2019-20672.pdf. Accessed April 2022.

3 NHTSA. 2021. NHTSA Advances Biden-Harris Administration's Climate & Jobs Goals. Available at: https://www.nhtsa.gov/press-releases/nhtsa-advances-biden-harris-administrations-climate-jobs-goals. Accessed April 2022.

4 USEPA. 2021. Federal Register, Vol. 86, No. 80, California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a previous Withdrawal of a Waiver of Preemption; Opportunity for Public Hearing and Public Comment. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/notice-reconsideration-previous-withdrawal-waiver. Accessed April 2022.

5 NHTSA. 2021. NHTSA Repeals SAFE I Rule. December 21. Available at: https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy. Accessed April 2022.

6 USEPA. 2021. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026.* Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed April 2022.

efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;

- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by the USEPA and NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.

Clean Power Plan

On October 23, 2015, the USEPA published a final rule establishing the Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electricity Utility Generating Units (80 FR 64510-64660), also known as the Clean Power Plan. These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel–fired electric generating units. The guidelines establish CO_2 emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: (1) fossil-fuel fired electric utility steam-generating units, and (2) stationary combustion turbines. Concurrently, the USEPA published a final rule establishing Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units (80 Federal Register [FR] 64661-65120). The rule prescribes CO_2 emission standards for newly constructed, modified, and reconstructed affected fossil-fuel–fired electric utility generating units.

Implementation of the Clean Power Plan was stayed by the U.S. Supreme Court pending resolution of several lawsuits. In March 2017, President Donald Trump signed an executive order that calls for the USEPA's review of the Clean Power Plan. In June 2019, the USEPA issued the final Affordable Clean Energy rule, which became effective in August 2019. It officially rescinded the Clean Power Plan rule issued during the Obama Administration. However, on January 19, 2021, the D.C. Circuit Court of Appeals vacated the Affordable Clean Energy rule and remanded it to the USEPA to revise the regulations.

Executive Order 14008

On January 27, 2021, President Biden issued an Executive Order on Tackling the Climate Crisis at Home and Abroad (Executive Order 14008).[7] Part I of the Order highlights placing the climate crisis at the center of United States foreign policy and national security. Addressing the climate crisis will require significant short-term global reductions in GHG emissions and net-zero global emissions by mid-century or sooner. The United States will pursue green recovery efforts and initiative to advance the clean energy transition.

---

7 White House Briefing Room. 2021. Executive Order on Tackling the Climate Crisis at Home and Abroad. Available at: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/. Accessed April 2022.

Part II of the Order relays the government-wide approach to the climate crisis, which involves reducing climate pollution in every sector of the economy, especially through innovation, commercialization, and deployment of clean energy technologies and infrastructure. A National Climate Task Force was established to focus on addressing the climate crisis through key federal actions to reduce climate change impacts. A 100 percent carbon pollution-free electricity sector is targeted by no later than 2035, and a net-zero emissions economy is to be achieved by no later than 2050. Offshore wind energy is aimed to be doubled by 2030.

State

Assembly Bill 32

In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32; California Health and Safety Code Division 25.5, Sections 38500, et seq.). The primary objective of AB 32 is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020. To achieve this reduction mandate, AB 32 requires the California Air Resources Board (CARB) to adopt rules and regulations in an open public process to achieve the maximum potential in technologically feasible and cost-effective GHG reductions.

In 2007, CARB approved a statewide limit on the GHG emissions level for year 2020, consistent with the determined 1990 baseline and in accordance with Health and Safety Code Section 38550. Per Health and Safety Code Section 38561(b), CARB is also required to prepare, approve, and amend a scoping plan that identifies and makes recommendations for measures, mechanisms, and incentives as necessary to facilitate the maximum feasible and cost-effective GHG reductions by 2020.

Scoping Plan

2008 Scoping Plan

In 2008, CARB adopted the Climate Change Scoping Plan: A Framework for Change (2008 Scoping Plan), which contained the main strategies California will implement to achieve the required GHG reductions required by AB 32.[8] CARB created a planning framework that is composed of eight emissions sectors: (1) transportation; (2) electricity; (3) commercial and residential; (4) industry; (5) recycling and waste; (6) high global warming potential (GWP) gases; (7) agriculture; and, (8) forest net emissions.

The 2008 Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions from the eight emissions sectors to 1990 levels by 2020. To achieve the necessary GHG reductions to meet AB 32's 2020 target, CARB developed a series of reduction measures in the Scoping Plan covering a range of sectors and activities. CARB is required to update the Scoping Plan at least once every five years to evaluate progress and develop future inventories that may guide this process.

2014 Scoping Plan

CARB approved the first update to the Climate Change Scoping Plan: Building on the Framework, in June 2014. The Scoping Plan update includes a status of the 2008 Scoping Plan measures and other federal, State, and local efforts to reduce GHG emissions in California, and potential

[8] CARB. 2008. Climate Change Scoping Plan: A Framework for Change. December. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2008-scoping-plan-documents. Accessed April 2022.

actions to further reduce GHG emissions by 2020. In conjunction with the 2014 First Update, CARB identified "six key focus areas comprising major components of the State's economy to evaluate and describe the larger transformative actions that will be needed to meet the State's more expansive emission reduction needs by 2050." Those six areas are: (1) energy; (2) transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure); (3) agriculture; (4) water; (5) waste management; and (6) natural and working lands. The 2014 First Update identifies key recommended actions for each sector that will facilitate achievement of the 2050 reduction target.[9]

2017 Scoping Plan

The second update to the plan occurred in November 2017, which identified CARB's strategy for achieving the State's 2030 GHG target as established in SB 32. The strategy includes continuation of the Cap and Trade Program through 2030, and incorporates a Mobile Source Strategy that targets increasing ZEV fleet penetration and a more stringent target for the Low Carbon Fuel Standard by 2030. When discussing project-level GHG emissions reduction actions and thresholds, the 2017 Scoping Plan identified steps that local governments can take to support climate action as follows:

> "Project-Level Greenhouse Gas Emissions Reduction Actions and Thresholds
>
> Beyond plan-level goals and actions, local governments can also support climate action when considering discretionary approvals and entitlements of individual projects through California Environmental Quality Act (CEQA). Absent conformity with an adequate geographically specific GHG reduction plan…, CARB recommends that projects incorporate design features and GHG reduction measures, to the degree feasible, to minimize GHG emissions. Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development…
>
> Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA…
>
> California's future climate strategy will require increased focus on integrated land use planning to support livable, transit-connected communities, and conservation and other lands. Accommodating population and economic growth through travel- and energy-efficient land use provides GHG-efficient growth, reducing GHGs from both transportation and building energy use. GHGs can be further reduced at the project level through implementing energy-efficient construction and travel demand management approaches."[10]

---

9 CARB. 2014. First Update to the Climate Change Scoping Plan: Building on the Framework. May. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2013-scoping-plan-documents. Accessed April 2022.

10 CARB. 2017. California's 2017 Climate Change Scoping Plan. November. Available at: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed April 2022.

The 2022 Scoping Plan Update, which is currently under review, assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045.[11]

Senate Bill 32 and Assembly Bill 197

Enacted in 2016, SB 32 codifies the 2030 emissions reduction goal of Executive Order B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. SB 32 was coupled with AB 197, a companion bill designed to improve the transparency of CARB's regulatory and policy-oriented processes. AB 197 created the Joint Legislative Committee on Climate Change Policies, which has the responsibility to verify facts and make recommendations to the Legislature concerning statewide programs, policies, and investments related to climate change. AB 197 also requires CARB to make certain GHG emissions inventory data publicly available on its website; consider the social costs of GHG emissions when adopting rules and regulations designed to achieve GHG emission reductions; and include specified information in all Scoping Plan updates for the emission reduction measures contained therein.

Renewables Portfolio Standard

As most recently amended by SB 100 (2018), California's Renewables Portfolio Standard required retail sellers of electric services and local publicly owned electric utilities to increase procurement from eligible renewable energy resources to 50 percent of total retail sales by 2026, and 60 percent of total retail sales by 2030. SB 100 also established a State policy goal to achieve 100 percent carbon-free electricity by 2045, a goal that was accompanied by Executive Order B-55-18 (2018) which established a goal to achieve carbon neutrality as soon as possible, and no later than 2045, achieve and maintain net negative GHG emissions thereafter.[12]

Title 24 Building Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the California Code of Regulations, were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods for building features such as space conditioning, water heating, lighting, and whole envelope. The 2005, 2008, 2013, and 2016 updates to the efficiency standards included provisions such as cool roofs on commercial buildings, increased use of skylights, and higher efficiency lighting, heating, ventilation, and air conditioning (HVAC), and water heating systems.

The 2019 Title 24 standards are the currently applicable building energy efficiency standards, and became effective on January 1, 2020.[13] The 2019 updates include a requirement for solar photovoltaic systems for new homes, requirements for newly constructed healthcare facilities,

---

11 CARB. 2022. 2022 Scoping Plan Documents. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents#:~:text=The%202022%20Scoping%20Plan%20Update%20focuses%20on%20outcomes%20needed%20to,economic%2C%20environmental%2C%20energy%20security%2C. Accessed June 2022.

12 California Executive Department. 2018. Executive Order B-55-18 to Achieve Carbon Neutrality. Available at: https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf. Accessed June 2022.

13 CEC. 2019. California's Energy Efficiency Standards for Residential and Nonresidential Buildings. Available online at: https://www.energy.ca.gov/title24/2019standards/. Accessed April 2022.

additional high-efficiency lighting requirements, high-performance attic and walls, higher efficiency water and space heaters, and high-efficiency air filters.

The California Public Utilities Commission, California Energy Commission (CEC), and CARB also have a shared, established goal of achieving zero net energy (ZNE) for new construction in California. The ZNE goal generally means that new buildings must use a combination of improved efficiency and renewable energy generation to meet 100 percent of their annual energy need, as specifically defined by the CEC. The CEC has more recently focused on grid harmonization strategies, to bring maximum benefits to the grid, environment, and occupants; and GHG emissions reductions.[14]

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen Code, and establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. Like Part 6 of Title 24, the CALGreen Code is periodically updated, with increasing energy savings and efficiencies associated with each code update.

Sustainable Communities Strategy Plans (SB 375)

SB 375, the Sustainable Communities and Climate Protection Act, coordinates land use planning, regional transportation plans, and funding priorities to reduce GHG emissions from passenger vehicles through improving regional transportation, land use, and housing planning that provides easier access to jobs, services, public transit, and active transportation options. SB 375 requires that the Metropolitan Planning Organization (MPO) for the project area include a Sustainable Communities Strategy in its Regional Transportation Plan (RTP) that will achieve CARB's GHG emission reduction targets, by reducing vehicle miles traveled (VMT) from light-duty vehicles through developing more compact, complete, and efficient communities. SB 375's targets for the Southern California region under Southern California Association of Governments' (SCAG's) jurisdiction in 2020 and 2035 are reductions in per capita GHG emissions of 8 percent and 19 percent, respectively to 2005.[15] The Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for SCAG is further discussed below.

Senate Bill 743

SB 743 reflects a legislative policy to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of GHG emissions. SB 743 requires the Office of Planning and Research (OPR) to establish "alternative metrics to the metrics used for traffic levels of service for transportation impacts outside transit priority areas." Under SB 743, the new metrics or significance criteria must promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. SB 743 dictates that once the CEQA Guidelines are amended to include new thresholds, automobile delay, as described by level of service or similar measures of vehicular capacity or congestion, shall no longer be considered a significant impact under CEQA in all locations in which the new thresholds are applied. The Legislature gave OPR the option of applying the new thresholds only to transit priority

[14] CEC. 2018. The 2019 Building Energy Efficiency Standards ZNE Strategy. September 11.

[15] CARB. SB 375 Regional Plan Climate Targets. Available at: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed April 2022.

areas, or more broadly to areas throughout the State. OPR proposed to apply the new thresholds throughout the State.

In January 2016, OPR issued its Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA (Revised SB 743 Proposal). Included in the Revised SB 743 Proposal were proposed new CEQA Guidelines Section 15064.3 and related revisions to Appendix G. Under the proposed new Guidelines, the analysis of transportation impacts in the CEQA context would shift from a levels of service metric to a VMT metric. In proposing the new approach, OPR noted the relationship between VMT and GHG emissions. A VMT metric was adopted as part of the 2018 CEQA Guidelines Amendments, which became effective on December 28, 2018.

Low Carbon Fuel Standard

Executive Order S-1-07, as issued by former Governor Schwarzenegger, called for a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB by 2020.[16] In response, CARB approved the Low Carbon Fuel Standard (LCFS) regulations in 2009, which became fully effective in April 2010. In 2011, the Board approved amendments to clarify, streamline, and enhance certain provisions of the regulation. In 2015, the Board re-adopted the LCFS to address procedural issues, which began implementation on January 1, 2016. In 2018, the Board approved amendments to the regulation, which includes strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California's 2030 GHG target enacted through SB 32, adding new crediting opportunities to promote ZEV adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.[17]

Advanced Clean Cars Program

In 2012, CARB approved the Advanced Clean Cars (ACC) program, a new emissions-control program for non-commercial passenger vehicles and light-duty truck for model years 2017–2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of ZEVs. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

Executive Order N-79-20

Executive Order N-79-20 requires all new passenger vehicles sold in California and all off-road vehicles and equipment to be zero-emission where feasible by 2035, while all medium- and heavy-duty vehicles are required to be zero-emission where feasible by 2045. Governor Newsom ordered extensive inter-agency efforts to support the Executive Order, including evaluations of technological feasibility and cost effectiveness, expansion of electric vehicle (EV) charging options and affordable fueling, as well as identification of near-term strategies to increase zero-emission public transportation options.

16 Carbon intensity is a measure of the GHG emissions associated with the various production, distribution, and use steps in the "lifecycle" of a transportation fuel.

17 CARB. 2020. LCFS Basics. Available at: https://ww2.arb.ca.gov/sites/default/files/2020-09/basics-notes.pdf. Accessed April 2022.

Senate Bill 44

Senate Bill (SB) 44, effective January 1, 2022, provides specialized procedures for the administrative and judicial review of processes and approvals granted for an "environmental leadership transit project." SB 44 defines "environmental leadership transit project," as "a project to construct a fixed guideway and related fixed facilities" that meets all of the following conditions:

The fixed guideway operates at zero-emissions.

(i) If the project is more than two miles in length, the project reduces emissions by no less than 400,000 metric tons of greenhouse gases directly in the corridor of the project defined in the applicable environmental document over the useful life of the project, without using offsets.

(ii) If the project is no more than two miles in length, the project reduces emissions by no less than 50,000 metric tons of greenhouse gases directly in the corridor of the project defined in the applicable environmental document over the useful life of the project, without using offsets.

The project reduces no less than 30,000,000 vehicle miles traveled in the corridor of the project defined in the applicable environmental document over the useful life of the project.

The project is consistent with the applicable sustainable communities strategy or alternative planning strategy.

The project is consistent with the applicable regional transportation plan.

The project applicant demonstrates how it has incorporated sustainable infrastructure practices to achieve sustainability, resiliency, and climate change mitigation and adaptation goals in the project, including principles, frameworks, or guidelines as recommended by one or more of the following:

(i) The sustainability, resiliency, and climate change policies and standards of the American Society of Civil Engineers.

(ii) The Envision Rating System of the Institute for Sustainable Infrastructure.

(iii) The Leadership in Energy and Environment Design (LEED) rating system of the United States Green Building Council[18].

Regional

Southern California Association of Governments' Regional Transportation Plan/Sustainable Communities Strategy

SB 375 requires SCAG to incorporate a Sustainable Communities Strategy into its RTP that achieves the GHG emission reduction targets set by CARB. In May 2020, SCAG released and adopted the Adopted Final 2020-2045 RTP/SCS called Connect SoCal.[19] This update is expected to meet the State's goal of 19 percent reductions per capita of transportation emissions in 2035,

18 State of California. SB 44. Available at: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB44. Accessed April 2022.

19 SCAG. 2020. Connect SoCal. Available at: https://scag.ca.gov/connect-socal. Accessed April 2022.

as compared to 2005. Connect SoCal was adopted by SCAG's Regional Council on May 7, 2020; and on September 3, 2020, the final plan was unanimously adopted. On June 5, 2020, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) found that Connect SoCal was in air quality conformance with the state implementation plan.[20]

South Coast Air Quality Management District CEQA Guidelines and Proposed GHG Thresholds

The South Coast Air Quality Management District (SCAQMD) is principally responsible for comprehensive air pollution control in the South Coast Air Basin, which includes Los Angeles, Orange, and the urbanized portions of Riverside and San Bernardino Counties. SCAQMD works with SCAG and Los Angeles County's transportation commissions and local governments, and cooperates with all federal and State government agencies to regulate air quality.

In April 2008, SCAQMD convened a Working Group to develop GHG significance thresholds. On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold for projects where SCAQMD is the lead agency. As for all other projects where SCAQMD is not the lead agency, the SCAQMD Board has adopted an interim threshold of 10,000 MT of CO_2 equivalents (CO_2e) per year for industrial stationary source projects. The Working Group has not convened since the fall of 2010. As of April 2022, the proposal has not been considered or approved for use by the SCAQMD Board. In the meantime, no GHG significance thresholds for non-industrial sources have been approved by the SCAQMD Board.

2019 Metro Climate Action and Adaptation Plan

First published and approved by the Metro Board in June 2012, the Climate Action and Adaptation Plan (CAAP) establishes a framework to identify the areas of greatest opportunity for Metro to reduce GHG emissions, and evaluates opportunities based on their cost and the volume of emission reduction. Metro's influence on GHG emissions extends to all of Los Angeles County's transportation systems.

The 2019 CAAP outlines how Metro will reduce operational GHG emissions and protect riders from climate change. Since the adoption of the first CAAP, Metro has reported that its GHG emissions have decreased by 12 percent, despite an increase in service by 4 percent.[21] The CAAP includes a GHG emissions inventory for Metro activities from 2017, and demonstrates how these emissions are expected to change by 2030 and 2050. Metro outlines 13 GHG reduction measures in the CAAP that will enable Metro to achieve a goal of 79 percent reduction in emissions relative to 2017 levels by 2030, and 100 percent by 2050. It also includes climate adaptation actions to protect its infrastructure, along with Metro staff and riders.

Metro Vision 2028 Strategic Plan

Metro approved the Vision 2028 Strategic Plan (Vision 2028) in June 2018, following the passage of Measure M in November 2016, a voter-approved sales tax anticipated to add $120 billion in transportation funds to the Los Angeles Metropolitan area over the next 40 years. By 2028, Metro intends to double the percentage of use of transportation modes outside of passenger vehicles,

---

[20] FTA/FHWA. June 2020. SCAG Connect SoCal RTP/SCS, 2019 FTIP Amendment No. 19- 12 (and associated conformity determination) Letter. Available at: https://scag.ca.gov/sites/main/files/file-attachments/scagff12_060520_2.pdf. Accessed June 2022.

[21] Metro. 2019. Metro Climate and Adaptation Plan 2019. Available at: https://media.metro.net/projects_studies/sustainability/images/Climate_Action_Plan.pdf. Accessed: April 2022.

which generate the highest GHG emissions per person per trip. Vision 2028 aims to accomplish the following: ensuring that County residents have access to high-quality mobility options within a 10-minute distance from home, reducing trip wait to a maximum of 15 minutes at any time, improving average travel speeds on the County's bus network by 30 percent, and providing reliable and convenient options to avoid congestion.

Metro Green Construction Policy

Metro adopted a Green Construction Policy in August 2011, and committed to using more sustainable construction equipment and vehicles for all construction projects performed on Metro properties and in Metro rights-of-way. The Green Construction Policy also committed to implementing best practices to reduce emissions. Under the Policy, all off-road diesel-powered construction equipment greater than 50 horsepower is required to meet Tier-4 off-road emission standards. In addition, idling of construction equipment shall be restricted to 5 minutes unless certain exemptions apply, and construction equipment shall incorporate, where feasible, emission-reduction technologies, such as hybrid drives and specific fuel economy standards.

2020 Metro Moving Beyond Sustainability Strategic Plan

Metro published the Moving Beyond Sustainability Plan (MBS) in 2020, which outlines a comprehensive sustainability strategy for the next 10 years—and beyond. The plan combines the concerted efforts of Metro's Environmental Compliance and Sustainability Department and Los Angeles' Countywide Planning and Development Department, and integrates input and guidance from internal and external stakeholders.

MBS is Metro's most comprehensive sustainability planning document to date, and sets goals, targets, strategies, and actions that align with and emanate from other key Metro guidance documents, including Vision 2028, Long Range Transportation Plan, Equity Platform Framework, and our Climate Action and Adaptation Plan. It is also designed to align with and support parallel efforts and plans under way at the City of Los Angeles and Los Angeles County, including the Green New Deal and Our County[22].

Local

Sustainable City pLAn and Los Angeles' Green New Deal

The Sustainable City pLAn (pLAn), first introduced by Mayor Eric Garcetti in April 2015, identified goals and strategies to improve sustainability for the City in the areas of the environment, economy, and equity. In April 2019, Mayor Eric Garcetti released the Los Angeles' Green New Deal, which provided greater detail to the former pLAn, and proposed new goals and accelerated targets.[23] The climate-oriented goals of the Green New Deal were inspired by the initiatives set forth in the 2017 Paris Climate Agreement. With respect to GHGs, the Green New Deal committed to increasing solar power generation and energy efficiency. In addition, it accelerated the City's commitment to attaining GHG reductions, with the goals of reducing levels by 50 percent by 2025, 73 percent by 2035, and 100 percent by 2050 in comparison to the 1990 baseline emissions. Other targets identified in the Green New Deal included a 13 percent reduction in VMT per capita by 2025, and a 39 percent reduction by 2035, as well as increasing the percentage of trips made

---

22 Metro. 2020. Moving Beyond Sustainability Strategic Plan. Available at: http://media.metro.net/2020/Moving-Beyond-Sustainability-Strategic-Plan-2020.pdf. Accessed April 2022.

23 City of Los Angeles. 2019. L.A.'s Green New Deal: Sustainable City pLAn. Available at: https://plan.lamayor.org/sites/default/files/pLAn_2019_final.pdf, accessed April2022.

by walking, biking, or transit to 35 percent by 2025, 50 percent by 2035, and maintaining a percentage of at least 50 percent by 2050.

Proposed DTLA 2040 Community Plan

The City of Los Angeles is currently in the process of updating the Central City and Central City North Community Plans through the Downtown Los Angeles 2040 Draft Community Plan. Because it is unknown when the new community plan would be adopted and its EIR certified, the analysis in this section is based on the current Community Plans.

3.8.2 Environmental Setting

Science of Global Climate Change

There is a general scientific consensus that global climate change is occurring, caused in whole or in part by increased emissions of GHGs that keep the Earth's surface warm by trapping heat in the Earth's atmosphere, in much the same way as glass traps heat in a greenhouse. The Earth's climate is changing because human activities, primarily the combustion of fossil fuels, are altering the chemical composition of the atmosphere through the buildup of GHGs.

GHGs allow the sun's radiation to penetrate the atmosphere and warm the Earth's surface, but do not let the infrared radiation emitted from the Earth escape back into outer space. As a result, global temperatures are predicted to increase over the century. In particular, if climate change remains unabated, surface temperatures in California are expected to increase anywhere from 4.1 to 8.6 degrees Fahrenheit by the end of the century. Not only would higher temperatures directly affect the health of individuals through greater risk of dehydration, heat stroke, and respiratory distress, the higher temperatures may increase ozone formation, thereby worsening air quality. Rising temperatures could also reduce the snowpack, which would increase the risk of water shortages. Higher temperatures along with reduced water supplies could reduce the quantity and quality of agricultural products. In addition, there could be an increase in wildfires and a shift in distribution of natural vegetation throughout the State. Global warming could also increase sea levels and coastal storms, resulting in greater risk of flooding.

Global Greenhouse Gas Emissions and Climate Change

The Earth's climate is changing because human activities, primarily the combustion of fossil fuels, are altering the chemical composition of the atmosphere through the buildup of GHGs. Emissions of CO_2 are the leading cause of global warming, along with other pollutants such as CH_4, N_2O, HFCs, PFCs, and SF_6.

The magnitude of each GHG's impact on global warming differs because each GHG has a different GWP. The GWP indicates how much the pollutant will contribute to global warming relative to the contribution from the same mass of CO_2 on a pound-for-pound basis. The effect each GHG has on climate change is measured as a combination of the volume of its emissions and its GWP. This effect is expressed as a function of the amount of warming caused by the same mass of CO_2. Therefore, GHG emissions are typically measured in terms of pounds or metric tons of CO_2e. CO_2 has the greatest impact on global warming because of the relatively large quantities of CO_2 emitted into the atmosphere. Global CO_2 concentrations have increased from 265 parts per million (ppm) to 280 ppm over the last 10,000 years. Within the last 200 years, CO_2 concentrations have risen by 49 percent to current levels of approximately 419 ppm.[24]

Climate change modeling predicts that continued GHG emissions at or above current rates would induce further extreme climate changes by the end of the century. Not only would higher temperatures directly affect the health of individuals through greater risk of dehydration, heat stroke, and respiratory distress, the higher temperatures may increase ozone formation, thereby worsening air quality. Rising temperatures could also reduce the snowpack, which would increase the risk of water shortages, and increase the frequency and intensity of wildfires. Higher temperatures along with reduced water supplies could reduce the quantity and quality of agricultural products. In addition, there could be an increase in wildfires and a shift in distribution of natural vegetation throughout the State. Global warming could also increase sea levels and coastal storms, resulting in greater risk of flooding.

Sources of Greenhouse Gas Emissions

National

In 2017, the United States emitted about 6.5 billion MT (gross emissions) of CO_2e. This represents a 1.3 percent increase since 1990, and a 13.0 percent reduction below peak levels in 2005. In the same year, transportation accounted for the highest fraction of GHG emissions (approximately 29 percent) of the six economic sectors (residential, commercial, industrial, transportation, electric power, and agriculture). The majority of transportation emissions resulted from passenger cars (41.2 percent), freight trucks (23.3 percent), and light-duty trucks (17.5 percent).[25] From 2005 to 2013, transportation emissions dropped by 9 percent due partly to increased fuel efficiency across the U.S. vehicle fleet and the domestic aviation system.[26] However, from 1990 to 2017, transportation emissions rose by 17 percent, because demand for travel increased as a result of factors including population growth, economic growth, urban sprawl, and periods of low fuel prices.[27]

California

In 2018, California emitted approximately 425 million MT of CO_2e, or about 7 percent of total U.S. emissions.[28] California's percent contribution to overall U.S. emissions is due to its size in comparison to other states. However, California has among the lowest per capita GHG emission rates in the country as a result of its energy efficiency and renewable energy programs. In addition, California's mild climate has allowed the State to reduce its fuel use and GHG emissions.

---

24 NOAA. 2022. Monthly Average Mauna Loa CO_2. Available at: https://www.esrl.noaa.gov/gmd/ccgg/trends/. Accessed April 2022.

25 USEPA. 2019. Inventory of U.S. Greenhouse Gas Emissions and Sinks. Available at: https://www.epa.gov/sites/production/files/2019-04/documents/us-ghg-inventory-2019-main-text.pdf. Accessed April 2022.

26 United States. 2016. 2016 Climate Action Report: Second Biennial Report of the United States of America Under the United Nations Framework Convention on Climate Change. Available at: https://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/2016_second_biennial_report_of_the_united_states_.pdf. Accessed April 2022.

27 USEPA. 2019. Inventory of U.S. Greenhouse Gas Emissions and Sinks. Available at: https://www.epa.gov/sites/production/files/2019-04/documents/us-ghg-inventory-2019-main-text.pdf. Accessed April 2022.

28 CARB. 2019. California Greenhouse Gas Emissions for 2000-2017 – Trends of Emissions and Other Indicators. Available at: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf. Accessed April 2022.

The largest contributor to California's 2018 GHG emissions inventory was the transportation sector at 40 percent, followed by industrial sources at 21 percent, electricity generation (both in-state and out-of-state) at 15 percent, and commercial and residential sources at 10 percent. The remainder of the GHG emissions inventory included agriculture, high GWP sources including the release of ozone-depleting substances, losses from the electricity transmission and distribution system, and gases from semiconductor manufacturing processes, and the recycling and waste sectors.[29]

Per California's Fourth Climate Change Assessment by The California Climate Change Center (CCCC), by 2050, the statewide average annual maximum daily temperature is projected to warm by approximately 5.6 to 8.8 degrees Fahrenheit above 2000 averages.[30] As discussed, some of the potential effects specific to California as a result of global warming and climate change may include:

- Poor air quality, which in combination with drier conditions, would increase the potential for large wildfires, further worsening air quality and public health, as well as increased need for power generation;

- Challenges to the State's water supply, such as increase in demand and competition between urban and agricultural use of water in the Sacramento-San Joaquin Delta and threats to agricultural crop-yield;

- Changes in hydrology such as the amount of precipitation, intensity and frequency of storms and flooding, sea level rise, coastal erosion, and saltwater intrusion, which would threaten California's fresh water supply; and

- Changes in timing of ecological events, geographic ranges, species' composition within communities, and ecosystem processes such as carbon cycling and storage.

3.8.3 Methodology

Similar to the air quality analysis, the GHG emissions were calculated using CalEEMod 2020.4.0, California Emissions Estimator Model. CalEEMod is a statewide program designed to calculate both criteria and GHG emissions from development projects in California. CalEEMod uses well-established and SCAQMD-accepted models for emission estimates combined with documented modeling assumptions that can be used if site-specific information is not available. CalEEMod incorporates and relies upon models and emissions estimates that are based on published and well-established sources such as the USEPA AP-42 emission factors, CARB's on-road and off-road mobile source emission factor models (EMFAC and OFFROAD, respectively), and studies commissioned by California agencies such as the CEC and CalRecycle. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory) have been provided by the various California air districts to account for local requirements and conditions. The model is an accepted and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California, and is recommended by the SCAQMD as the technical expert agency on air quality matters. Accordingly, using CalEEMod provides a consistent, transparent, and reasonable methodology for estimating the Project's construction

[29] CARB. 2020. California Greenhouse Gas Emissions for 2000-2018 – Trends of Emissions and Other Indicators. Available at: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2018/ghg_inventory_trends_00-18.pdf. Accessed April 2022.

[30] CCCC. 2019. California's Fourth Climate Change Assessment. Key Findings. Available at: http://www.climateassessment.ca.gov/state/overview/. Accessed April 2022.

and operational air quality emissions for purposes of this analysis. The full methodology is described in the *Los Angeles Aerial Rapid Transit Greenhouse Gas Emissions Technical Report* (Appendix J of this Draft EIR).

The proposed Project involves the construction of stations, a junction, and towers. The proposed Project would result in construction and operational emissions. Operational GHG emissions were evaluated for the following three scenarios: (1) Baseline/Existing – calculated existing conditions in year 2019; (2) Project Build-out – calculated projected emissions in year 2026, after completion of all construction activity; and (3) Horizon Year Projection – calculated projected emissions in year 2042.

State CEQA Guidelines Section 15064.4[31] discusses the significance evaluation for GHG emissions. Section 15064.4(a) recognizes that the "determination of the significance calls for a careful judgment" by the lead agency that is coupled with lead agency discretion to determine whether to (1) quantify greenhouse gas emissions resulting from a project,[32] and/or (2) rely on a qualitative analysis or performance-based thresholds. Section 15064.4(b) states that a lead agency should focus analysis on the incremental contribution of the project's emissions to climate change, and that a project's incremental contribution may be cumulatively considerable even if it appears small compared to statewide, national, or global emissions. Section 15064.4(b) further states that a lead agency should consider the following, non-exclusive list of factors when assessing the significance of GHG emissions:

1. The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting;

2. The extent to which project emissions exceed a threshold of significance that the lead agency determines applies to the project; and

3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change, and its conclusion that the project's incremental contribution is not cumulatively considerable.[33]

Thresholds of Significance

For purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact with respect to greenhouse gas emissions if it would:

---

31 CNRA. 2018. Final Adopted Text of the 2018 Amendments and Additions to the State CEQA Guidelines. Available at: http://resources.ca.gov/ceqa/docs/2018_CEQA_FINAL_TEXT_122818.pdf. Accessed April 2022.

32 CNRA. 2018. Final Adopted Text of the 2018 Amendments and Additions to the State CEQA Guidelines. Available at: http://resources.ca.gov/ceqa/docs/2018_CEQA_FINAL_TEXT_122818.pdf. Accessed April 2022. Section 15064.4(c) states that a lead agency may use a model or methodology of its discretion to estimate greenhouse gas emissions resulting from a project. The selection of the model or methodology must be supported with substantial evidence.

33 Ibid. Section 15064.4(b).

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

3.8.4 Environmental Impacts

GHG-1: *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Construction

Less Than Significant Impact. The proposed Project would include the construction of stations, a junction, and towers. Construction of the proposed Project components would be phased, and may partially overlap in schedule, especially because construction would occur at several physically separated sites. Construction activities could commence as early as 2024, and take approximately 25 months, including construction, cable installation, and system testing. Construction is anticipated to occur predominantly on weekdays (i.e., Monday through Friday) from approximately 7 am to 5 pm.

The major construction phases include utilities; foundations, columns, and tower base; structural steel and gondola equipment erection; asphalt and re-striping; vertical circulation, hardscape, and landscape and interior work; and rope pulling. The GHG emissions from these construction phases are largely attributable to fuel use from off-road construction equipment and on-road vehicle trips associated with worker commutes, vendor deliveries, and material hauling. In addition, some indirect GHG emissions are produced from electricity usage during construction.

Permanent vegetation changes that occur because of land use development constitute a one-time change in the carbon sequestration capacity of a project site. In this case, land would be converted to stations, towers, and a junction with landscaped areas with trees.

The total GHG emissions from proposed Project construction are 3,792 MT CO_2e, which include construction electricity usage and construction off-road equipment and mobile trips. When amortized over a period of 30 years, the emission estimates for the Project become 127 MT CO_2e per year. Consistent with SCAQMD recognized methodologies, amortized construction GHG emissions are included in the Project GHG operational emissions, as shown in Table 3.8-1, and evaluated below as part of the Project's GHG emissions.

Operation

Less Than Significant Impact. Operational emissions are emissions that would occur after build-out of the proposed Project. This analysis identifies operational emissions for source categories including direct emissions from area, mobile, and stationary sources, and indirect emissions from energy use, water/wastewater, and waste management.

Table 3.8-1: Summary of Project GHG Emissions

Source of GHG Emissions	CO_2e (Metric Tons/Year)
Baseline/Existing Conditions (2019)	
On-Road Mobile Emissions	18,655
Build-Out (2026)	
On-Road Mobile Emissions	14,869
Electricity Usage	6
Water and Wastewater	7
Solid Waste	163
Land Use Change	2
Construction Equipment/Trips (30-year Amortization)	117
Construction Electricity (30-year Amortization)	10
Net GHG Emissions	**-3,482**
Horizon Year (2042)	
On-Road Mobile Emissions	11,950
Electricity Usage	1
Water and Wastewater	2
Solid Waste	199
Land Use Change	2
Construction Equipment/Trips (30-year Amortization)	117
Construction Electricity (30-year Amortization)	10
Net GHG Emissions	**-6,375**

The Project is proposed to be powered by renewable energy, and provide safe, environmentally friendly, and high-capacity transit connectivity in the Project area. Operation of the proposed Project would result in electricity demand for the aerial gondola system, as well as energy needed for complementary components such as station lighting, restrooms, and escalators. GHG emissions from electricity use are based on anticipated sources of power. The Project would obtain power through renewable electricity from LADWP's Green Power Program. Renewable electricity sources are assumed to have zero GHG emissions (e.g., the gondola operations would be powered by renewable electricity from LADWP's Green Power Program). Other sources not powered by renewable electricity, such as the electricity usage by the Los Angeles State Historic Park amenities at the Chinatown/State Park Station, would result in a small amount of GHG emissions. These amenities would be operated by the Los Angeles State Historic Park. Additionally, the proposed Project would feature battery storage as a backup power supply to allow for unloading of the aerial gondola system in the event of a temporary power grid failure, which would require several hours per year of maintenance.

Area source GHG emissions would include landscaping-related fuel combustion sources, such as lawn mowers. Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. Solid waste generation associated with the aerial gondola system is expected to be small.

To determine whether the proposed Project would generate GHGs, the Project's estimated operational emissions are compared to the GHG emissions associated with the 2019 existing condition (otherwise referred to as the baseline year). Current vehicular emissions associated with events at Dodger Stadium result from passengers in vehicles traveling to the game, along with employees (i.e., total VMT). By transitioning the passengers of these vehicles to the proposed Project, total VMT would be reduced, along with corresponding reductions in emissions. GHG emissions were approximately 18,655 MT CO_2e per year in the 2019 existing conditions from VMT associated with those attending Dodger games and other events at Dodger Stadium.

At its build-out operational year of 2026, the proposed Project's emissions are estimated to be approximately 15,174 MT CO_2e/yr. Accordingly, the proposed Project would result in a decrease from existing conditions by 3,482 MT CO_2e/yr. At its horizon operational year of 2042,[34] the proposed Project's emissions are estimated to be approximately 12,281 MT CO_2e/yr. Accordingly, the proposed Project would result in a decrease from existing GHG conditions by 6,375 MT CO_2e/yr. Therefore, the proposed Project would result in a net decrease in GHG emissions compared to existing conditions.

Table 3.8-1 summarizes the results of the GHG emissions analysis, including the baseline year, buildout year, and horizon year, and presents the amortized annual rate for construction over a 30-year period.

As shown in Table 3.8-1, the proposed Project would reduce GHG emissions compared to the baseline conditions by 3,482 MT CO_2e/yr at the build-out year (2026), and a decrease from existing GHG conditions by 6,375 MT CO_2e/yr at the horizon year (2042). In accordance with CEQA Section 15064.4(b), the proposed Project would not result in an incremental contribution of GHG emissions compared to existing conditions; and as shown, would reduce GHG emissions compared to existing conditions. Therefore, impacts related to GHG emissions from construction and operation of the proposed Project would be less than significant.

GHG-2: *Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?*

Less Than Significant Impact. California's climate policy under AB 32 and SB 32 is rooted in achieving GHG emissions reductions below the reference year of 1990, even as California's population and economy continue to grow over time. GHG reduction plans, such as the CARB Scoping Plan, are premised on achieving long-term reductions in GHG emissions even as sectors of the economy continue to emit GHGs. Because the proposed Project would result in a net decrease of GHG emissions, the proposed Project is consistent with applicable GHG reduction plans, policies, and regulations that were designed to achieve overall GHG reductions even as growth occurs.

As described previously, the Project is proposed to be powered by renewable electricity, and provide safe, environmentally friendly, and high-capacity transit connectivity in the Project area. In addition, as noted in Appendix C of the *Los Angeles Aerial Rapid Transit Greenhouse Gas Emissions Technical Report*, the proposed Project would be consistent with all applicable GHG reduction plans, policies, and regulations. Implementation of the proposed Project would result in a net decrease of GHG emissions as an innovative transportation alternative that would reduce VMT and emissions compared to existing conditions. The electrical power for the operation of the proposed Project's aerial gondola system and associated stations, junction, and towers would come from renewable resources as supplied by the LADWP's Green Power Program. The proposed Project would incorporate energy-efficient features, such as open-air stations and high-efficiency lighting. The proposed Project would meet the CALGreen Code to the extent practicable, and would include water-efficient restroom features and drought-tolerant landscaping. In addition, at least 65 percent of the construction waste from the proposed Project will be salvaged for reuse, recycled, or diverted from landfills. The proposed Project would provide

[34] The horizon year of 2042 was chosen because it is the current horizon year for Metro's Long Range Transportation Plan.

transportation alternatives consistent with local, regional, and statewide policies to reduce traffic, air pollution, and GHGs by reducing VMT.

To provide additional analysis of the proposed Project's consistency with specific elements of applicable State, regional, and local GHG plans, policies, and regulations, the proposed Project's potential to impede or conflict with the State's GHG reduction strategies was evaluated (refer to Appendix C of the *Los Angeles Aerial Rapid Transit Greenhouse Gas Emissions Technical Report)*, including the 2017 Scoping Plan, California Renewables Portfolio Standard as most recently amended by SB 100, Title 24, Assembly Bill 1109, CALGreen Code, AB 1493 (Pavley), the Low Carbon Fuel Standard, Advanced Clean Cars Program, SB 375 (RTP/SCS), Senate Bill X7-7, IWMA, and AB 341. In addition, the proposed Project's consistency with the 2019 Metro CAAP was analyzed, which commits Metro to reducing its GHG emissions by 79 percent relative to 2017 levels by 2030 and 100 percent (i.e., zero emissions) by 2050.

As described in Appendix C, the Project would not impede or conflict with applicable GHG reduction plans, policies, or regulations. Given the Project's reduction in GHG emissions compared to existing conditions in the buildout year (2026) and horizon year (2042), as well as the Project using renewable electricity and providing an innovative alternative mode of transit, the Project is consistent with California's GHG reduction target for the year 2030, as codified by SB 32, and California's post-2030 climate goals.

Accordingly, the proposed Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions, and the impact would be less than significant.

3.8.5 Mitigation Measures

The proposed Project would result in less than significant impacts related to GHG emissions. No mitigation measures are required.

3.8.6 Level of Significance after Mitigation

The proposed Project would result in less than significant impacts related to GHG emission.

This page intentionally left blank.

3.9 Hazards and Hazardous Materials

This section evaluates the potential impacts related to hazards and hazardous materials from construction, operation, and maintenance of the proposed Project. This section is based in part on the Phase I Environmental Site Assessment (ESA) that was prepared for the proposed Project by AECOM in July 2022 (Appendix K of this Draft EIR). The environmental regulatory database report and records review prepared for the proposed Project in April 2022 is provided in Section 6 of Appendix K. For a detailed evaluation of hazards related to toxic air contaminants, refer to Section 3.3, Air Quality, of this Draft EIR. For a detailed evaluation of the potential impacts related to wildfire and wildland fires, including the regulatory setting, refer to Section 3.20, Wildfire, of this Draft EIR.

The term "hazardous materials" can have varying definitions for different regulatory programs, but are generally defined by state and federal regulations as substances that must be regulated in order to protect the public health and the environment. For the purpose of the following analysis, the term "hazardous materials" refers to both hazardous materials and hazardous waste.

Hazardous materials have certain chemical, physical, or infectious properties that cause them to be hazardous. The California Health and Safety Code Article 22501 defines hazardous materials as a material, "because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment."

Toxic substances may cause short-term or long-term health effects, ranging from temporary effects to permanent disability or death.[1] Examples of common toxic substances include formaldehyde, mercury, lead, asbestos, toxic air pollutants, per- and polyfluoroalkyl substances, pesticides, and polychlorinated biphenyls (PCBs).[2] Soils may also be toxic because of accidental spilling of toxic substances, prior land uses, and naturally occurring conditions.

3.9.1 Regulatory Setting

Federal

Comprehensive Environmental Response, Compensation, and Liability Act of 1980

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, otherwise known as the "Superfund Act," provides a federal funding to identify, characterize, and remediate hazardous material sites. Through the Superfund Act, the USEPA was granted the authority to identify and obtain the cooperation of parties responsible for hazardous material incidents and conditions.

Occupational Safety and Health Act of 1970

The Occupational Safety and Health Act, which is implemented by the Occupational Safety and Health Administration (OSHA), contains requirements, as set forth in Title 29 of the Code of Federal Regulations (CFR) Section 1910, that are designed to promote worker safety, worker training, and a worker's right-to-know. OSHA requirements would be in effect during construction

1 World Health Organization. 2016. Public Health Impact of Chemicals: Knowns and Unknowns. Available at: https://www.who.int/publications/i/item/WHO-FWC-PHE-EPE-16.01-eng. Accessed May 2022.

2 United States Environmental Protection Agency (USEPA). 2020. Chemicals and Toxic Topics. Available at: https://www.epa.gov/environmental-topics/chemicals-and-toxics-topics. Accessed May 2022.

and operation of the Project to ensure the safety of workers. Section 1926 requires that all employees working on site (such as, but not limited to equipment operators, general laborers, and others) exposed to hazardous substances, health hazards, or safety hazards, and their supervisors and management responsible for the site shall receive training meeting the requirements before they are permitted to engage in hazardous waste operations that could expose them to hazardous substances, safety, or health hazards.

OSHA 29 CFR 1926.55

CFR 1926.55 includes tables of permissible exposure limits for airborne contaminants and mineral dusts. CFR 1926.55 states that employers must limit an employee's exposure to any substance listed in the subsection tables in accordance with 1926.55(a)(1), (a)(2), and 1926.55 (b), (c), and (d).[3]

National Emissions Standards for Hazardous Air Pollutants for Asbestos

The USEPA established the National Emission Standards for Hazardous Air Pollutants for Asbestos (Asbestos NESHAP), which establishes a national work practice standard to minimize the release of asbestos fibers during activities involving the handling of asbestos. Air toxics regulations under the Clean Air Act, as described in Section 3.3, Air Quality, of this Draft EIR, specify work practices for asbestos to be followed during demolitions and renovations of all facilities, including, but not limited to, structures, installations, and buildings. The regulations require a thorough inspection where the demolition or renovation operation will occur. The Asbestos NESHAP also includes regulatory provisions for the labeling of asbestos waste.[4]

Resource Conservation and Recovery Act of 1976

The Resource Conservation and Recovery Act (RCRA) gives USEPA authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste. The main objectives are to protect human health and the environment from the potential hazards of waste disposal to conserve energy and natural resources, to reduce the amount of waste generated, and to ensure that wastes are managed in an environmentally sound manner. Regulated entities that generate hazardous waste are subject to waste accumulation, manifesting, and recordkeeping standards. Compliance monitoring is delegated to states and local authorities. The California Department of Toxic Substances Control (DTSC) has been delegated by USEPA to implement and enforce the RCRA requirements in California.

Superfund Amendment and Reauthorization Act, Title III

The Superfund Amendment and Reauthorization Act (SARA), Title III of 1986 is the Emergency Planning and Community Right-to-Know Act.[5] Facilities are required to report the following items on USEPA Form R, Toxic Chemical Release Inventory Reporting Form: facility identification, off-site locations where toxic chemicals are transferred in wastes, chemical-specific information, and supplemental information. Form R requires a facility to list the hazardous substances that are handled on-site, and to account for all releases of listed toxic chemicals for the calendar year.

---

3 United States Department of Labor, Occupational Safety and Health Administration: https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.55. Accessed May 2022.

4 USEPA. Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP). Available at: https://www.epa.gov/stationary-sources-air-pollution/asbestos-national-emission-standards-hazardous-air-pollutants. Accessed May 2022.

5 United States Code. Title 42, Chapter 116 et seq.: Emergency Planning and Community Right-to-Know Act. Available at: https://www.law.cornell.edu/uscode/text/42/chapter-116. Accessed May 2022.

Releases to the environment include emissions to the air, discharges to surface water, and on-site releases to land and underground injection wells.

Hazardous Materials Transportation Act of 1975

The United States Department of Transportation, the Federal Highway Administration, and the Federal Railroad Administration are the three entities that regulate the transport of hazardous materials at the federal level. The Hazardous Materials Transportation Act (49 CFR 171, Subchapter C) governs the transportation of hazardous materials. These regulations are promulgated by the United States Department of Transportation and enforced by the USEPA.

American Society for Testing and Materials International (ASTM) E1527-13

American Society for Testing and Materials International E1527-13 is not a federal regulation but a professional society standard for hazardous material site assessment.[6] It is recognized by the USEPA as a means to assess and indicate a site's hazardous material conditions.

Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), creating the framework for state, local, tribal and territorial governments to engage in hazard mitigation planning to receive certain types of non-emergency disaster assistance. Requirements and procedures to implement hazard mitigation planning provisions may be found in the Code of Federal Regulations, Stafford Act Title 44, Chapter 1, Part 201 (44 CFR Part 201).

The purpose of mitigation planning is for State, local, and Indian tribal governments to identify the natural hazards that impact them, to identify actions and activities to reduce any losses from those hazards, and to establish a coordinated process to implement the plan, taking advantage of a wide range of resources.

State

California Department of Toxic Substances Control

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State of California, local agencies, and developers to comply with California Environmental Quality Act (CEQA) requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency to develop, at least annually, an updated Cortese List, which is a planning document used by State, local agencies, and developers, to comply with CEQA requirements in providing information about the location of hazardous materials release sites. The DTSC is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List. Although the Cortese List is no longer maintained as a single list, the following databases provide information that meet the Cortese List requirements:

---

6 American Society for Testing and Materials. ASTM E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Available at https://www.astm.org/Standards/E1527.htm. Accessed May 2022.

1. List of Hazardous Waste and Substances sites and Brownfields and Environmental Restoration Program (Cleanup Program) from Department of Toxic Substances Control (DTSC) Envirostor database (Health and Safety Code Section 25356);

2. List of open and active leaking underground storage tank (LUST) Sites by County and Fiscal Year from the State Water Resources Control Board (SWRCB) GeoTracker database (Health and Safety Code 25295);

3. List of solid waste disposal sites identified by the State Water Resources Control Board with waste constituents above hazardous waste levels outside the waste management unit (Water Code Section 13273[e] and 14 California Code of Regulations [CCR] Section 18051);

4. List of “active” Cease and Desist Orders and Cleanup and Abatement Orders from the State Water Resources Control Board (Water Code Sections 13301 and 13304); and

5. List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by the DTSC.

California Hazardous Waste Control Act

California’s Hazardous Waste Control Act of 1972, administered by DTSC, was the first comprehensive hazardous waste control law in the United States. The Hazardous Waste Control Act establishes requirements for the proper management of hazardous substances and wastes with regard to criteria for (1) identification and classification of hazardous wastes; (2) generation and transportation of hazardous wastes; (3) design and permitting of facilities that recycle, treat, store, and dispose of hazardous wastes; (4) treatment standards; (5) operation of facilities; (6) staff training; (7) closure of facilities; and (8) liability requirements. The regulations serve to manage hazardous waste from the moment it is generated by an individual or a business until it is recycled or discarded.[7]

California Health and Safety Code

Articles 25316, 25317, and 25507 of the California Health and Safety Code identify hazardous material, substances, and wastes that require removal, including petroleum and petroleum byproducts. Article 25507 specifies the conditions when a business plan for emergency response to a release or threatened release of a hazardous material should be implemented. Article 25160-25166 specifies conditions for transporters of hazardous waste.

California Division of Occupational Safety and Health

The California Division of Occupational Safety and Health, better known as Cal/OSHA, protects and improves the health and safety of working people in the state as well as the safety of passengers riding on elevators, amusement rides, and tramways. Cal/OSHA sets and enforces standards; provides outreach, education, and assistance; and issues permits, licenses, certifications, registrations, and approvals.

---

[7] California Environmental Protection Agency (Cal EPA). Overview of Environmental Law. Available at: https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/CUPA-Documents-Inspection-OvrviwEnvlaw.pdf, accessed May 2022.

Asbestos Standards

California Code of Regulations Article 4, Section 1529 and Article 110, Section 5208 discuss asbestos standards for construction and general industry purposes, respectively. The construction standards in Section 1529 regulate asbestos exposure in all construction work such as demolition, repair, maintenance, transportation, and excavation.[8] The general industry standards in Section 5208 regulate asbestos exposures in all industries covered by the California Occupational Safety and Health Act.[9] Both sections outline regulations related to asbestos, including but not limited to exposure monitoring, methods of compliance, protective clothing, hygiene practices, and communication of hazards.

Lead Paint Standard

California Code of Regulations Article 4, Section 1532.1 establishes requirements on lead safety in construction and makes employers responsible for compliance to these requirements. Section 1532.1 applies to all construction work, defined as work for construction, alteration and/or repair, including painting and decorating. The section outlines regulations, including but not limited to exposure assessment, methods of compliance, protective clothing, medical surveillance, and employee training.[10]

California Public Resources Code

California Public Resources Code, Article 9, Sections 4201 through 4204 provide for the classification of lands within State responsibility areas in accordance with the severity of fire hazard present to identify measures to reduce the rate of spreading and to reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.[11]

California Public Resources Code 4291 maintains that all buildings or structures adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material, shall maintain defensible space of 100 feet from each side and from the front and rear of the structure. The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation.[12]

Senate Bill 158

Senate Bill (SB) 158 establishes oversight of DTSC through the creation of the Board of Environmental Safety. The bill requires the board to perform certain activities, including setting of

---

8 California Code of Regulations. Title 8, Section 1529: Asbestos. Available at: https://www.dir.ca.gov/title8/1529.html. Accessed May 2022.

9 California Code of Regulations. Title 8, Section 5208: Asbestos. Available at: https://www.dir.ca.gov/title8/5208.html. Accessed May 2022.

10 California Code of Regulations. Title 8, Section 1532.1: Lead. Available at: https://www.dir.ca.gov/title8/1532_1.html. Accessed March 2022.

11 California Legislative Information, Public Resources Code. Division 4, Forests, Forestry and Range And Forage Lands [4001 - 4958], Chapter 1, Prevention and Control of Forest Fires [4101 - 4205]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=4201. Accessed May 2022.

12 California Legislative Information, Public Resources Code. Division 4, Forests, Forestry and Range And Forage Lands [4001 - 4958], Chapter 3, Mountainous, Forest-, Brush- and Grass-Covered Lands [4291 - 4299]. Available at: http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=4291. Accessed May 2022.

fees related to the handling of hazardous substances and hazardous waste, hearing appeals of hazardous waste facility permitting decisions, and conducting a specified analysis. The bill established an office of the ombudsperson in the board to receive complaints and suggestions from the public, to evaluate complaints received, to report findings and make recommendations to the Director of Toxic Substances Control and the board, and to render assistance to the public. The bill requires the director and the chairperson of the board to, when requested, but no less than annually, appear before the appropriate policy committees in the Assembly and Senate to provide an update on the department's performance, as provided. The board is also authorized to adopt, amend or appeal regulations via the Administrative Procedure Act, including through the emergency regulation process. SB 158 began transferring oversight authority to the board beginning on January 1, 2022.[13]

California Ocean Plan

Ocean standards protect the beneficial uses of California's marine waters through establishing water quality objectives and implementation provisions in statewide water quality control plans and polices. Ocean standards plans and policies include the SWRCB's Water Quality Control Plan for Ocean Waters of California (Ocean Plan). The Ocean Standards Unit is responsible for developing and updating the statewide plans and policies involving marine waters, as well as providing scientific support and inter-agency coordination regarding marine pollution and resource management. This plan is applicable, in its entirety, to point source discharges to the ocean. Nonpoint sources of waste discharges to the ocean are subject to Chapter I, Chapter II, and Chapter III of the plan. This plan is not applicable to discharges to enclosed bays and estuaries or inland waters or the control of dredged material.[14] The plan contains general requirements for management of waste discharge such that waste discharged to the ocean–including floatable material, settleable material, substances that accumulate to toxic levels in marine waters, sediments, or biota, substances that significantly decrease the natural light to benthic communities and other marine life, and materials that result in aesthetically undesirable discoloration of the ocean surface–must be essentially free of materials harmful to aquatic life.

Regional

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is the regulatory agency responsible for improving air quality for large areas of Los Angeles, Orange County, Riverside and San Bernardino Counties, including the Project area. The SCAQMD's expertise is air quality; therefore, the SCAQMD reviews the air quality analysis in CEQA documents to ensure that the air quality impacts were accurately identified and analyzed. The SCAQMD adopts rules related to Toxics and Other Non-Criteria Pollutants, which are applicable to hazards materials. These rules include but are not limited to Rules 403 and 1403, which are further described below.

- Rule 403 requires the implementation of best available dust control measures (BACM) during active operations capable of generating fugitive dust.
- Rule 1403, adopted in 1989, establishes Survey Requirements, notification, and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities. The United States Environmental Protection Agency

---

13 California Senate Bill 158. Available at: https://legiscan.com/CA/text/SB158/id/2424457, accessed August 2022.

14 State Water Resources Control Board. Revised 2019. California Ocean Plan. Available at: https://www.waterboards.ca.gov/water_issues/programs/ocean/docs/oceanplan2019.pdf, accessed August 2022.

delegated to SCAQMD the authority to enforce the federal asbestos requirements found in the National Emission Standards for Hazardous Air Pollutants, and the SCAQMD is the local enforcement authority for asbestos.[15]

- Rule 1166 - Volatile Organic Compound Emissions from Decontamination of Soil requires that an approved mitigation plan be obtained from SCAQMD prior to commencing any of the following activities:
    - The excavation of an underground storage tank or piping which has stored volatile organic compounds (VOCs).
    - The excavation or grading of soil containing VOC material including gasoline, diesel, crude oil, lubricant, waste oil, adhesive, paint, stain, solvent, resin, monomer, and/or any other material containing VOCs.
    - The handling or storage of VOC-contaminated soil [soil which registers >50 parts per million (ppm) or greater using an organic vapor analyzer (OVA) calibrated with hexane] at or from an excavation or grading site.
    - The treatment of VOC-contaminated soil at a facility.[16]

Los Angeles County Operational Area Emergency Response Plan

On July 5, 1995, the Los Angeles County Board of Supervisors adopted a resolution providing for formation of the Los Angeles County Operational Area, and, in accordance with Standardized Emergency Management System, the County of Los Angeles serves as the lead agency of the Los Angeles County Operational Area. In 1998, the County of Los Angeles adopted the Los Angeles County Operational Area Emergency Response Plan, which provides emergency planning for the Los Angeles County Operational Area, an area that includes the City of Los Angeles, and therefore, the proposed Project site. The Los Angeles County Operational Area serves as an intermediate level of the State's emergency services organization and encompasses the County and all political subdivisions located within the County, including cities, unincorporated communities, and special districts. An updated Los Angeles County Operational Area Emergency Response Plan was adopted in June 2012. The purpose of this plan is to establish the coordinated emergency management system, which includes prevention protection, response, recovery, and mitigation within the Los Angeles County Operational Area.[17]

As a part of the plan, a Local Hazard Mitigation Plan (LHMP) is included which addresses all major natural and human-caused disasters that may occur in the operational area. In addition, the plan states that each agency/jurisdiction in the operational area is responsible for the completion of its own hazard mitigation plan.[18] This is addressed in the Safety Element of the City of Los Angeles General Plan as discussed below.

---

15 South Coast Air Quality Management District. Asbestos Demolition and Removal. Available at: http://www.aqmd.gov/home/rules-compliance/compliance/asbestos-demolition-removal, accessed May 2022.

16 South Coast Air Quality Management District, Rule 1166. *Available at: https://www.aqmd.gov/home/rules-compliance/compliance/rule-1166-site-specific-and-various-locations-soil-mitigation-plan.* Accessed May 2022.

17 County of Los Angeles. Los Angeles County Operational Area Emergency Response Plan, June 2012.

18 Los Angeles County Operational Area Emergency Response Plan, Section 5 – Los Angeles County Hazard Analysis and Mitigation. Available at: *https://ceo.lacounty.gov/wp-content/uploads/OEM/OAERP/SECTION%205.%20%20LOS%20ANGELES%20COUNTY%20HAZARD%20ANALYSIS%20AND%20MITIGATION.pdf*. Accessed May 2022.

In accordance with County Emergency Ordinance 2.68, the Office of Emergency Management has been tasked with the responsibility for updating, developing, and maintaining the Operational Area Emergency Response Plan. The intent of this plan is to integrate Los Angeles County Operational Area resources into an efficient organization capable of responding to any emergency using the National Incident Management System, Standardized Emergency Management System, mutual aid, and other appropriate response procedures. The Operational Area Emergency Response Plan identifies the following four emergency management phases:

- Preparedness Phase: The preparedness phase includes activities to develop operational capabilities and effective responses to a disaster, such as mitigation activities, emergency/disaster planning, training, and exercises, and public education. This phase also includes “Increased Readiness” with actions such as testing warning and communications systems.
- Response Phase: The response phase includes pre-emergency/emergency imminent responses and emergency response conditions, priorities, and procedures.
- Recovery Phase: The recovery phase details the actions taken post–emergency response by the Cal OES Director operating through the State Coordinating Officer. The Cal OES Director will bring together representatives of federal, State, County, and City agencies, as well as representatives of the American Red Cross, to coordinate assistance programs and establish support priorities. The Federal Emergency Management Agency (FEMA) will establish tele-registration to initiate the process of receiving federal, State, and local recovery assistance.
- Mitigation Phase: Mitigation efforts occur both before and following disaster events. Eliminating or reducing the impact of hazards that exist and are a threat to life and property are part of the mitigation efforts. Post-disaster mitigation is part of the recovery process.[19]

Local

Los Angeles City Fire Code (City Fire Code)

The City Fire Code (Article 7, Chapter V of the Los Angeles Municipal Code) regulates the type, configuration, and quantity of hazardous materials that may be stored in structures or in outdoor areas. The Fire Code scope includes the prevention, control, and mitigation of dangerous conditions related to storage, dispensing, use, and handling of hazardous materials.

LAFD is a Certified Unified Program Agency (CUPA), and in compliance with State guidelines, each governmental agency designated by the State of California as a CUPA is authorized to apply statewide standards to each facility in its jurisdiction that treats on site or generates hazardous waste, operates underground storage tanks, or stores hazardous materials.

All businesses that store, handle or use hazardous materials in reportable quantities, as defined in Chapter 6.95 of Division 20 of the California Health and Safety Code (HSC), must obtain a CUPA Permit. In addition to obtaining a permit each business is required to submit a Hazardous Materials Business Plan (HMBP). The business plan will assist emergency responders in planning for and handling emergencies involving hazardous materials. The main program objective is to safeguard the lives of emergency responders, the public, and to minimize property loss.

[19] *Ibid*.

City of Los Angeles General Plan

The Safety Element is a component of the City of Los Angeles General Plan, maintained by the Department of City Planning. The Safety Element offers a high-level overview of how the City plans for disasters, and references readers to other implementation documents where they can find more detailed information. The General Plan is carried out by several City departments, through the goals and policies as well as programs. City departments draft and implement additional interrelated long-range plans and code provisions that address safety and disaster planning. Through the Safety Element, the City assists readers to navigate this network of resources.[20]

The Safety Element includes the high-level framework of Goals, Objectives, Policies and Programs that pertain to the safety of the City. The LHMP contains information related to hazard identification and planning in Los Angeles. The Emergency Operation Plan (EOP) and related Annexes details strategic information on disaster response and recovery. The 2021 update incorporates the LHMP into the City's General Plan by reference and outlines compliance with State regulations.

The Safety Element's goals, objectives, and policies are broadly stated to reflect the comprehensive scope of Citywide emergency planning and disaster response.

Additionally, as part of the City of Los Angeles General Plan, the Land Use Element is comprised of 35 individual Community Plans, which each outline goals, objectives, and policies for the area. Community Plans are intended to promote an arrangement of land uses, streets, and services that will contribute to the health, safety, welfare, and convenience of the people that live and work in the community. The Project components are located in the Central City, Central City North, and Silver Lake-Echo Park-Elysian Valley Community Plans. The City of Los Angeles is currently in the process of updating the Central City and Central City North Community Plans through the Downtown Los Angeles 2040 Draft Community Plan.[21] Because it is unknown when the new community plan would be adopted and its EIR certified, the analysis in this section is based on the current applicable plans.

City of Los Angeles Hazard Mitigation Plan

The City of Los Angeles, in conjunction with several emergency service partners, has prepared a Local Hazard Mitigation Plan that sets strategies for coping with natural and man-made hazards faced by residents. The plan outlines steps for risk and vulnerability assessment, including hazard identification and profile, assessment of the impact of hazards on physical, social, and economic assets, identification of particular areas of vulnerability, and estimates of the cost of potential damage. The intent of the plan is to reduce risks from disasters to the people, property, economy and environment in the City.

---

20 City of Los Angeles. General Plan Safety Element. Available at: https://planning.lacity.org/odocument/bf51ae04-1c7b-4931-9a29-d46209998b89/2021_SafetyElementBookFINAL.pdf. Accessed May 2022.

21 City of Los Angeles. 2021. Downtown Community Plan. Available at: https://planning.lacity.org/odocument/2425dc72-10bd-49c8-afd6-e862225f4b1c/CPU_Downtown_v18.pdf. Accessed May 2022.

Table 3.9-1: City of Los Angeles General Plan Goals, Objectives, and Policies Related to Hazards and Hazardous Materials

General Plan Element	Goal/Objective/Policy
Safety Element	Objective 1.1. Implement comprehensive hazard mitigation plans and programs that are integrated with each other and with the City's comprehensive emergency response and recovery plans and programs.
	Policy 1.1.4. Health/environmental protection. Protect the public and workers from the release of hazardous materials and protect City water supplies and resources from contamination resulting from accidental release or intrusion resulting from a disaster event, including protection of the environment and public from potential health and safety hazards associated with program implementation.
	Policy 1.1.5. Risk reduction. Reduce potential risk hazards due to disaster with a focus on protecting the most vulnerable people, places and systems.
	Objective 2.1: Develop and implement comprehensive emergency response plans and programs that are integrated with each other and with the City's comprehensive hazard mitigation and recovery plans and program.
	Objective 3.1: Develop and implement comprehensive disaster recovery plans which are integrated with each other and with the City's comprehensive hazard mitigation and emergency response plans and programs.
	Policy 3.1.2. Health/safety/environment. Develop and establish procedures for identification and abatement of physical and health hazards which may result from a disaster. Provisions shall include measures for protecting workers, the public and the environment from contamination or other health and safety hazards associated with abatement, repair and reconstruction programs.

Source: City of Los Angeles. General Plan Safety Element. Available at: https://planning.lacity.org/odocument/bf51ae04-1c7b-4931-9a29-d46209998b89/2021_SafetyElementBookFINAL.pdf. Accessed May 2022.

City of Los Angeles Municipal Code

The Los Angeles Municipal Code, Chapter IX (Building Regulations), Article 1 (Buildings), Division 71 (Methane Seepage Regulations), commonly known as the City Methane Ordinance, describes methane testing and control requirements based on building type, building use/occupation, and whether a structure is in a methane zone or buffer zone. Requirements for new construction in such zones include methane gas sampling; and depending on the detected concentrations of methane and gas pressure at the site, application of design remedies for reducing potential methane impacts. The City has prepared a map of methane zones and methane buffer areas in the City. The proposed Project alignment crosses a methane zone and buffer zone and may require site-specific methane testing for particular structures, depending on the final architectural design.

City of Los Angeles Emergency Operations Plan (2017)

The City of Los Angeles Emergency Management Department develops the City's emergency response and recovery plans, including the Emergency Operations Plan which serves as the City's overall plan for emergency management, emergency planning, preparedness, response, and response activities. The Emergency Management Department leads the City's effort in the development of Citywide emergency plans, revises and distributes the Emergency Operations Master Plan and Master Procedures and Annexes and updates and disseminates guidelines for the emergency response and recovery plans. The department also reviews and tests departmental emergency plans to ensure City departments are ready to fulfill their respective emergency missions. The plan includes the key roles and responsibilities of City departments, offices, boards, commissions, councils, and authorities. The Emergency Operations Center management function is performed by the director who is initially represented by either the Fire or Police Department, depending on the nature of the emergency. If the emergency is a civil disturbance, other criminal behavior or a major public event, the Los Angeles Police Department (LAPD) will serve as the initial lead agency. For all other events and incidents, the Los Angeles Fire Department (LAFD) will serve as the initial lead agency. The Fire Suppression and Rescue Division conducts fire suppression and rescue operations; provides emergency medical services; controls incidents involving explosives and hazardous materials; petroleum and chemical pipeline accidents; assists in safe demolition of buildings; and radiological defense. The Police Division maintains peace and order preserves life and property and enforces all State and local laws. Additionally, the LAPD provides security in disaster areas, as well as the actual policing functions normally associated with law enforcement activities; maintains an orderly flow of traffic in, out, and around all areas affect by a disaster with priority given to provide ingress/egress for emergency vehicles responding to any disaster; and is responsible for managing evacuation routes, directing evacuees to an evacuation center and escorting emergency vehicles (as needed) during a disaster.[22]

City of Los Angeles Emergency Operations Plan Evacuation Functional Support Annex (2018)

The City of Los Angeles Emergency Management Department develops the City's emergency response and recovery plans, including the Emergency Operations Plan which serves as the City's overall plan for emergency management, emergency planning, preparedness, response, and response activities. The Annex is developed in support of the Emergency Operations Plan to facilitate response during evacuations. The Annex reflects the City of Los Angeles procedures and assigned responsibilities for evacuation missions during the response phase of an emergency incident, and identifies the needed and available evacuation capabilities and resources.[23]

The Annex identifies LAPD as the primary lead agency responsible for conducting an area evacuation, which is the evacuation of a geographical area to include the coordination and traffic management of vehicle flow out of a specified area identified by boundary coordinates or streets. The Los Angeles Department of Transportation (LADOT) will coordinate with LAPD and other agencies (as necessary) to identify a traffic plan with evacuation routes.

City of Los Angeles Fire Department Haz Mat Program

The LAFD is the City's key agency in hazardous materials emergencies and provides a robust multi-tier emergency services response to hazardous materials incidents. The LAFD Haz Mat Program uses a unified approach with allied agencies and many stakeholders to provide preparedness, prevention, response, mitigation and resiliency to hazardous materials emergencies. The Haz Mat Program is designed to address the natural, technological, or

[22] City of Los Angeles, Emergency Management Department. 2018. Emergency Operations Plan. Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-04/comprehensive_emergency_operations_plan_eop-_2018.pdf, accessed May 2022.

[23] *City of Los Angeles Emergency Operations Plan Evacuation Functional Support Annex.* May 2018 Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-04/evacuation_annex_2018.pdf. Accessed May 2022.

purposeful response challenges, including chemical, biological, radiological, nuclear and explosive threats to the community and national security.

3.9.2 Environmental Setting

Use, Disposal, Storage, and Transport of Hazardous Materials

The information presented below is based in part on the research conducted for the Phase I ESA.

Phase I ESA Site Visits

As discussed in Section 3.1 of the Phase I ESA (Appendix K), an original site visit of the proposed Project, adjacent properties, and public rights-of-way (ROWs) was conducted on March 18, 2020. The purpose of the site visit was to identify potential environmental concerns in the area of the proposed Project. AECOM was unaccompanied during the March 18, 2020 site visit; therefore, interviews were not conducted. The site visit methodology consisted of walking accessible areas of the proposed Project alignment and portions of the surrounding area. Observations of the proposed Project were made from existing ROWs and other publicly accessible areas. Where applicable, online resources and mapping tools were used to enhance our observations of current on-site conditions.

A follow-up site visit of the proposed Broadway Junction location (1201 North Broadway property) was completed on September 30, 2020, in which the interior of the existing building at 1201 North Broadway was assessed. The interior of the 1201 North Broadway building was not accessible at the time of the original site visit. The site visit methodology consisted of walking over accessible areas of the 1201 North Broadway property, including the building interiors and exteriors, and the perimeter of the property.

An updated site visit of the proposed Project (including the 1201 North Broadway property), adjacent properties, and public ROWs was performed on May 6, 2022. During the site visit, AECOM was accompanied through the 1201 North Broadway property by a tenant representative to identify potential environmental concerns in the building. AECOM was unaccompanied through the public ROWs and adjacent properties; therefore, interviews were not conducted for these areas. The site visit methodology consisted of walking accessible areas of the proposed Project alignment and portions of the surrounding area. Observations of the proposed Project were made from existing ROWs and other publicly accessible areas.

The existing conditions observed during the site visits and via desktop study are described below.

Alameda Station

The Alameda Station platform would be located over the existing public ROW on Alameda Street, between Los Angeles Street and Cesar E Chavez Avenue. Vertical circulation elements (i.e., elevators, escalators, stairs) for pedestrian access, which would also serve as queueing areas to the station, would be to the east in an existing Los Angeles Union Station (LAUS) parking lot, and to the west north of the Placita de Dolores of El Pueblo de Los Angeles. The proposed new pedestrian plaza at El Pueblo currently contains a small paved parking lot and loading areas. The planned LAUS Forecourt is currently occupied by an asphalt-paved surface parking lot associated with LAUS. The placement of the escalators and queueing on the eastern side of the station would be designed to accommodate the future development of the planned LAUS Forecourt and Esplanade Improvements Project.

Utility-owned pad-mounted transformers were identified via a desktop study in the proposed locations for the vertical circulation elements; one in a landscaped planter to the south of the parking spaces, which is the proposed location of the pedestrian plaza at El Pueblo, and the other in the northwest corner of the paved parking lot associated with LAUS, which is the location of the planned LAUS Forecourt. Observations of the transformers were made by AECOM during the May 6, 2022, site visit. Labeling indicating PCB content was not observed on the transformers and no staining was observed associated with the transformers at the time of the May 2022 site visit. Based on the age of the development in the proposed Project (pre-1979), the potential exists for PCBs to be present in the proposed Project.

Additionally, yellow traffic markings, which may potentially contain hazardous levels of lead and chromate, were observed along Alameda Street and along the curb in the existing parking and loading area for El Pueblo.

Historically, this portion of the proposed Project alignment had railroad tracks along the center of Alameda Street from at least 1888 through at least 1970. In addition, several spur tracks were apparent in aerial photographs of the 1920s in the proposed location for the vertical circulation elements and queuing areas to the Alameda Station on the west. Portions of the tracks may remain beneath pavement or may have been removed from these areas and therefore, potential hydrocarbons, metals, persistent pesticides, and treated wood waste (railroad ties) may be present in soils along or adjacent to the railroad track alignment.

Alameda Tower

The Alameda Tower would be on a portion of the Alameda Triangle, which is a triangular shaped, City owned property (part of the City ROW) between Alameda Street, North Main Street, and Alhambra Avenue that contains landscaping and hardscaping. Additionally, yellow traffic markings were identified via desktop study on Alameda Street, North Main Street, and Alhambra Avenue.

Alpine Tower

The Alpine Tower would be on a City-owned parcel that is currently a paved surface parking lot, at the northeastern corner of Alameda Street and Alpine Street, adjacent to the Metro L Line (Gold). Additionally, yellow traffic markings were identified via desktop study on Alameda Street and Alpine Street.

Chinatown/State Park Station

The Chinatown/State Park Station would be adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park. The southern portion of the station would be located on City-owned property (part of the ROW), while the northern portion of the station would be integrated into the southern boundary of the Los Angeles State Historic Park. This area is currently hardscaped with perimeter landscaping. Yellow traffic markings were identified via desktop study on Spring Street.

Historically, this portion of the proposed Project alignment was part of the Southern Pacific Railroad Company’s Freight Yards (also known as Union Pacific Railroad – Cornfield Yard). This 50-acre former railroad transfer station and storage yard operated from at least the mid-1880s to the 1980s when decommissioning began. The historical use of the site included the use and storage of large quantities of petroleum products and hazardous materials that resulted in impacts to the subsurface soils and groundwater.

Broadway Junction

The Broadway Junction is a non-passenger junction that would be located at the intersection of North Broadway and Bishops Road. The junction would primarily be on privately-owned property with a portion of the junction and overhead cable infrastructure cantilevered and elevated above the public ROW. The privately-owned properties composing the Broadway Junction site currently contain an office building and ancillary uses, located at 1201 North Broadway, which would be vacated and demolished prior to construction of the junction. Based on the original date of construction (1920s to 1940s), asbestos-containing building materials, lead-based paint and/or other hazardous building materials may be present at the 1201 North Broadway Building.

This property comprises several parcels. The original 1201 North Broadway building was first constructed in 1924 for use as an automotive sales and service dealership with building additions constructed to the north and east in 1937 and 1946, respectively; the three buildings were joined together. The 1201 North Broadway building was renovated for its current commercial office use in approximately 2003. This building is constructed of concrete block and brick walls on a slab on-grade concrete foundation with a wooden truss roof. The interior of the building contains a lobby, offices, meeting rooms, kitchen, restrooms, an architectural woodshop, and a janitorial closet. The building interior is finished with carpet, concrete, and hardwood floors; drywall, brick, and concrete walls; and open ceilings with overhead fluorescent lighting and air conditioning ducting.

This property also contains an exterior courtyard area that is mainly unpaved with minimal landscaping surrounded by corrugated metal fencing. The unpaved portion of the parcel is used as outdoor space for tenants of the commercial building. A pad-mounted transformer owned by the Los Angeles Department of Public Works and two storm drains were observed in the northern exterior courtyard area. Also, access to the building electrical room is from this area, which contains electrical panels and a dry type transformer. Small quantities of paints and paint-related supplies were observed stored in the architectural woodshop of the 1201 North Broadway building, and janitorial cleaning supplies and some paints were observed stored in a janitorial closet of this building. Also observed in the janitorial closet was a SCA-1200HT wash tank used to clean soluble support materials on 3D printed parts. A small propane tank (approximately 20 pounds) associated with the barbeque grill was observed in the northern exterior courtyard area of the 1201 North Broadway property.

The Broadway Junction site also contains an asphalt-paved surface parking lot, which was constructed in 1963, and is associated with the commercial office property. Additionally, yellow traffic markings were identified via desktop study on North Broadway and Bishops Road.

Stadium Tower

The Stadium Tower would be on hillside private property north of Stadium Way between the Downtown Gate of Dodger Stadium and SR-110. Based on the results of the Phase I ESA, hazardous materials conditions were not identified in this area of the Project.

Dodger Stadium Station

The Dodger Stadium Station would be in the southeastern portion of the Dodger Stadium property near the Downtown Gate. The site of the Dodger Stadium Station currently contains a paved surface parking area, a drive aisle, and a landscaped berm. Based on the results of the Phase I ESA, hazardous materials conditions were not identified in this area of the Project.

Phase I ESA Regulatory Database Search

Listings Within the Proposed Project Alignment

As discussed in Section 6.3 of the Phase I ESA (Appendix K), the environmental database report search identified five properties that coincide with Project Component sites: LAUS and El Pueblo de Los Angeles, which is the proposed location of construction support space and vertical circulation elements for the Alameda Station; 901 North Main Street, which is the proposed location of the Alpine Tower; the Los Angeles State Historic Park property, which is the location of the proposed Chinatown/State Park Station; and the 1201 North Broadway property, which is the proposed location of the Broadway Junction. A detailed description of the database listings identified as associated with the proposed Project are included in the Phase I ESA Report (Appendix K). The following provides a brief summary of these database listings by Project component.

Los Angeles Union Station Property

LAUS is listed in several databases under various names and addresses associated with the property. The majority of these database listings are compliance, non-contamination related. The underground storage tank (UST) databases report that this site formerly operated two heating oil USTs and one gasoline UST that were originally installed in the late-1930s. A memorandum dated August 16, 1996 reviewed on the online GeoTracker database states that soil impacted with total petroleum hydrocarbons (TPH), maximum of 4,000 ppm was used for soil reuse on the property under the Regional Water Quality Control Board's approval in 1990. Therefore, the Cleanup Program Sites-Spills, Leaks, Investigations, and Cleanups (SLIC) database reported the case status at LAUS as closed as of August 16, 1996d. No further information was available on the State Water Resources Control Board's (SWRCB's) online GeoTracker database. The GeoTracker is a database and geographic information system (GIS) that provides online access to environmental data and tracks regulatory data about LUST, Department of Defense (DoD), SLIC, and Landfill sites. A copy of the 1996 memorandum is included as an attachment to the Phase I ESA report (provided as Appendix K).

El Pueblo de Los Angeles

This property is listed in the US Brownfields database, which was established in 1995 by the EPA's Brownfields and Land Revitalization Program to address and manage contaminated property. A brownfield is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. The Brownfields redevelopment process includes three stages: Pre-Development, Development, and Management. The Pre-Development stage incudes conducting due diligence such as a Phase I ESA.

The US Brownfield database is a listing of Brownfields sites that is obtained from the Assessment, Cleanup, and Redevelopment Exchange System (ACRES), which stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding, as well as information on Targeted Brownfields Assessments performed by EPA Regions. ACRES indicates that a Phase I ESA was completed for the El Pueblo De Los Angeles in 2018 to 2019. No additional information is reported.

901 North Main Street Property

The 901 North Main Street property is listed on the US Brownfields database, which reports that a Phase I ESA was conducted at this property in 2018 to 2019. No additional information is reported.

Los Angeles State Historic Park Property

The Los Angeles State Historic Park property was formerly occupied by Southern Pacific Railroad (now Union Pacific Railroad) Company's Freight Yards (also known as Cornfield Yard), which included transfer station and storage yard activities that have been converted to use for the Metro L Line (Gold), Los Angeles State Historic Park, and a vacant area that is planned for residential development. The property is listed in several databases for release cases associated with historical site operations including the SWRCB's SLIC database, which is related to groundwater impacts, and DTSC's EnviroStor database, which are related to soil impacts. A summary of these database listings as they relate to the Los Angeles State Historic property, provided below.

<u>Groundwater</u>

An annual groundwater monitoring program was first implemented at the Los Angeles State Historic Park site in August 2000 at the request of the Los Angeles Regional Water Quality Control Board (LARWQCB). According to the database search report and the SWRCB's online GeoTracker database, the status of the SLIC cleanup case for the Los Angeles State Historic Park (Former Union Pacific Railroad – Cornfield Yard) was reported as "Open - Verification Monitoring," as of July 8, 2010. The most recent annual groundwater monitoring report (2021 Annual Report) available on the online GeoTracker database was prepared in January 2022, which states that concentrations of fuel-related petroleum hydrocarbons and benzene, xylenes, ethylbenzene and toluene (BTEX) in groundwater had generally decreased compared to previous annual groundwater monitoring events. Benzene had not been detected in well BMW-6 during previous monitoring events since 2016.

In 2021, the highest concentrations of VOCs were detected in BMW-4, consistent with previous groundwater monitoring events, which is greater than 0.25-mile northeast and hydrologically upgradient of the proposed Chinatown/State Park Station In well BMW-4, benzene was detected at a concentration of 1,970 microgram per liter (μg/L), which is greater than the California maximum contaminant level (MCL) of 1 μg/L and ethylbenzene was detected at 1,340 μg/L, which is greater than the MCL of 300 μg/L. In well BMW-6, immediately down-gradient of BMW-4 and closer to the proposed Chinatown/State Park Station location, benzene was detected slightly above the MCL at a concentration of 2.14 μg/L (duplicate sample at 2.31 μg/L). The monitoring report concluded that the concentrations in BMW-4 were limited in extent and the remaining dissolved phase gasoline-range impacts to groundwater were stable given the long-term decreasing monitoring concentration trends and that natural attenuation was occurring. The newly detected benzene concentration in well BMW-6 indicates that the groundwater plume may be migrating down-gradient towards the proposed Project and the Chinatown/State Park Station.

<u>Soils</u>

According to the database search report and the DTSC's online EnviroStor database, the status of the EnviroStor case for the Los Angeles State Historic Park (Former Cornfield Yard) is reported as active as of November 17, 2014. According to *a Supplemental Remedial Action Workplan Memorandum* prepared by Group Delta Consultants, Inc., in 2015, during construction of the State Park in 2014, arsenic and lead contamination was encountered in near surface soils and additional soil removal action was completed in 2015 in selected portions of the Los Angeles State Historic Park site, but additional removal action was required in the northeastern portion. Because the proposed Chinatown/State Park Station is in the southwestern portion of the park, additional removal action was not required in the area of the proposed station.

The EnviroStor database indicates that the Los Angeles State Historic Park entered into the Voluntary Cleanup Program (VCP) with the DTSC in 2001. According to *Final Site Characterization Sampling Results for the 32-Acre Parcel of the Former Cornfield Rail Yard* prepared by The Shaw Group, Inc. dated June 17, 2002, soil sampling was conducted across the 32-acre park site in 2002, including the southwestern portion, which is the area of the Chinatown/State Park Station. The only soil sample location in close proximity to the proposed Chinatown/State Park Station was G-1, at which a shallow soil sample was collected between 0.5 and 1.5 feet below ground surface (bgs), 5 feet bgs, and 10 feet bgs for lead and arsenic analysis. The analytical results indicated arsenic concentrations between 1.0 and 1.9 milligrams per kilogram (mg/kg) and lead concentrations between 1.6 and 2.8 mg/kg, which did not require a removal action in this area. Based on the soil sampling results, soil removal action was completed in select locations in the Los Angeles State Historic Park in 2003. In addition, cleanup goals for lead (400 mg/kg) and arsenic (30 mg/kg) in soil have been established for the park site. It is anticipated that a complete Removal Action Completion Report for the entire park site will be prepared by 2023 for the DTSC. It is unknown at this time if the additional soil removal action has been completed in the northeastern portion of the Los Angeles State Historic Park property. According to a *Proposed Soil Removal Locations* map dated 2014 included as an attachment to the Workplan Memorandum, it does not appear that soil removal action was required in the area of the proposed Chinatown/State Park Station based on the established site-specific clean up goals.

1201 North Broadway Property

The 1201 North Broadway property is listed in several databases. The 1201 North Broadway property was formerly occupied by an automotive dealership from 1924 until 2003. Several of the database listings are related to the former use and storage of hazardous materials and wastes at the former automotive dealership. The UST databases and LAFD records indicate that former operations included the use of a 1,000-gallon gasoline UST, a 200-gallon waste oil UST, a three-stage clarifier, a paint spray booth and paint storage, an auto body shop, service area, former in-ground hydraulic lifts, and former 1,000-gallon gasoline aboveground storage tank and associated former gasoline pump island. The former USTs were installed in the 1940s and removed in the 1990s; at the time of removal soil sampling was conducted, but no formal closure was issued by the LAFD, which is the regulatory oversight agency. The former gasoline tank was beneath the sidewalk along North Broadway and the former waste oil tank was in the service area of the former dealership (inside the building). The database search report indicates that in 1991, a leak from the gasoline UST (subsequently removed later in the 1990’s) was discovered during a tank repair. Site assessment activities were conducted between 1999 and 2001 and the LUST case was closed by the LAFD in November 2001. A copy of the 2001 LAFD closure letter is included as an Appendix to the Phase I ESA.

A review of previous environmental reports prepared for other projects at the 1201 North Broadway property in 2003, 2015, 2017, and 2019 indicate that residual concentrations of petroleum hydrocarbons may still exist on-site in the areas of the former lifts and gasoline UST associated with the former use of the 1201 North Broadway property as an automotive dealership.

Listings for Surrounding Properties

As discussed in Section 3.2 of the Phase I ESA (Appendix K), a number of additional surrounding sites were identified in the environmental database report search. However, the majority of these sites were listed in non-contamination-related databases. Based on a review and analysis of the database listings in the Phase I ESA, none of these additional surrounding sites are expected to present a recognized environmental concern to the proposed Project, based on their distance (i.e., greater than 500 feet), regulatory status (i.e., regulatory closure, no violations found), media impacted (i.e., soil only), and/or topographical position relative to the Project alignment (i.e., down-gradient or cross-gradient).

Methane Zones

Methane zones are usually a result of naturally occurring tar and crude oil, or shallow soil contamination by old oil drilling wells. Methane is generated by the biodegradation of organic matter in the absence of oxygen. Non-pressurized methane is not normally problematic if properly monitored and controlled per Cal/OSHA regulations. If the gas accumulates to high concentrations and becomes pressurized, detectable levels may enter the interior of a structure through cracks or other penetrations present in floor slabs. Methane exposure to workers during construction can be hazardous at higher levels, especially in confined spaces. In addition, methane seepage can result in an explosion if an adequate concentration of methane gas exists where combustion is possible.

Methane gas is known to be generated in the area. The City of Los Angeles Department of Building and Safety's Los Angeles Methane Zone Map categorizes two types of zones: Methane Zones and Methane Buffer Zones. The different zones are based on the proximity to a methane gas source. According to the City of Los Angeles Department of Building and Safety maps, portions of the proposed Project alignment pass through identified Methane Zones and/or Methane Buffer Zones (Figure 3.9-1). The proposed Chinatown/State Park Station, Broadway Junction, Alpine Tower, and Stadium Tower are in a Methane Zone and/or Methane Buffer Zone.

Proximity to Schools

Public Schools in the City are administered by the Los Angeles Unified School District (LAUSD). The two public schools in 0.25-mile of the Project alignment include Castelar Elementary School and Ann Street Elementary School. Castelar Elementary School is at 840 Yale Street, approximately 0.22-mile northwest of the Alpine Tower site and 0.22-mile southwest of the Chinatown/State Park Station site. Ann Street Elementary School is at 126 Bloom Street, approximately 0.24-mile southeast of the Chinatown/State Park Station site.

Additionally, there are two private schools within 0.25-miles of the Project alignment. The Chinese Consolidated School is at 816 Yale Street, approximately 0.22-miles northwest of the Alpine Tower site and 0.22-mile southwest of the Chinatown/State Park Station site. Cathedral High School is the closest school to the Project alignment, at 1253 Bishops Road adjacent to and directly west of the Broadway Junction site.

Schools within 0.25-mile of the Project alignment are shown in Figure 3.15-2 in Section 3.15, Public Services.

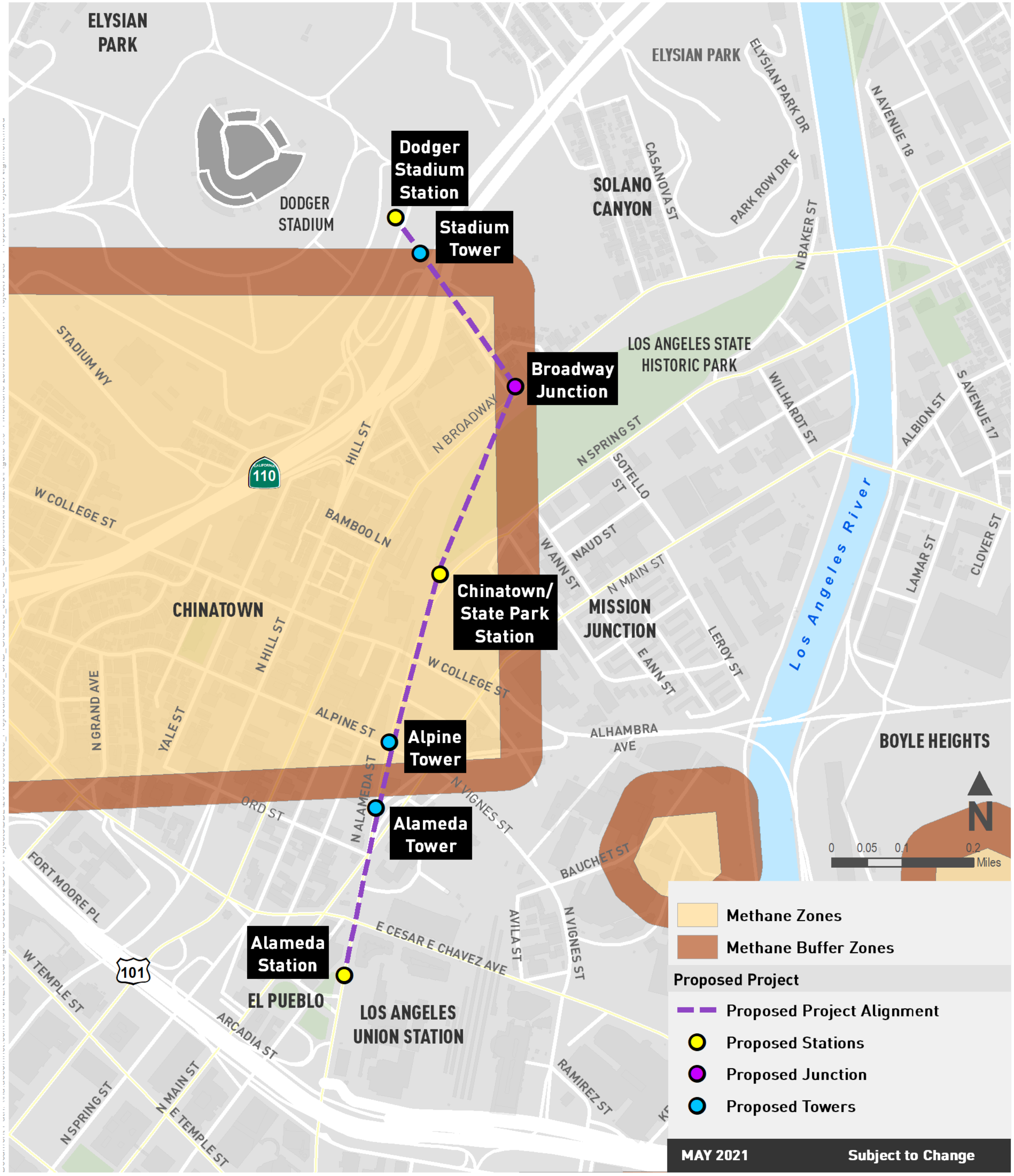


Figure 3.9-1: Methane Zones Within the Project Area

Emergency Evacuation and Response Plans

The City of Los Angeles Emergency Management Department coordinates evacuations in the case of emergency with the LAPD and LAFD, as outlined in the City's Emergency Operations Plan. As described in Section 3.9.1, Regulatory Setting, for the Emergency Operations Plan, the LAPD will serve as the initial lead agency if the emergency is a civil disturbance, other criminal behavior or a major public event. For all other events and incidents, the LAFD will serve as the initial lead agency. The Fire Suppression and Rescue Division conducts fire suppression and rescue operations; provides emergency medical services; controls incidents involving explosives and hazardous materials; petroleum and chemical pipeline accidents; assists in safe demolition of buildings; and radiological defense. The Police Division maintains peace and order, preserves life and property and enforces all State and local laws. Additionally, the LAPD provides security in disaster areas, as well as the actual policing functions normally associated with law enforcement activities; maintains an orderly flow of traffic in, out, and around all areas affect by a disaster with priority given to provide ingress/egress for emergency vehicles responding to any disaster; and is responsible for managing evacuation routes, directing evacuees to an evacuation center, and escorting emergency vehicles (as needed) during a disaster.

The City's Emergency Operations Plan also includes hazards specific annexes, which explain procedures unique to the hazard type, including the Evacuation Functional Support Annex, which was developed to facilitate response during evacuations. The Annex notes that although "it is difficult to accurately predict the location, frequency, and scale of an emergency or disaster, it is possible, however, to plan and manage an evacuation network and establish evacuation procedures in effort to reduce the adverse impact of a threatened or actual emergency incident."[24] As stated in the Annex, when necessary an evacuation is conducted by law enforcement in the City of Los Angeles, and would be supported by other City departments (e.g. Park Rangers) as required. Although primary evacuation routes are not specifically defined by the Annex, they are described as major interstates, highways and primary arterials in the City and Los Angeles County. If evacuation is required, the City would work with local law enforcement agencies or departments to identify evacuation routes. In response to a localized emergency, agencies such as LAFD, LAPD, and the LADOT, would work together to identify the appropriate local egress option and direct individuals to those routes. Potential evacuation routes would vary based on the type and location of the hazard or disaster.

In addition to the described evacuation procedures, the County of Los Angeles designates disaster routes in the County, including within the City. As described by Los Angeles County Public Works, "disaster routes are freeway, highway or arterial routes pre-identified for use during times of crisis. These routes are utilized to bring in emergency personnel, equipment, and supplies to impacted areas in order to save lives, protect property and minimize impact to the environment. During a disaster, these routes have priority for clearing, repairing and restoration over all other roads. Disaster routes are not evacuation routes. Although an emergency may warrant a road be used as both a disaster and evacuation route, they are different. An evacuation route is used to move the affected population out of an impacted area."[25] Disaster routes are categorized as either Primary Disaster Routes (Freeway) or Secondary Disaster Routes. In the Project area, SR-110 is designated as a Primary Disaster Route, and Alameda Street, Cesar E. Chavez Avenue, and Spring Street are designated as Secondary Disaster Routes. In the event

---

24 *City of Los Angeles Emergency Operations Plan, Evacuation Functional Support Annex,* May 2018. Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-04/evacuation_annex_2018.pdf. Accessed May 2022.

25 County of Los Angeles Public Works. n.d. Disaster Routes. Available at: https://dpw.lacounty.gov/dsg/DisasterRoutes/. Accessed May 2022.

of an emergency, these routes would be used to evacuate the area and move emergency equipment, personnel, and supplies during a disaster.

3.9.3 Methodology

The following impact analysis is based in part on the Phase I ESA (Appendix K) and a review of publicly available information, including various online City databases (including the Bureau of Engineering, Department of Public Works, NavigateLA database, and the Department of City Planning, Zoning Information and Map Access System database), which were searched for information on the area of the proposed Project, as well as the City of Los Angeles General Plan. Google Earth was used to identify schools and airports in the Project area. School locations were confirmed through a review of the LAUSD website.

The analysis of hazardous materials consists of a summary of the regulatory framework that guides the decision-making process, a description of the existing conditions, anticipated impacts, and mitigation measures and level of significance after mitigation, if applicable. Project activities were assessed to determine their potential impact on creating conditions hazardous to the public or the environment during construction and operation. Potential impacts were then analyzed against applicable significance criteria, as described below. Where a potentially significant impact would be anticipated, proposed mitigation measures to address these potential effects were developed.

Thresholds of Significance

For purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area; or
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The following threshold from Appendix G of the CEQA Guidelines related to hazards and hazardous materials is discussed in this Draft EIR in Section 3.20, Wildfire. The proposed Project would have a significant impact on hazards and hazardous materials if it would:

- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

3.9.4 Environmental Impacts

This environmental analysis of potential impacts related to hazards and hazardous materials is based on a review of the results of the Phase I ESA prepared for the Project, a review of published reports and maps, and the Los Angeles Municipal Code (LAMC). AECOM performed a Phase I ESA of the proposed Project in conformance with the scope and limitations of ASTM E1527-13, which meets the requirements of Title 40, CFR Part 312.

The proposed Project would be regulated by the various laws, regulations, and policies summarized above in the Regulatory Setting. Compliance by the proposed Project with applicable federal, state, and local laws and regulations is assumed in this analysis.

HAZ-1: *Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Construction Impacts

Less Than Significant Impact with Mitigation. During construction activities for the stations, junction, and towers, it is anticipated that limited amounts of hazardous substances, such as solvents, paints, oils, hydraulic fluids, gasoline, and diesel fuel would be transported to and used at the Project component sites throughout the construction duration. Construction activities would include the use of machinery and other equipment that may require fueling or maintenance/ servicing with other petroleum-based products (e.g., grease, oil). These materials are considered hazardous and could cause temporary localized soil and water contamination. Incidents of spills or other localized contamination may occur during refueling, operation of machinery, undetected fluid leaks, or mechanical failure. In addition, during construction of the proposed Project, paints, solvents, and other materials (e.g., wood and cement sealers) may be used. These types of materials are not acutely hazardous, and all storage, handling, and disposal of these materials are regulated by the USEPA, DTSC, and LAFD. In addition, as discussed in Section 3.10, Hydrology and Water Quality, all construction activities would be subject to the Statewide NPDES Construction General Permit (CGP), which regulates stormwater discharges from construction sites that result in soil disturbance of one acre or more of total land area and/or are smaller sites which are part of a larger plan of development. The CGP requires preparation of a construction Stormwater Pollution Prevention Plan (SWPPP), which would identify the Best Management Practices (BMPs) that would be in place prior to the start of construction activities and during construction, including materials management BMPs.

Overall, all construction activities involving the transportation, usage, and disposal of hazardous materials would be subject to federal, State, and local health and safety requirements. This would include the prevention of spills or leaks related to construction equipment and vehicles. With adherence to all applicable regulations, the impact related to the routine use and handling of hazardous materials during construction would be less than significant.

During construction, ground-moving activities such as excavation for the foundations of the stations and towers would include disturbance of soils. The proposed sites of the Alameda Station, Alpine Tower, Chinatown/State Park Station, and Broadway Junction were listed in hazardous materials database listings. The remaining Project component sites (Alameda Tower, Stadium Tower, and Dodger Stadium Station) were not listed in hazardous materials database listings.

Construction of the Alameda Station would have a maximum excavation depth of 10 feet bgs and the maximum depth of the drilled piles is expected to be 125 feet below pile depth. Construction activities for the Alameda Station may also require the relocations of existing utilities, including an active hazardous liquid [petroleum] pipeline (crude oil pipeline), as detailed in Section 3.19, Utilities and Service Systems.

As discussed in Section 3.9.2, Environmental Setting, portions of the historical tracks along Alameda Street may remain beneath the pavement. Therefore, the potential presence of hydrocarbons, metals, and persistent pesticides in soil along or adjacent to the railroad track alignment may exist. Treated wood waste (railroad ties) may also exist, which would be treated in accordance with applicable federal, State, and local health and safety regulations.

This residual contamination may be encountered during excavation and construction activities for the Alameda Station, which has the potential to create a significant hazard to the public or the environment through the disposal of hazardous materials. Therefore, the proposed Project would implement Mitigation Measure HAZ-A, requiring preparation of a Soil and Groundwater Management Plan, which shall include sampling and analyzing soils and groundwater, and required methods and procedures for the proper handling and removal of impacted soils and/or groundwater for off-site disposal, to reduce impacts related to construction of the Alameda Station to less than significant.

Construction of the Alpine Tower would have a maximum excavation depth of 10 feet bgs, and the maximum depth of drilled piles is 120 feet below pile depth. As discussed in the Regulatory Database Search in Section 3.9.2, Environmental Setting, the paved surface parking lot at the site of the proposed Alpine Tower (901 North Main Street) was listed in the US Brownfields database. However, there was no indication of potential contamination, therefore the potential to encounter contaminated soils during construction activities for the Alpine Tower is low. With the implementation of Mitigation Measure HAZ-A, impacts would be less than significant.

The Chinatown/State Park Station would be constructed partially in the southern boundary of the Los Angeles State Historic Park property. Construction of the Chinatown/State Park Station would have a maximum excavation depth of 10 feet bgs and the maximum depth of drilled piles is 80 feet below pile depth. The Los Angeles State Historic Park property is listed in multiple database listings, because the site was formerly used as the Southern Pacific Railroad (now Union Pacific Railroad) Company’s freight yards, which included transfer station and storage yard activities. The park site is subject to an annual groundwater monitoring program at the request of the LARWQCB. Based on the results of the groundwater monitoring program indicating the VOC concentrations were stable given the long term decreasing monitoring concentration trends and that natural attenuation is occurring, as well as the distance to and upgradient location of the contaminated groundwater in the park, the potential for construction of the Chinatown/State Park Station to encounter existing contaminated groundwater is low; however, recent groundwater analytical results indicate that the groundwater water plume may be migrating down-gradient towards the proposed Project. As further described in Section 3.10, Hydrology and Water Quality, because the proposed piles at this station would be drilled to 80 feet below pile depth, removal of nuisance water, which is water that seeps into boreholes, during construction may be required. The park site is also subject to soil removal action under DTSC; however, it appears that soil removal action has been completed in selected portions of the park. Nonetheless, residual contamination may be encountered during construction of the Chinatown/State Park Station, which has the potential to create a significant hazard to the public or the environment through the disposal of hazardous materials. Therefore, the proposed Project would implement Mitigation Measure HAZ-A to prepare a Soil and Groundwater Management Plan, which shall include sampling and analyzing soils/groundwater and required methods and procedures for the proper handling and removal of impacted soils and/or groundwater for off-site disposal, to reduce impacts related to construction of the Chinatown/State Park Station to less than significant. Furthermore, it is not anticipated that the groundwater monitoring wells in the Los Angeles State Historic Park property would be restricted during construction activities of the Chinatown/State Park Station; the wells would remain accessible during and after construction activities as required for the RWQCB’s annual groundwater monitoring program.

Construction of the Broadway Junction at the 1201 North Broadway property would have a maximum excavation depth of 7 feet bgs and the maximum depth of drilled piles is 120 feet below pile depth. As discussed in Section 3.9.2, Environmental Setting, the 1201 North Broadway property was formerly occupied by an automotive dealership from 1924 until 2003. Previous testing and studies conducted for the 1201 North Broadway site indicate that residual petroleum hydrocarbons may still exist in soils at the 1201 North Broadway property in the area of the former hydraulic lifts and gasoline UST. Excavation or earthwork would occur in the area of the former lifts; therefore, there is potential to encounter contaminated soils during construction activities, which has the potential create a significant hazard to the public or the environment through the disposal of hazardous materials. Therefore, the proposed Project would implement Mitigation Measure HAZ-A to prepare a Soil and Groundwater Management Plan, which shall include sampling and analyzing soils and groundwater, and required methods and procedures for the proper handling and removal of impacted soils and/or groundwater for off-site disposal, to reduce impacts related to construction of the Broadway Junction to less than significant.

Construction of the Broadway Junction would also require demolition of the existing building at the 1201 North Broadway property. Based on an asbestos and lead-based paint survey of the property in 2003, asbestos-containing materials (ACMs) and lead-based paints (LBPs) were detected in various locations throughout the existing building. The proposed Project would comply with Cal/OSHA regulations which require construction standards for the handling of ACMs and LBPs, including but not limited to exposure monitoring, protective clothing, methods of compliance, and employee training. Implementation of Mitigation Measure HAZ-B would require the proposed Project to conduct hazardous materials abatement by a licensed abatement contractor prior to demolition of the existing building at 1201 North Broadway, which would remove, dispose of, and transport hazardous materials in accordance with federal, state, and local regulations. The licensed abatement contractor would be required to comply with Cal/OSHA regulations governing asbestos standards and lead paint standards (California Code of Regulations Article 4 Sections 1529, 5208, and 1532), OSHA 29 CFR Section 1926.62 regarding lead in construction, and OSHA 29 CFR Section 1926.1101 regarding asbestos exposure. The contractor would also be required to comply with SCAQMD Rule 1403, related to asbestos emissions during building demolition activities. Safe work measures would be taken during the hazardous materials abatement, including wetting the area to prevent possible release of hazardous materials into the air and removing dust with high-efficiency particulate air vacuums and/or disposable wet wipe towels. With implementation of Mitigation Measure HAZ-B, impacts would be reduced to less than significant.

Operational Impacts

Less Than Significant Impact. It is anticipated that operation and maintenance of the proposed Project would include use of limited quantities of hazardous materials, such as oils, paints, solvents, and cleaners, which are not acutely hazardous. The system maintenance area at the proposed Dodger Stadium Station would have storage for approximately 55 gallons each of gear oil, hydraulic fluid, and rope lubrication. These would be stored in a single location with a fire rating and spill protection in place. The proposed Project would also use limited amounts of hydraulic fluid in the vertical circulation equipment and would require incidental use of cleaning supplies and fuels. These would be stored in a fire rated cabinet with spill protection.

In accordance with the California Health and Safety Code Article 25507, businesses that handle hazardous materials in quantities equal to or greater than 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas, or extremely hazardous substances above the threshold planning quantity are required to (1) inventory their hazardous materials, (2) develop a site map, (3) develop an emergency plan, and (4) implement a training program for employees. Businesses must submit this information electronically to the statewide information management system (California Environmental Reporting System, or CERS). Once the submittal has been made, the local implementing agency (CUPA) and LAFD will verify the information and provide it to agencies responsible for the protection of public health and safety and the environment. These agencies include Fire Departments, Hazardous Materials Response Teams, or Local Environmental Regulatory divisions. The transport, use, and storage of hazardous materials are governed by a range of federal, State, and local statutes and regulations. Compliance with applicable federal, State, and local requirements (including potential development of a HMBP) concerning the handling, storage and disposal of hazardous waste would reduce the potential to release contaminants.

No activities are proposed that would result in the use or discharge of unregulated hazardous materials. The proposed Project would transport, handle and store, and dispose of all materials in compliance with all codes, standards, and regulations. Therefore, impacts related to the routine transport, use, or disposal of hazardous materials during operation would be less than significant.

HAZ-2: *Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Construction Impacts

Less Than Significant Impact with Mitigation. Relatively small quantities of hazardous materials that would be used during construction activities (e.g., petroleum-based products, paints, solvents, sealers) would be transported, used, stored, and disposed of according to City, County, State, and federal regulations. These substances are not considered acutely hazardous. Construction activities would be temporary in nature and would involve the limited transport, storage, use, and disposal of hazardous materials. As is typical in construction, there exists a potential for hazardous materials and waste spills to occur.

Nevertheless, the storage and disposal of hazardous materials and waste is highly regulated, and would be conducted in accordance with all federal, State, and local regulatory requirements, as described in Section 3.9.1, that are intended to prevent or manage hazards. If a spill does occur, it would be remediated accordingly. All hazardous materials, soils, drums, trash, and debris would be handled, removed, and disposed of in accordance with State and federal regulatory guidelines at a licensed Class I, II, or III disposal facility, depending on the amount and type of material encountered.

As discussed in Threshold HAZ-1, the potential to encounter existing contaminated soils and groundwater during construction activities would be mitigated with the preparation and implementation of a Soil and Groundwater Management Plan. In addition, as discussed in Section 3.10, Hydrology and Water Quality, the proposed Project would be required to comply with the CGP, which includes preparation of a construction SWPPP. The SWPPP would identify the BMPs that would be in place prior to the start of construction activities and during construction to reduce impacts from hazardous materials, including materials management BMPs.

Based on the age of the existing building at 1201 North Broadway, there is a potential for the presence of ACMs and LBPs. However, it is not uncommon for construction activities to encounter these potential hazards. ACM and LBP are highly regulated. Testing of any suspected buildings or portions thereof for ACM and LBP is part of standard construction practice at the time of demolition. In addition, Mitigation Measure HAZ-B, which would require hazardous materials abatement by a licensed abatement contractor prior to demolition of the existing building at 1201 North Broadway, would be implemented to reduce the potential for release of these materials into the environment. The licensed abatement contractor would remove, dispose of, and transport hazardous materials in accordance with federal, State, and local regulations. The licensed abatement contractor would be required to comply with Cal/OSHA regulations governing asbestos standards and LBP standards (CCR Article 4 Sections 1529, 5208, and 1532), OSHA 29 CFR Section 1926.62 regarding lead in construction, and OSHA 29 CFR Section 1926.1101 regarding asbestos exposure. Safe work measures would be taken, where applicable, during the hazardous materials abatement, including wetting the area to prevent possible release of hazardous materials into the air and removing dust with high-efficiency particulate air vacuums and/or disposable wet wipe towels, as well as compliance with SCAQMD Rule 1403 related to asbestos emissions during building demolition activities. Additionally, the proposed Project would comply with Cal/OSHA regulations which require construction standards for the handling of ACMs and lead-based paints, including but not limited to exposure monitoring, protective clothing, methods of compliance, and employee training. The hazardous materials abatement and demolition of the existing building at 1201 North Broadway would be short-term and a singular occurrence, and the potential for a significant release involving these materials is low.

As shown in Figure 3.9-1, different portions of the proposed Project alignment pass through Methane Zones and/or Methane Buffer Zones. The proposed Chinatown/State Park Station, Broadway Junction, Alpine Tower, and Stadium Tower are in a Methane Zone and/or Methane Buffer Zone. These zones are usually a result of naturally occurring tar and crude oil, or shallow soil contamination by old oil-drilling wells. Non-pressurized methane is not normally problematic if properly monitored and controlled per OSHA and Cal/OSHA regulations. If the gas accumulates to high concentrations and becomes pressurized, detectable levels may enter the interior of a structure through cracks or other penetrations present in floor slabs.

Methane exposure to workers during construction can be hazardous at higher levels, especially in confined spaces. In addition, methane seepage can result in an explosion if an adequate concentration of methane gas exists where combustion is possible. The anticipated construction methods for the proposed Project involve relatively shallow and wide excavations and would not be considered confined spaces; therefore, this reduces the likelihood of construction workers being exposed to methane gas concentrations that would be hazardous due to inhalation. Further, construction activities and workers would be required to comply with OSHA and Cal/OSHA regulations, including but not limited to 29 CFR Section 1926.55 and 8 CCR Section 5416, to develop and enforce workplace safety standards and ensure worker safety during construction, and project contractors would be required to comply with OSHA and Cal/OSHA regulations regarding any potential construction activities that may cause methane release.

The proposed Project would also be required to be designed and constructed to comply with the regulations of Division 71 of the Los Angeles Municipal Code. Compliance with Division 71 Section 91.7104.1 which includes appropriate methane exposure or release identification protocols based on a site-specific evaluation of the risk during construction, would be required to ensure worker health and safe construction.

With adherence to OSHA, Cal/OSHA, and Division 71 of the Los Angeles Municipal Code, impacts related to methane gas exposure or release during construction of the proposed Project would be less than significant.

Therefore, construction impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less than significant with the implementation of Mitigation Measures HAZ-A and HAZ-B.

Operational Impacts

Less Than Significant Impact. It is anticipated that operation and maintenance of the proposed Project would include limited quantities of hazardous materials, such as oils, paints, solvents, and cleaners, which are not acutely hazardous, as discussed above in Threshold HAZ-1. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal, State, and regulatory requirements, including the Los Angeles County Fire Code, and to the extent applicable, Chapter 6.95 of Division 20 of the HSC (governing HMBPs), and the Statewide NPDES General Permit for Stormwater Discharges Associated with Industrial Activities and associated SWPPP (for additional discussion of this NPDES General Permit, see Section 3.10 (Hydrology and Water Quality).

As previously discussed, several Project components are in a Methane Zone and/or Methane Buffer Zone. Although the stations, junction, and towers are mainly open-aired structures, enclosed spaces would include vertical circulation elements (stairwells and/or elevators). The proposed Project would be required to be designed and constructed to comply with Division 71 of the LAMC and Cal/OSHA regulations to ensure worker health and safety. Building permit application requirements for new construction in such zones include methane gas sampling and depending on the detected concentrations of methane and gas pressure at the site, the development and application of design remedies for reducing potential methane impacts. The required methane mitigation systems are based on the Site Design Level, with more involved mitigation systems required at the higher Site Design Levels. In addition, as discussed above, compliance with Division 71 Section 91.7104.1 includes appropriate methane exposure or release identification protocols based on a site-specific evaluation of the risk during construction, and would be required to ensure worker health and safe construction. With adherence to existing regulations, impacts due to methane gas during operation would be less than significant.

Therefore, operational impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less than significant for the proposed Project.

HAZ-3: *Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Construction Impacts

Less Than Significant Impact with Mitigation. As discussed in Section 3.15, Public Services, both the Chinese Consolidated School and Castelar Elementary School are located approximately 0.22-mile northwest of the proposed location of the Alpine Tower and 0.22-mile southwest of the proposed location of the Chinatown/State Park Station. The two schools are adjacent to one another. Ann Street Elementary School is approximately 0.24-mile southeast of the proposed location of the Chinatown/State Park Station. The closest school to the Project alignment is Cathedral High School, adjacent to and directly west of the construction staging area for the Broadway Junction, which would be on the northeastern corner of North Broadway and Bishops Road. Construction of the proposed Project is temporary, and emissions associated with construction are discussed in Section 3.3, Air Quality, of this Draft EIR. The proposed Project is not anticipated to emit any acute hazardous emissions. Additionally, construction would involve temporary use of limited quantities of hazardous materials, such as solvents, paints, oils, hydraulic fluids, gasoline, and diesel fuel, which are not considered acutely hazardous. In addition, Mitigation Measure HAZ-A would establish requirements for the handling, management and disposal of any contaminated soils or structures that prevent unacceptable exposure to contaminated soils or vapors during construction at any nearby school. Any handling of hazardous materials used during construction of this alternative would be regulated by federal, State, and local standards so that schools are not adversely impacted, as described in Section 3.9.1.

As discussed in Threshold HAZ-1, the proposed Project would require the demolition of the building at 1201 North Broadway to construct the Broadway Junction. Based on an asbestos and LBP survey conducted of the property in 2003, ACMs and LBPs were detected in various locations throughout the existing building at 1201 North Broadway. Implementation of Mitigation Measure HAZ-B would require the proposed Project to conduct hazardous materials abatement by a licensed abatement contractor prior to demolition, which would remove, dispose of, and transport hazardous materials in accordance with federal, State, and local regulations. The licensed abatement contractor would be required to comply with Cal/OSHA regulations governing asbestos standards and lead paint standards (CCR Article 4 Sections 1529, 5208, and 1532), OSHA 29 CFR Section 1926.62 regarding lead in construction, and OSHA 29 CFR Section 1926.1101 regarding asbestos exposure. The contractor would also be required to comply with SCAQMD Rule 1403, related to asbestos emissions during building demolition activities. Safe work measures would be taken during the hazardous materials abatement, including wetting the area to prevent possible release of hazardous materials into the air and removing dust with high-efficiency particulate air vacuums and/or disposable wet wipe towels. Therefore, the potential impacts related to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing school from demolition of the existing building at 1201 North Broadway would be reduced to less than significant with implementation of Mitigation Measure HAZ-B.

Operational Impacts

Less Than Significant Impact. It is anticipated that operation and maintenance of the proposed Project would include the use of limited quantities of hazardous materials, such as oils, paints, solvents, lubricants, and cleaners. These would be stored in a fire rated cabinet with spill protection. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. The proposed Project would handle and store all materials in compliance with all codes, standards, and regulations. Therefore, the proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Impacts would be less than significant.

HAZ-4: *Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

Construction Impacts

Less Than Significant Impact with Mitigation. As discussed in Section 3.9.2, Environmental Setting, the environmental database report search identified five properties that coincide with Project component sites: LAUS and El Pueblo de Los Angeles, which is the proposed location of construction support space and vertical circulation elements for the Alameda Station; 901 North Main Street, which is the proposed location of the Alpine Tower; the Los Angeles State Historic Park property, which is the proposed location of the Chinatown/State Park Station; and the 1201 North Broadway property, which is the proposed location of the Broadway Junction. The remaining Project component sites (Alameda Tower, Stadium Tower, and Dodger Stadium Station) were not listed in hazardous materials database sites.

Construction of the vertical circulation elements for the Alameda Station would be in sites included on a list of hazardous materials sites. As discussed in Section 3.9.2, Environmental Setting, the LAUS property is listed in several databases under various names and addresses associated with the property, and El Pueblo de Los Angeles is listed in the US Brownfields and Facility Index System databases. As discussed in Threshold HAZ-1, the potential presence of hydrocarbons, metals, and persistent pesticides in soil along or adjacent to the railroad track alignment may exist. This residual contamination may be encountered during excavation and construction activities for the Alameda Station, which has the potential to create a significant hazard to the public or the environment. Therefore, the proposed Project would implement Mitigation Measure HAZ-A to prepare a Soil and Groundwater Management Plan, which shall include sampling and analyzing soils/groundwater and required methods and procedures for the proper handling and removal of impacted soils and groundwater for off-site disposal, to reduce impacts related to construction of the Alameda Station to less than significant.

As discussed in Section 3.9.2, Environmental Setting, the paved surface parking lot at the site of the proposed Alpine Tower (901 North Main Street) was listed on several databases. However, because no violations were reported, it is anticipated that the potential to encounter any contaminated soils during construction activities for the Alpine Tower is considered low. Therefore, impacts related to being located on a site included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 would be less than significant with the implementation of Mitigation Measures HAZ-A and HAZ-B.

Construction of the Chinatown/State Park Station would be constructed partially within the southern boundary of the Los Angeles State Historic Park property. The Los Angeles State Historic Park property is listed in multiple hazardous materials databases, because the site was formerly used as the Southern Pacific Railroad (now Union Pacific Railroad) Company's freight yards, which included transfer station and storage yard activities. As discussed in Threshold HAZ-1, the site is subject to annual groundwater monitoring at the request of the LARWQCB and soil removal action under DTSC. The potential for construction of the Chinatown/State Park Station to encounter existing contaminated groundwater is considered low, and soil removal action has been completed in portions of the park, including the area of the proposed station. Nonetheless, residual groundwater and soil contamination may be encountered during excavation and construction activities of the Chinatown/State Park Station. Therefore, the proposed Project would implement Mitigation Measure HAZ-A to prepare a Soil and Groundwater Management Plan, which shall include sampling and analyzing soils/groundwater and required methods and procedures for the proper handling and removal of impacted soils and/or groundwater for off-site disposal, to reduce impacts related to construction of the Chinatown/State Park Station to less than significant.

The Broadway Junction would be constructed within the 1201 North Broadway property, which is listed in multiple hazardous materials database listings, because the site was formerly occupied by an automotive dealership from 1924 until 2003. As discussed in Threshold HAZ-1, previous testing and studies conducted for the 1201 North Broadway site indicate that residual petroleum hydrocarbons may still exist in soils in the area of the former hydraulic lifts and gasoline UST. Excavation or earthwork would occur in the area of the former lifts; therefore, there is potential to encounter contaminated soils during construction activities, which has the potential create a significant hazard to the public or the environment through the disposal of hazardous materials. Therefore, the proposed Project would implement Mitigation Measure HAZ-A to prepare a Soil and Groundwater Management Plan, which shall include sampling and analyzing soils and groundwater and required methods and procedures for the proper handling and removal of impacted soils and/or groundwater for off-site disposal, to reduce impacts related to construction of the Broadway Junction to less than significant.

With implementation of Mitigation Measure HAZ-A, construction of the proposed Project would result in a less than significant impact related to being located on a site included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5.

Operational Impacts

No Impact. After construction is complete and the Project is operational, the identified sites that are included on a list of hazardous materials sites would not be disturbed, and therefore, would not create a significant hazard to the public or the environment. No impact would occur.

HAZ-5: *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

Construction and Operational Impacts

No Impact. The proposed Project alignment is not in an area covered by an airport land use plan, nor within two miles of a public airport. The closest public airport is the Hollywood Burbank Airport, approximately 12 miles northwest of the proposed Project alignment. Additionally, as discussed in Section 3.15, Public Services, Chapter 5 Other CEQA Considerations, and the Heliport Technical Memo, Appendix O, the LAPD Air Support Division uses the City-owned Hooper Heliport atop the C. Erwin Piper Technical Center, at 555 Ramirez Street, approximately 0.38 miles east of the proposed location for Alameda Station. Construction and operation of the proposed Project would not interfere with LAPD access to the Hooper Heliport, and heliport operations would not be impacted by construction activities. Therefore, no impacts related to safety hazards or excessive noise for people residing or working in the proposed Project area would occur.

HAZ-6: *Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Construction Impacts

Less Than Significant Impact. The City of Los Angeles Emergency Management Department coordinates evacuations and evacuation routes with LAPD and LAFD in case of emergency, as outlined in the City's Emergency Operations Plan and Emergency Operations Plan Evacuation Functional Support Annex. The LAFD serves as the initial lead agency for controls incidents involving hazardous materials, including petroleum and chemical pipeline accidents. Although evacuation routes are not specifically designated in the City's Emergency Operations Plan, they are defined as major interstates, highways, and primary arterials in the City and Los Angeles County. Arterials potentially affected by construction include Cesar E. Chavez Avenue, Alameda Street, Spring Street, and North Broadway. The proposed Project alignment would also cross over SR-110. A complete list of regional freeways and key arterials in the proposed Project area is provided in Section 3.17.2 of Transportation. In addition, the City is in the Los Angeles Operational Area, which is governed by the Los Angeles County Operational Area Emergency Response Plan. As described above, the purpose of this plan is to establish the coordinated emergency management system, which includes prevention protection, response, recovery, and mitigation in the Los Angeles County Operational Area. Disaster routes mapped for the Los Angeles County Operational Area identify disaster routes in the County, including within the City. Designated disaster routes in the Project area include Alameda Street, Cesar E. Chavez Avenue, Spring Street, and SR-110. In the event of a disaster, these routes would be used to evacuate the area.

Construction activities would not interfere with the implementation of the City's Emergency Operations Plan and Annexes, including the Evacuation Annex, which outlines the responsibilities and procedures for City departments, such as LAPD and LAFD, for hazards and evacuations in the event of an emergency. The Evacuation Annex identifies the needed and available evacuation capabilities and resources, and describes how these resources are mobilized. For example, the Evacuation Annex notes each department's responsibilities and tasks in the event of an emergency. Coordination with the LAPD and LAFD during the permitting process would be required to ensure that the proposed Project's construction activities would not interfere with any of the departments' prescribed roles or responsibilities. In addition, as discussed in Section 3.17, Transportation, the proposed Project would implement Mitigation Measure TRA-B, which requires preparation of a Construction Traffic Management Plan. The Construction Traffic Management Plan would be required to ensure adequate emergency access is maintained in and around the proposed Project alignment and component sites throughout all construction activities. Therefore, construction activities would also not interfere with the implementation of the Los Angeles County Operational Area Emergency Response Plan, which is intended to establish the emergency management system, including prevention, protection, response, recovery, and mitigation in the Los Angeles County Operational Area, including the City of Los Angeles. Additionally, the Los Angeles County Operational Area Emergency Response Plan stipulates that each agency/ jurisdiction in the operational area is responsible for the completion of its own hazard mitigation plan. With respect to hazards and as noted above, the City of Los Angeles Safety Element in the General Plan contains an LHMP that provides information related to hazard identification and planning in Los Angeles and outlines compliance with State regulations. With adherence to these State regulations and the City's General Plan, construction activities would not interfere with the LHMP.

The following sections detail anticipated construction period work areas, and temporary traffic handling measures such as temporary lane configuration changes. This information is intended to identify a likely construction scenario and its potential for impacts, but the ultimate design, construction process, and traffic handling would be subject to design review and approval by the City of Los Angeles and other reviewing agencies. Accordingly, the potential construction work areas, and traffic handling could vary from the scenarios identified for the purposes of analysis in this Draft EIR.

Overall, construction of the proposed Project would not substantially impair the implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. However, as discussed further below, to provide additional environmental benefits in the Hazards context, this section includes a discussion of Mitigation Measure TRA-B and Mitigation Measure TRA-C (as discussed in Section 3.17, Transportation), which would be implemented as part of the proposed Project to reduce transportation-related impacts. Therefore, impacts would be less than significant with mitigation incorporated.

Alameda Station

Metro's LAUS Forecourt and Esplanade Improvements Project is currently being developed in coordination with the City of Los Angeles. The Esplanade improvements would include restriping and pedestrian and bicycle enhancements along Alameda Street and Los Angeles Street. The Draft EIR takes into account conditions with the planned Esplanade improvements. Upon completion of the Esplanade improvements, Alameda Street will include one northbound left turn lane, two northbound through lanes, one northbound through-right lane, a northbound curbside drop off zone, and two southbound through lanes. A two-way Esplanade bike path would be provided along the eastern side of Alameda Street. Conditions on Cesar E. Chavez remain the same as existing conditions.

There are two potential options for construction of Alameda Station – the Temporary Deck Option and the No Deck Option – depending on whether or not Metro's existing approximately 60-space parking lot in front of the Union Station Terminal and the future location of the planned LAUS Forecourt can be used for construction staging and location of the crane to be used during Alameda Station's construction. Both the Temporary Deck Option and No Deck Option are analyzed for construction of the Alameda Station.

Temporary Deck Option

Foundations and Columns (Full-Time Conditions): Under the Temporary Deck option, during the approximately 16-week foundations and columns phase of construction, the northbound through-right lane and one southbound through lane would remain open on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street.

The two northbound through lanes on Alameda Street would be partially shortened until reopening near the intersection of Cesar E. Chavez Avenue and Alameda Street to allow for northbound through traffic. No left turns would be allowed onto Cesar E. Chavez Avenue from Alameda Street during this phase, because construction would require full-time closure of the northbound left turn lane. Construction during this phase would also require full-time closure of one southbound through lane, as well as the northbound curbside drop-off zone, which would be used as a temporary northbound through lane.

The planned two-way Alameda Esplanade bike path along the eastern edge of Alameda Street along with Alameda Street's eastern and western sidewalks would remain open during this phase of construction, as well as the crosswalks at Los Angeles Street and Cesar E. Chavez Avenue, allowing for continued pedestrian access to LAUS and El Pueblo from Alameda Street.

The westbound left turn lane on Cesar E. Chavez Avenue would be closed full-time during Alameda Station's foundations and columns phase, but all other lanes (the eastbound left turn lane, two eastbound through lanes, the eastbound right turn lane, two westbound through lanes, and the westbound through-right lane) would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Deck Shoring, Cribbing, and Erection (Full-Time Conditions): Under the Temporary Deck Option, Alameda Station construction would include the installation and use of a temporary deck spanning over Alameda Street during the structural steel and gondola equipment erection phase.

The construction of the temporary deck would require that all lanes along Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street (the northbound left turn lane, two northbound through lanes, the northbound through-right lane/northbound curbside drop off zone, and two southbound through lanes) remain closed full-time for approximately two weeks.

Restricted local access to El Pueblo along with a service/loading area for El Pueblo would be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue. Emergency access to El Pueblo would also be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue.

Both the eastern and western sidewalks and the planned two-way Alameda Esplanade bike path along the eastern edge of Alameda Street would remain open during this phase of construction. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would also remain open, allowing for continued pedestrian access to LAUS and El Pueblo from Alameda Street. Pedestrian traffic on the eastern sidewalk would be controlled while specific construction activities are taking place to ensure safety. Bicycle traffic on the planned two-way Alameda Esplanade bike path would be controlled while specific construction activities are taking place during this construction phase to ensure safety.

The westbound left turn lane and eastbound right turn lane of Cesar E. Chavez Avenue would be closed full-time during the approximately two-week deck construction period, and all other lanes (the eastbound left turn lane, two eastbound through lanes, two westbound through lanes, and the westbound through-right lane) of Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection (Full-Time Conditions): Under the Temporary Deck Option, during the approximately 28-week structural steel and gondola equipment erection phase of construction, one northbound through lane, the northbound through-right lane, and two southbound through lanes would remain open on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street. The westernmost northbound through lane on Alameda Street would be partially shortened until reopening near the intersection of Cesar E. Chavez Avenue and Alameda Street to allow for through traffic. The northbound left turn pocket on Alameda Street would also be shortened, but not closed, allowing for left turns onto Cesar E. Chavez Avenue from Alameda Street. No full lane closures would be required.

A pedestrian detour would be required for a portion of the western sidewalk along Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street via existing sidewalks along the western edge of the Placita de Dolores. Pedestrians on the western side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. Pedestrians on the eastern side would primarily use a covered pedestrian sidewalk on the roadway along the eastern edge of Alameda Street. However, to ensure safety while certain, specific construction activities are taking place, pedestrians on the eastern side would be routed along the sidewalk within LAUS property and on a temporary sidewalk along the northern edge of the planned LAUS Forecourt. This temporary sidewalk may also be used to access LAUS. With the exception of the certain, specific construction activities, the planned two-way Alameda Esplanade bike path along Alameda Street would remain open. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would also remain open, allowing for continued pedestrian access to LAUS and El Pueblo.

All lanes along Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Deck Removal (Full-Time Conditions): The temporary deck would be removed following completion of the structural steel and gondola equipment erection phase of construction. Removal of the deck would require that all lanes along this portion of Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street (the northbound left turn lane, two northbound through lanes, the northbound through-right lane/northbound curbside drop off lane, and two southbound through lanes) remain closed full-time for approximately three weeks.

Restricted local access to El Pueblo along with a service/loading area for El Pueblo would be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue. Emergency access to El Pueblo would also be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue.

A pedestrian detour would be required for a portion of the western sidewalk along Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street. Pedestrians on the western side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. Pedestrian traffic on the eastern sidewalk would be controlled while certain construction activities are taking place during this construction phase to ensure safety. During these certain, specific construction activities, pedestrians on the eastern side would be routed along the sidewalk in LAUS property and on a temporary sidewalk along the northern edge of the planned LAUS Forecourt. This temporary sidewalk may also be used to access LAUS. Except during these certain, specific construction activities, the planned two-way Alameda Esplanade bike path and the eastern sidewalk along Alameda Street would remain open. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would also remain open, allowing for continued access to LAUS and El Pueblo.

The westbound left turn lane and eastbound right turn lane of Cesar E. Chavez Avenue would be closed full-time during the approximately three-week deck removal phase, and all other lanes (the eastbound left turn lane, two eastbound through lanes, two westbound through lanes, and the westbound through-right lane) of Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Vertical Circulation, Hardscape and Landscape, Interior Work (Full-Time Conditions): Under the Temporary Deck Option, during the approximately 27-week vertical circulation, hardscape and landscape, and interior work phase of construction, no lanes would be closed on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street, with the exception of periodic closures for asphalt/re-striping on 10 non-consecutive working days. The northbound curbside drop off zone along Alameda Street would be closed full-time during this phase of construction.

A portion of the western sidewalk would require a pedestrian detour on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street via existing sidewalks along the western edge of the Placita de Dolores. Pedestrians on the western side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. However, the planned two-way Alameda Esplanade bike path and the eastern sidewalk along Alameda Street would remain open, as well as the crosswalks at Los Angeles Street and Cesar E. Chavez Avenue, allowing for continued access to LAUS and El Pueblo.

All lanes on Cesar E. Chavez Avenue would remain open through the entirety of this phase. All sidewalks on Cesar E. Chavez Avenue would remain open for pedestrian access.

No Deck Option

Foundations and Columns (Full-Time Conditions): Under the No Deck Option, during the approximately 16-week foundation and columns phase of construction, the northbound through-right lane would remain open on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street. The two northbound through lanes on Alameda Street as well as the northbound left turn lane would be partially shortened until reopening near the intersection of Cesar E. Chavez Avenue and Alameda Street to allow for northbound traffic. Construction during this phase would also require the full-time closure of the two southbound through lanes and the northbound curbside drop off lane.

Restricted local access to El Pueblo along with a service and loading area for El Pueblo would be provided on Alameda Street near its intersection with Los Angeles Street. Emergency access to El Pueblo would also be provided on Alameda Street near its intersection with Los Angeles Street.

The planned two-way Alameda Esplanade bike path along the eastern edge of Alameda Street along with Alameda Street's eastern and western sidewalks would remain open during this phase of construction, as well as the crosswalks at Los Angeles Street and Cesar E. Chavez Avenue, allowing for continued access to LAUS and El Pueblo from Alameda Street.

The westbound left turn lane and the eastbound right turn lane on Cesar E. Chavez Avenue would be closed full-time during Alameda Station's foundations and columns phase, but all other lanes (the eastbound left turn lane, two eastbound through lanes, two westbound through lanes, and the westbound through-right lane) of Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection

Construction Hours. During construction hours under the No Deck Option, the approximately 30-week structural steel and gondola equipment erection phase of construction would require the closure of all lanes on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street (one northbound left turn lane, two northbound through lanes, one northbound through-right lane/ northbound curbside drop off zone, and two southbound through lanes) as well as the planned two-way Alameda Esplanade bike path.

Restricted local access to El Pueblo along with a service/loading area for El Pueblo would be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue. Emergency access to El Pueblo would also be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue.

During construction hours of this phase of construction, partial closures of Alameda Street's western sidewalk would be required. Pedestrian detours would be required along the portion of the western sidewalk along the Placita de Dolores. Pedestrians on the western side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. Partial closures to the eastern sidewalk and a portion of the planned two-way Alameda Esplanade bike path would also be required. Pedestrian traffic on the eastern sidewalk would be controlled while certain construction activities are taking place during this construction phase to ensure safety. During these certain, specific construction activities, pedestrians on the eastern side would be routed along the sidewalk in LAUS property and on a temporary sidewalk along the northern edge of the planned LAUS Forecourt. This temporary sidewalk may also be used to access LAUS. A portion of the planned two-way Alameda Esplanade bike path would also be closed during construction hours, requiring bicyclists to use the same pedestrian detour outlined for the eastern side of Alameda Street. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would remain open, however. Accordingly, access to Union Station and El Pueblo would be maintained.

The westbound left turn lane and the eastbound right turn lane on Cesar E. Chavez Avenue would be closed during construction hours, but all other lanes (the eastbound left turn lane, two eastbound through lanes, two westbound through lanes, and the westbound through-right lane) of Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Non-Construction Hours. During non-construction hours of the structural steel and gondola equipment erection phase of construction under the No Deck Option, one northbound through lane, the northbound through-right lane, and one southbound through lane would remain open on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street. The northbound left-turn lane and one northbound through lane would be shortened, but not closed, until reopening near the intersection of Cesar E. Chavez Avenue during non-construction hours. One southbound through lane, the eastern curbside drop off zone, and the planned Alameda Esplanade bike path would remain closed during non-construction hours due to construction staging.

A partial pedestrian detour would be required during non-construction hours along the portion of the western sidewalk along the Placita de Dolores due to the western sidewalk's partial closure. Pedestrians on the western side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. A partial pedestrian detour would also be required due to the closure of a portion of the eastern sidewalk along the planned LAUS Forecourt. Pedestrians on the eastern side would be routed along the sidewalk in LAUS property before crossing on a temporary sidewalk along the northern edge of the planned LAUS Forecourt to return to Alameda Street. This temporary sidewalk may also be used to access LAUS. A portion of the planned two-way Alameda Esplanade bike path would also be closed during non-construction hours, requiring bicyclists to use the same pedestrian detour outlined for the eastern side of Alameda Street. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would remain open, however. Accordingly, access to Union Station and El Pueblo would be maintained.

All lanes on Cesar E. Chavez Avenue would remain open during non-construction hours. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Vertical Circulation, Hardscape and Landscape, Interior Work (Full-Time Conditions): Under the No Deck Option, during the approximately 27-week vertical circulation, hardscape and landscape, and interior work phase of construction, no lanes would be closed on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street, with the exception of periodic closures for asphalt/re-striping on 10 non-consecutive working days. The northbound curbside drop off zone along Alameda Street would be closed full-time during this phase of construction.

A partial pedestrian detour would be required during this phase of construction along the portion of the western sidewalk along the Placita de Dolores. Pedestrians on the western side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. A partial pedestrian detour would also be required due to the closure of a portion of the eastern sidewalk along the planned LAUS Forecourt. Pedestrians on the eastern side would be routed along the sidewalk in LAUS property and on a temporary sidewalk along the northern edge of the planned LAUS Forecourt. This temporary sidewalk may also be used to access LAUS. A portion of the planned two-way Alameda Esplanade bike path would also be closed, requiring bicyclists to use the same pedestrian detour outlined for the eastern side of Alameda Street. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would remain open, however. Accordingly, access to Union Station and El Pueblo would be maintained.

All lanes on Cesar E. Chavez Avenue would remain open through the entirety of this phase. All sidewalks on Cesar E. Chavez Avenue would remain open for pedestrian access.

Alameda Tower

Foundations and Columns (Full-Time Conditions): During the approximately 16-week foundations and columns phase of construction, the northbound left turn lane, one northbound through lane, and three southbound through lanes on Alameda Street between Main Street and Alhambra Avenue would remain open. Construction of this phase would require the full-time closure of one northbound through lane on Alameda Street between Main Street and Alhambra Avenue, as well as the parking lane on the eastern side of Alameda Street.

The western sidewalk on Alameda Street would remain open for pedestrian access during this phase, and the eastern sidewalk along the Alameda Triangle on Alameda Street between Main Street and Alhambra Avenue would be closed.

The westbound left turn lane would be closed full-time on Alhambra Avenue while the shared westbound left-turn/westbound right-turn lanes would remain open. The sidewalk on Alhambra Avenue would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection: The structural steel and gondola equipment erection phase of construction would last approximately 26 weeks.

Weeks 1-3 Full-Time Conditions. During the first three weeks of the structural steel and gondola equipment erection phase, conditions would be the same as described for the foundations and columns phase above.

Weeks 4-26 Construction Hours. During construction hours of weeks 4 through 26 of the structural steel and gondola equipment erection phase of construction, no lanes on Alameda Street between Main Street and Alhambra Avenue would be open, except for the westernmost southbound through lane which would remain open for local and emergency access during construction hours to allow continued access to businesses along this portion of Alameda Street. All other travel lanes on Alameda Street between Main Street and Alhambra Avenue (the northbound left-turn lane, two northbound through lanes, and three southbound through lanes), and the parking lane on the eastern side of Alameda Street would be closed.

The western sidewalk would remain open for pedestrian access during construction hours. The eastern sidewalk along the Alameda Triangle on Alameda Street between Main Street and Alhambra Avenue would be closed during construction hours.

Closures along other portions of Alameda Street would be required to facilitate the construction road closures on Alameda Street between Main Street and Alhambra Avenue.[26]

The westbound left turn lane on Alhambra Avenue would require full-time closure, while the shared westbound left-turn/westbound right-turn lanes would remain open. The sidewalk on Alhambra Avenue would remain open for pedestrian access.

Weeks 4-26 Non-Construction Hours. During non-construction hours of weeks 4 through 26 of the structural steel and gondola equipment erection phase of construction, three southbound through lanes would be open. The parking lane on the east side of Alameda Street, the northbound left turn lane, and two northbound through lanes on Alameda Street between Main Street and Alhambra Street would remain closed during non-construction hours.

The western sidewalk would remain open for pedestrian access during non-construction hours, but the eastern sidewalk would remain closed along the Alameda Triangle on Alameda Street between Main Street and Alhambra Avenue.

Closures along other portions of Alameda Street would be required to facilitate the construction road closures on Alameda Street between Main Street and Alhambra Avenue.[27]

All lanes to the north of the intersection of Alameda Street and Alhambra Avenue would remain open during non-construction hours.

The westbound left turn lane on Alhambra Avenue would require full-time closure, while the shared westbound left-turn/westbound right-turn lanes would remain open. The sidewalk on Alhambra Avenue would remain open for pedestrian access.

---

[26] *All northbound through travel in this section of Alameda Street would be rerouted to Main Street or to Ord Street. One existing northbound through lane would be used as a right turn only lane from Alameda Street onto Main Street, and the existing right turn lane onto Main Street would be maintained. The existing northbound left turn pocket from Alameda Street onto Ord Street would be closed, and all northbound left turns would occur from the westernmost existing through lane. All southbound lanes on Alameda Street between Bauchet Street and Main Street would remain open along with both eastern and western sidewalks. All northbound lanes on Alameda Street between Alhambra Avenue and Alpine Street would remain open along with both eastern and western sidewalks. Two southbound lanes on Alameda Street between Alhambra Avenue and Alpine Street would be closed during construction hours, while the westernmost southbound through lane would remain open for local and emergency access to allow continued access to businesses along this section of Alameda Street. All northbound lanes on Alameda Street between Alpine Street and College Street would remain open along with both eastern and western sidewalks. Two southbound through lanes in this section of Alameda Street would be tapered towards closure at the Alameda Street and Alpine Street intersection, and the southbound through right lane would be restricted to right turn only. The southbound left turn lanes/center striped median on Alameda Street and College Street would remain open. The westbound left turn lane on Alpine Street would be closed during construction hours, while the rest of the lanes on Alpine Street would remain open. Both sidewalks on Alpine Street would remain open for pedestrian access.*

[27] *All northbound through travel in this section of Alameda Street would be rerouted to the right onto Main Street or to the left onto Ord Street. One existing northbound through lane would be used as a right turn only lane from Alameda Street onto Main Street, and the existing right turn lane onto Main Street would be maintained. The existing northbound left turn pocket from Alameda Street onto Ord Street would be closed, and all northbound left turns would occur from the westernmost existing through lane. All southbound lanes on Alameda Street between Bauchet Street and Main Street would remain open along with both eastern and western sidewalks.*

Hardscape and Landscape, Interior Work (Full-Time Conditions): The approximately 14-week hardscape and landscape, interior work phase of construction would require no lane closures nor the closure of the parking lane on the eastern side of Alameda Street between Main Street and Alhambra Avenue, with the exception of periodic closures for asphalt/re-striping on 10 non-consecutive working days on the northbound left turn lane, two northbound through lanes, and the parking lane on the eastern side of Alameda Street, as well as the northbound left turn pocket directly to the south of the intersection of Alameda Street and Main Street.

This phase would require the full-time closure of the eastern sidewalk along the Alameda Triangle on Alameda Street between Main Street and Alhambra Avenue. The western sidewalk would remain open for pedestrian access.

No lane closures on Alhambra Avenue are required during this phase, with the exception of periodic closures for asphalt/re-striping on 10 non-consecutive working days on the westbound left turn lane on Alhambra Avenue. The sidewalk on Alhambra Avenue would remain open for pedestrian access.

Alpine Tower

Foundations and Columns (Full-Time Conditions): During the approximately 15-week foundations and columns phase of construction, to the north of the intersection of Alameda Street and Alpine Street, one northbound through lane, the southbound left turn lane, two southbound through lanes, and the southbound through-right lane would remain open on Alameda Street. This phase of construction would require full-time closure of one northbound through lane and a portion of the northbound parking lane on Alameda Street to the north of its intersection with Alpine Street.

Additional road closures on Alameda Street would be required to facilitate the construction road closures near of the intersection of Alameda Street and Alpine Street.[28]

The western sidewalk on Alameda Street would remain open for pedestrian access, but a portion of the eastern sidewalk on Alameda Street to the north of its intersection with Alpine Street would be closed during this phase.

On Alpine Street between Main Street and Alameda Street, two westbound through lanes, the westbound left turn lane, and two eastbound through lanes would remain open. The northernmost westbound through lane would be reconfigured to be a through-right turn lane to allow for a right turn onto Alameda Street because construction of this phase would require the closure of Alpine Street's westbound right turn lane onto Alameda Street.

The southern sidewalk on Alpine Street would remain open for pedestrian access. The northern sidewalk on Alpine Street between Alameda Street and Main Street would be closed during this phase. To the west of the intersection of Alpine Street and Alameda Street, all lanes and sidewalks would remain open on Alpine Street.

Structural Steel and Gondola Equipment Erection: The structural steel and gondola equipment erection phase for the Alpine Tower would last approximately 28 weeks.

[28] To the south of the intersection of Alameda Street and Alpine Street, the northbound right turn lane would be closed and the eastern northbound through lane would be used as a right turn only lane from Alameda Street onto Alpine Street.

Weeks 1-3 Full-Time Conditions. During the first three weeks of the structural steel and gondola equipment erection phase, conditions would be the same as described for the foundations and columns phase above.

Weeks 4-28 Construction Hours. During construction hours of weeks 4 through 28 of the structural steel and gondola equipment erection phase of construction, to the north of the intersection of Alameda Street and Alpine Street, two southbound through lanes and the southbound through-right lane would remain open on Alameda Street. The easternmost southbound through lane would be reconfigured to be a through-left turn lane because Alameda Street's southbound left turn lane would be closed during construction hours. During construction hours, two northbound through lanes and the northbound parking lane would also be closed.

Additional road closures on Alameda Street would be required to facilitate the construction road closures near the intersection of Alameda Street and Alpine Street.[29]

The western sidewalk would remain open on Alameda Street for pedestrian access both north and south of the intersection of Alameda Street and Alpine Street. A portion of the eastern sidewalk on Alameda Street to the north of its intersection with Alpine Street would be closed during construction hours. The eastern sidewalk south of the intersection would remain open during construction hours.

On Alpine Street between Main Street and Alameda Street, the two eastbound through lanes would remain open during construction hours. The westbound right turn lane, two westbound through lanes, and the westbound left turn lane would be closed during construction hours.

The southern sidewalk on Alpine Street between Main Street and Alameda Street would remain open for pedestrian access during construction hours. The northern sidewalk on Alpine Street would be closed during construction hours.

Additional road closures on Alpine Street would be required to facilitate the construction road closures near of the intersection of Alameda Street and Alpine Street.[30]

Weeks 4-28 Non-Construction Hours. During non-construction hours for weeks 4 through 28 of this phase of construction, to the north of the intersection of Alameda Street and Alpine Street, the southbound left turn lane, two southbound through lanes, and the southbound through-right lane would remain open. The northbound parking lane and two northbound through lanes would be closed.

The western sidewalk on Alameda Street both north and south of its intersection with Alpine Street would remain open for pedestrian access. The eastern sidewalk north of the intersection would be closed during non-construction hours. The eastern sidewalk south of the intersection would remain open during non-construction hours.

On Alpine Street between Main Street and Alameda Street, the two eastbound through lanes would remain open during non-construction hours. The westbound right turn lane, two westbound

---

29 To the south of the intersection of Alameda Street and Alpine Street, the western northbound through lane and the northbound right turn lane would be closed, and the eastern northbound through lane would be used as a right turn only lane from Alameda Street onto Alpine Street.

30 To the west of the intersection of Alpine Street and Alameda Street, two westbound through lanes, one eastbound through lane, and one eastbound through-right lane would remain open on Alpine Street, while the eastbound left turn lane would be closed during construction hours. The northern and southern sidewalks on this section of Alpine Street would remain open for pedestrian access.

through lanes, and the westbound left turn lane would remain closed during non-construction hours.

Additional road closures on Alpine Street would be required to facilitate the construction road closures near of the intersection of Alameda Street and Alpine Street.[31]

The southern sidewalk on Alpine Street would remain open for pedestrian access during construction hours. The northern sidewalk on Alpine Street between Alameda Street and Main Street would be closed during non-construction hours.

Hardscape and Landscape, Interior Work (Full-Time Conditions): During the approximately 12-week hardscape and landscape, interior work phase of construction, all travel lanes would remain open with the exception of periodic closures for asphalt re-striping on 10 non-consecutive working days. Construction of this phase would require full-time closures of a portion of the eastern sidewalk on Alameda Street to the north of its intersection with Alpine Street and the northern sidewalk on Alpine Street between Alameda Street and Main Street; however, the western sidewalk on Alameda Street and the southern sidewalk on Alpine Street would remain open for pedestrian access full-time during this phase.

Chinatown/State Park Station

Foundations and Columns (Full-Time Conditions): During the approximately 21-week foundations and columns phase of construction, both northbound through lanes and the northbound parking lane would remain open on Spring Street near the southern end of the Los Angeles State Historic Park. The westernmost northbound lane would be operated as a center reversible lane that would serve the peak travel direction; i.e., southbound travel during the weekday morning commute periods, and northbound travel during the weekday evening commute periods. The two-way left turn-lane would also remain open, but would be reconfigured for use as a southbound through lane because construction of this phase would require the full-time closure of the two southbound through lanes. The southbound parking lane on Spring Street near the southern end of the Los Angeles State Historic Park would also be closed during this phase of construction.

Although construction would occur along existing access points to nearby properties, local and emergency access to these properties would be maintained during this phase of construction.

Although the western sidewalk would be closed during this phase of construction, one southbound through lane would be reconfigured to be used as a rerouted covered pedestrian path on the roadway along the western edge of Spring Street. The eastern sidewalk along Spring Street would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection (Full-Time Conditions): During the approximately 28-week structural steel and gondola equipment phase of construction, one northbound through lane would remain open on Spring Street near the southern end of the Los Angeles State Historic Park, which would be operated as a center reversible lane to serve the peak travel direction, i.e., southbound travel during the weekday morning commute periods, and northbound travel during the weekday evening commute periods. The northbound parking lane would be reconfigured to be used as a northbound through lane during this phase of construction.

[31] To the west of the intersection of Alpine Street and Alameda Street, two westbound through lanes, one eastbound through lane, and one eastbound through-right lane would remain open on Alpine Street, while the eastbound left turn lane would be closed during non-construction hours. The northern and southern sidewalks on this section of Alpine Street would remain open for pedestrian access.

The two-way left turn lane and portions of one northbound through lane would be reconfigured to be used as a southbound through lane because construction of this phase would require full-time closure of the two southbound through lanes and the southbound parking lane.

Although construction would occur along existing access points to nearby properties, local and emergency access to these properties would be maintained.

The eastern sidewalk along Spring Street would remain open for pedestrian access. Although a portion of the western sidewalk would be closed, a covered pedestrian sidewalk on the roadway along the western side of Spring Street would be provided to maintain pedestrian access.

Vertical Circulation, Hardscape and Landscape, Interior Work (Full-Time Conditions): During the approximately 40-week vertical circulation, hardscape and landscape, and interior work phase of construction, all travel lanes on Spring Street would remain open with the exception of periodic closures on one southbound through lane and the southbound parking lane for asphalt/ re-striping on 10 non-consecutive working days.

Although this phase of construction would require full-time closure of a portion of the western sidewalk on Spring Street near the southern end of the Los Angeles State Historic Park, a rerouted covered pedestrian sidewalk on the roadway in the existing southbound parking lane along the western side of Spring Street would be provided to maintain pedestrian access. The southbound parking lane would be closed during this phase of construction to allow for this covered pedestrian sidewalk. However, the rerouted pedestrian access would be closed during the 10 non-consecutive days of asphalt/restriping, occurring on the existing southbound parking lane. The eastern sidewalk on Spring Street would remain open for pedestrian access at all times.

Broadway Junction

Foundations and Columns (Full-Time Conditions): During the approximately 28-week foundations and columns phase of construction, one northbound through lane, one southbound through lane, and the southbound through-right lane would remain open on North Broadway. The other northbound through lane would also remain open and would be reconfigured to be a through-left turn lane, because this phase of construction requires the closure of the northbound left turn lane onto Bishops Road. Construction of this phase would also require the full-time closure of the southbound parking lane on North Broadway.

A portion of the eastern sidewalk on North Broadway close to its intersection with Bishops Road would be closed during this phase of construction, however, a protected pedestrian sidewalk along the eastern side of North Broadway would be provided to maintain pedestrian access. Although a portion of the western sidewalk on North Broadway would be closed, pedestrian detours would be provided along Savoy Street.

All Bishops Road travel lanes would remain open during this phase of construction, while the eastbound parking lane and the westbound parking shoulder would be partially closed. The Bishops Road southern sidewalk would remain open for pedestrian access.

Deck Shoring, Cribbing, and Erection (Full-Time Conditions): Following completion of the foundations and columns phase, a temporary deck would be constructed over portions of North Broadway and Bishops Road to minimize the closures of North Broadway and Bishops Road that would otherwise be required to close for the duration of the Broadway Junction's structural steel and gondola equipment phase. Installation of the temporary deck would take approximately two weeks and would require the full-time closure of all travel and parking lanes (the northbound left/center left turn lane, two northbound through lanes, the southbound through lane, the southbound through-right lane, and the northbound and southbound parallel parking lanes) on North Broadway between Cottage Home Street and Savoy Street, and all travel and parking lanes and shoulders on Bishops Road (the shared eastbound left/eastbound right turn lane, the westbound through lane, and the eastbound parallel parking lane and westbound parking shoulder) between North Broadway and Savoy Street.

Restricted local and emergency access would be provided to allow access to properties along North Broadway from southbound travel along North Broadway. Restricted local and emergency access would be provided for the properties along North Broadway from Cottage Home Street up until the area of closure just south of the intersection of North Broadway and Bishops Road. Restricted local access would be provided to allow access to Cathedral High School's driveways. Emergency access would also be provided to Cathedral High School.

A protected pedestrian sidewalk along the eastern side of North Broadway would be provided to maintain pedestrian access. Although a portion of the western sidewalk on North Broadway would be closed, pedestrian detours would be provided along Savoy Street.

The sidewalk along Bishops Road would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection (Full-Time Conditions): During the approximately 38-week structural steel and gondola equipment phase of construction, one northbound through lane, the southbound through lane and the southbound through-right lane would remain open on North Broadway. The other northbound through lane would also remain open and would be reconfigured to be a through-left turn lane, because this phase of construction requires the closure of the northbound left turn lane onto Bishops Road. Construction of this phase would also require the full-time closure of the southbound parking lane on North Broadway.

A portion of the eastern sidewalk on North Broadway close to its intersection with Bishops Road would be closed during this phase of construction; however, a protected pedestrian sidewalk along the eastern side of North Broadway would be provided to maintain pedestrian access. Although a portion of the western sidewalk on North Broadway would be closed, pedestrian detours would be provided along Savoy Street.

All Bishops Road travel lanes would remain open during this phase of construction. The eastbound parking lane and the westbound parking shoulder would be partially closed. The Bishops Road sidewalk would remain open for pedestrian access.

Deck Removal (Full-Time Conditions): The temporary deck would be removed following completion of the structural steel and gondola equipment erection phase of construction. Removal of the deck would require the full-time closure of all travel and parking lanes on North Broadway (the northbound left/center left turn lane, two northbound through lanes, the southbound through lane, the southbound through-right lane, and the northbound and southbound parallel parking lanes) between Cottage Home Street and Savoy Street, and all travel and parking lanes and shoulders on Bishops Road (the shared eastbound left-turn/eastbound right-turn lanes, the westbound through lane, and the eastbound parallel parking lane and westbound parking shoulder) between North Broadway and Savoy Street during the approximately three-week deck removal phase.

Restricted local and emergency access would be provided to allow access to properties along North Broadway from southbound travel along North Broadway throughout construction of the Broadway Junction. Restricted local and emergency access would be provided for the properties along North Broadway from Cottage Home Street up until the area of closure just south of the intersection of North Broadway and Bishops Road. Restricted local access would be provided to allow access to Cathedral High School's driveways. Emergency access would also be provided to Cathedral High School.

A protected pedestrian sidewalk along the eastern side of North Broadway would be provided to maintain pedestrian access. Although a portion of the western sidewalk on North Broadway would be closed, pedestrian detours would be provided along Savoy Street.

The sidewalk along Bishops Road would remain open during this phase of construction.

Vertical Circulation, Hardscape and Landscape, Interior Work (Full-Time Conditions): During the approximately 29-week vertical circulation, hardscape and landscape, and interior work phase of construction, all travel lanes on North Broadway and Bishops Road would remain open, with the exception of periodic closures for asphalt/re-striping on 10 non-consecutive working days. All sidewalks would remain open, with the exception of periodic closures of the western sidewalk on North Broadway for asphalt/re-striping on 10 non-consecutive working days.

Stadium Tower

The Stadium Tower would be constructed on private property and would not require any road closures.

Dodger Stadium Station

The Dodger Stadium Station would be constructed on private property and would not require any road closures.

Rope pulling activities could be quickly halted in the event of an emergency, allowing roadways to be used during an emergency for either evacuation or emergency response. Rope pulling activities would occur during the installation of the cables for the proposed Project. The "pulling" of cables requires the placement of an initial thin, light line rope from one end to the other, which would be used to pull progressively larger cables. The initial placement is anticipated to be flown either by drone or helicopter.

Rope pulling activities for each of the two ropeway systems would require temporary closure of roadways underneath each ropeway system of the Project alignment, but with notice, could be halted to allow roadways to be used during an emergency. In addition, to minimize traffic disruption, rope pulling activities for each ropeway system would not occur contemporaneously. Rope pulling activities for the ropeway system from Alameda Station to Broadway Junction would require temporary closure of Alameda Street, Spring Street and North Broadway, as well as portions of roadways that intersect with these roadways, for up to two non-consecutive days. Rope pulling activities for the ropeway system from Broadway Junction to Dodger Stadium Station would require temporary closure of North Broadway, Bishops Road, Savoy Street, SR-110, and Stadium Way, for up to two non-consecutive days. Alameda Street, Spring Street, North Broadway, and SR-110 could all be used as potential evacuation routes. However, rope pulling is not expected to significantly impact emergency response due to the use of the thin, light line rope and the short duration of roadway closures associated with flying the line, and rope pulling activities could be quickly halted in the event of an emergency, thereby allowing the roadways to be used during an emergency.

The proposed road closures and roadway disruptions would be temporary and intermittent throughout construction of the proposed Project and would be coordinated with the LADOT, and construction activities would be halted in the event of an emergency related to hazardous materials to allow the roads or portions of the roads to reopen for emergency response or evacuation. Although evacuation routes are not defined in the City's Emergency Operations Plan, they are described as major interstates, highways, and primary arterials in the City and Los Angeles County. Cesar E. Chavez Avenue, Alameda Street, Spring Street, and North Broadway are all classified as arterials in the City and would require temporary, intermittent closures during certain phases of construction. Similarly, the County designates Alameda Street and Cesar E. Chavez Avenue as disaster routes with priority for clearing, repairing, and restoration over other roads, and emergency responders may choose to use these roadways to bring in emergency personnel, equipment, and supplies to impacted areas. Emergency responders would have multiple detour options around each closure, because the proposed Project is in an established urban area that is well-served by the surrounding roadway network, and emergency responders are able to use onboard live mapping software that informs them which roadways are experiencing delays due to construction, accidents, or other events, and they would be able to take alternative routes accordingly. Drivers of emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens to clear a path of travel, or driving in the lanes of opposing traffic. Emergency responders could also be flagged through a worksite if necessary, in addition to using routes designated as “Permitted Local Access.”

As discussed in Section 3.17, Transportation, a Construction Traffic Management Plan would be prepared as part of the Project, and is included as Mitigation Measure TRA-B. The Construction Traffic Management Plan for the proposed Project would identify potential fire evacuation routes and construction equipment storage areas to ensure that equipment would not be stored in the roadways to allow for emergency access, if needed. In addition, the Construction Traffic Management Plan would be based on the nature and timing of the specific construction activities at each of the Project construction sites. This coordination would ensure construction activities of the concurrent related projects and associated hauling activities are managed in collaboration with one another and the proposed Project. Further, the Construction Traffic Management Plan would require coordination with the City and emergency service providers to ensure emergency access is provided to the Project alignment and component sites and neighboring businesses and residences. Emergency access points will be marked accordingly in consultation with LAFD, as necessary.

While road closures and roadway disruptions would be temporary and intermittent throughout construction of the proposed Project and would be coordinated with LADOT, construction of the proposed Project could be quickly halted in the event of an emergency in coordination with LAFD and LAPD pursuant to their role in coordinating hazard and evacuation responses under the City's Emergency Operations Plan and to allow the roads to operate as disaster routes pursuant to the mapped disaster routes in the Los Angeles County Operational Area. Accordingly, construction of the proposed Project would not inhibit access in the event of an emergency to the identified disaster routes in the Project area. The proposed Project would otherwise comply with any regulatory or statutory requirements pertaining to street closures and detours.

Therefore, construction of the proposed Project would not substantially impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. To provide additional environmental benefits in the Hazards context, and as discussed in Section 3.17, Transportation, the proposed Project would implement Mitigation Measure TRA-3, requiring the development of a Project specific temporary disaster route plan prior to the start of construction. The temporary disaster route plan would require coordination with and approval by

LADOT, which would include street closure information and detour plans. In addition to detours, the temporary disaster route plan could also include temporary operational measures that would be implemented by the City during a disaster, including temporary contra-flow lanes or reversing directions to flush vehicles during a disaster situation. Therefore, impacts would be less than significant with mitigation incorporated.

Operational Impacts

Less Than Significant Impact. The proposed Project stations would be readily accessible from adjacent City streets during an evacuation situation affecting Project operations. Daily operations would not affect emergency response at the street level or to adjacent roadways or parcels because the cabins would be suspended above the public ROW. The Project is designed so that it would not affect roadway through lane capacity by any of the in-roadway structures proposed (i.e., Alameda Station). In addition, off-roadway structures would not hinder emergency response because the bases of stations, junction, and towers would not be in travel lanes. Upon completion of construction activities, all existing travel lanes along the Project alignment would continue to serve as designated disaster routes and provide local and emergency response route access. Additionally, annual maintenance activities may require crane access at tower locations, including the potential to require the temporary closing of traffic lanes. These temporary lane closures would require coordination with, and approval by, LADOT, which would include street closure information and detour plans, if necessary.

Based on this, daily operations, and annual maintenance activities of the proposed Project, would not impair the City's Emergency Operations Plan or Local All-Hazards Mitigation Plan, or the County's Operational Area Emergency Response Plan. Therefore, operation of the proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan, and the impact would be less than significant.

3.9.5 Mitigation Measures

The proposed Project would implement the following mitigation measures to reduce impacts related to hazards and hazardous materials.

HAZ-A **Prepare a Soil and Groundwater Management Plan**: The Project Sponsor shall retain a qualified environmental consultant to prepare a Soil and Groundwater Management Plan prior to any re-grading, decommissioning, or construction activities. The Soil and Groundwater Management Plan would be prepared and implemented to specify methods for handling and disposal in the event contaminated groundwater, contaminated soil, or structures, are encountered during project construction. The Soil and Groundwater Management Plan shall provide a summary of the environmental conditions at each Project component site, including stations and towers. The Soil and Groundwater Management Plan shall include methods and procedures for sampling and analyzing soils and/or groundwater in order to classify them as either hazardous or non-hazardous, and if identified as hazardous, shall include additional methods and procedures for the proper handling and removal of impacted soils and/or groundwater for off-site disposal and/or recycle. Methods and procedures in the Soil and Groundwater Management Plan shall be in accordance with current federal, state, and local regulations and be protective of workers and the environment.

HAZ-B **Hazardous Materials Abatement:** Prior to demolition of the existing building at 1201 North Broadway, a licensed abatement contractor will conduct hazardous materials abatement, which would remove, dispose of, and transport hazardous materials in accordance with federal, state, and local regulations. The licensed abatement contractor would be required to comply with Cal/OSHA regulations governing asbestos standards and lead paint standards (California Code of Regulations Article 4 Sections 1529, 5208, and 1532), OSHA 29 Code of Federal Regulations 1926.62 regarding lead in construction, and OSHA 29 Code of Federal Regulations 1926.1101 regarding asbestos exposure. The contractor would also be required to comply with SCAQMD Rule 1403, related to asbestos emissions during building demolition activities. Safe work measures would be taken during the hazardous materials abatement, including wetting the area to prevent possible release of hazardous materials into the air and removing dust with high-efficiency particulate air vacuums and/or disposable wet wipe towels.

3.9.6 Level of Significance after Mitigation

Compliance with regulations and implementation of Mitigation Measures HAZ-A and Mitigation Measure HAZ-B would reduce construction-related impacts to related to the routine transport, use, or disposal of hazardous materials; upset and accident conditions involving the release of hazardous materials into the environment; and being located on a site included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 to below the level of significance.

Compliance with regulations and implementation of Mitigation Measure HAZ-B would reduce construction-related impacts to related to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school to below the level of significance.

This page intentionally left blank.

3.10 HYDROLOGY AND WATER QUALITY

This section analyzes the potential impacts to hydrology, water quality, flood hazards, and groundwater during construction and operation of the proposed Project. The Project study area includes the footprints of the proposed Project components and the areas surrounding the Project alignment. Information contained in this section is based in part on information from the *Hydrology and Water Quality Technical Study* (Appendix L of this Draft EIR).

3.10.1 Regulatory Setting

Federal

Clean Water Act of 1972 (Including 1977 and 1987 Amendments) – Sections 303, 304, 401, 402, and 404

The Clean Water Act (CWA) is the primary federal law that establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulates quality standards for surface waters. The primary objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's surface waters. Pollutants regulated under the CWA include "priority" pollutants, including various toxic pollutants; "conventional" pollutants, such as biochemical oxygen demand, total suspended solids, oil and grease, and pH; and "non-conventional" pollutants, including any pollutant not identified as either conventional or priority.

CWA Sections 303 and 304 provide broad statutory guidance requiring states to issue water quality standards, criteria, implementation plans, and guidelines. CWA Section 401 requires applicants for a federal license or permit to conduct activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act.

CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system that controls point source discharges from municipal, industrial, and other facilities if their discharges go directly to surface waters (except for dredge or fill material). In accordance with Section 402(p) of the CWA, the municipal NPDES Permit allows stormwater discharges, except under certain conditions, and requires controls to reduce pollutants in those discharges to the maximum extent practicable. Such controls include best management practices (BMPs), as well as system, design, and engineering methods. A municipal NPDES permit has been issued to the County and 84 incorporated cities.

Under the Regional Phase I MS4 NPDES Permit, permittees are required to implement a development planning program to address stormwater pollution. This program requires project applicants for development projects to implement a Low Impact Development (LID) Plan throughout the operational life of the project, as applicable. The purpose of the LID is to reduce the discharge of pollutants in stormwater by outlining BMPs, which must be incorporated into the design of new development and redevelopment. These treatment control BMPs must be sufficiently designed and constructed to treat or filter the greater of an 85th percentile rain event or first 0.75 inch of stormwater runoff from a storm event, as applicable.

The CWA authorizes the United States Environmental Protection Agency (EPA) and states to implement activities to regulate water quality. Under the CWA, the EPA has implemented many pollution control standards for industries, as well as water quality standards for contaminants in surface waters. The CWA makes it unlawful to discharge pollutants from a point source into navigable waters unless an NPDES permit is obtained, and regulates discharge of dredge or fill material to surface waters.

National Flood Insurance Act of 1968

Congress implemented the National Flood Insurance Act of 1968 to provide subsidized flood insurance coverage to communities in compliance with Federal Emergency Management Agency (FEMA) regulations, which limit development on recognized floodplains. The National Flood Insurance Act was amended by the Flood Disaster Protection Act of 1973 (42 United States Code [USC] 4001 et seq.). These acts are administered by FEMA, which delineates Special Flood Hazard Areas and risk premium flood zones applicable to individual communities. The Flood Insurance Rate Maps (FIRMs) issued by FEMA identify land areas that are subject to flooding, and flood hazard zones in the community. The design standard for flood protection covered by the FIRMS is established by FEMA, with the minimum level of flood protection for new development determined to be the 100-year floodplain, defined as an area that is predicted to have a 1 percent probability of flooding in any given year.

Antidegradation Policy of 1968

The Federal Antidegradation Policy is designed to protect and maintain existing water uses, water quality, and national water resources, and establishes tiers to guide degradation analysis of water bodies.

40 California Code of Regulations (CFR) 131.38 – California Toxics Rule

The California Toxics Rule establishes numeric criteria for priority toxic pollutants for inland surface waters, enclosed bays, and estuaries. These federally promulgated criteria create water quality standards for California waters, and satisfy CWA requirements to protect human health and the environment.

State

State of California Constitution, Article X, Section 2

Article X, Section 2 of the California Constitution prohibits the unreasonable use or waste of water, regulates the method of use and method of diversion of water, and requires all water users to conserve and reuse available water supplies to the maximum extent possible.

Porter-Cologne Water Quality Control Act of 1969

The Porter-Cologne Water Quality Control Act of 1969 (California Water Code Section 13000 et seq.) (the Porter-Cologne Act) is California's statutory authority for the protection of water quality and requires the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs) to adopt water quality standards, plans, and objectives in order to protect State waters. The Porter-Cologne Water Quality Control Act regulates groundwater, surface water, and discharges to land. Water quality standards for the proposed Project are contained in the Los Angeles Regional Water Quality Control Board *Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan).[1]

---

1 Los Angeles Regional Water Quality Control Board. 2014. *Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties.* September.

The Basin Plan outlines the regulatory process for the protection of the beneficial uses of regional waters, and sets numeric and narrative water quality criteria controlling the discharge of wastes to the State's waters and land within the region. The Basin Plan describes implementation plans and other control measures designed to ensure compliance with statewide plans and policies, and provides comprehensive water quality planning.

The Basin Plan lists the beneficial uses of groundwater in the Central Basin as municipal and domestic supply, industrial service supply, industrial process supply, and agricultural supply. The Basin Plan also contains water quality objectives, which are region-wide narrative and numeric objectives for surface waters and groundwater.

Sustainable Groundwater Management Act

In 2014, California enacted a three-bill legislative package collectively known as the Sustainable Groundwater Management Act (SGMA) to improve local and regional management of groundwater resources. The SGMA, composed of Assembly Bill 1739, Senate Bill 1168, and Senate Bill 1319, provides a framework for sustainable groundwater management, and requires government and water agencies in charge of groundwater basins designated as high or medium priority by the Department of Water Resources (DWR) California Statewide Groundwater Elevation Monitoring (CASGEM) program to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge.

Under the SGMA, all basins that are designated as medium or high priority in the DWR California Statewide Groundwater Elevation Monitoring program and are subject to critical overdraft conditions must be managed under a new Groundwater Sustainability Plan (GSP) by January 31, 2020.

The Central Basin is categorized as high priority. To comply with SGMA, local agencies may either form a groundwater sustainability agency (GSA) to prepare a Groundwater Sustainability Plan, or submit an "Alternative Analysis" in lieu of forming a GSA. The Water Replenishment District of Southern California (WRD), which manages the Central Basin, chose to submit an Alternative Analysis of basin conditions that demonstrates the Central Basin has operated within its sustainable yield over a period of at least 10 years, pursuant to the SGMA provision of the California Water Code Section 10733.6(b)(3). The WRD of Southern California prepared the Alternative Analysis with key stakeholders of the Central Basin, including Los Angeles Department of Water and Power (LADWP), DWR, LA County Department of Public Works, and others.

State of California Antidegradation Policy – State Water Resources Control Board Resolution 68-16

The State and federal antidegradation policies are similar and complimentary. The State Antidegradation Policy incorporates the Federal Antidegradation Policy "where applicable" in State Water Resources Control Board Resolution 68-19.

State Water Resources Control Board Resolution 68-16 (State Antidegradation Policy) protects surface and ground waters from degradation. It states that waters having quality that is better than that established in effective policies shall be maintained unless any change will be consistent with the maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial uses, and will not result in water quality less than that prescribed in the policies.

Statewide NPDES Construction General Permit and Waste Discharge Requirements for Stormwater Discharges Associated with Construction Activity

In California, the NPDES stormwater permitting program for compliance with Section 402(d) of the CWA is administered by the SWRCB on behalf of the EPA. Pursuant to Section 402 of the CWA and the Porter-Cologne Act, the SWRCB has issued a statewide NPDES Construction General Permit (CGP) for stormwater discharges associated with construction activities under Order No. 2009-0009-DWQ, which was adopted on September 2, 2009, and went into effect on July 1, 2010. The CGP was subsequently amended by Order No. 2010-0004-DWQ and Order No. 2012-0006-DWQ. The existing CGP expired on September 2, 2014, and is administratively extended until a new order is adopted and becomes effective, which is anticipated to occur by September 1, 2023.[2]

The CGP regulates stormwater discharges from construction sites that result in soil disturbance of 1 acre or more of total land area, and/or are smaller sites that are part of a larger plan of development. All stormwater discharges associated with construction activity where clearing, grading, and disturbances to soil such as stockpiling or excavation result in soil disturbance of 1 acre or more of total land area must be in compliance with the CGP. Construction activity that results in soil disturbances of less than 1 acre of total land area is subject to the CGP if there is potential for significant water quality impairment from the activity, as determined by the LARWQCB. Operators of construction sites subject to the CGP must develop an adequate Stormwater Pollution Prevention Plan (SWPPP) establishing BMPs; implement erosion, sediment, and pollution prevention control measures; submit a Notice of Intent (NOI) to the SWRCB; and apply for and obtain a permit for coverage under the CGP.

Statewide NPDES General Permit for Stormwater Discharges Associated with Industrial Activities

The SWRCB has issued a statewide NPDES Industrial General Permit (IGP) for stormwater discharges associated with industrial activities under Order No. 2014-0057-DWQ, which was adopted on April 1, 2014, and went into effect on July 1, 2015. The IGP was subsequently amended in 2015 and 2018.[3] The IGP regulates stormwater discharges from industrial activities discharging to waters of the United States. Operators of qualifying industrial sites subject to the IGP are required to prepare SWPPPs describing BMPs that will be employed to protect water quality.

The IGP provides regulatory coverage for all facilities with industrial activities described in IGP Attachment A. Attachment A includes “Transportation Facilities” with Standard Industrial Classifications 40XX through 45XX (except 4221-25) and 5171, with vehicle maintenance shops, equipment cleaning operations, or airport deicing operations (but only those portions of the facility involved in vehicle maintenance, such as vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication) or other operations identified under the IGP as associated with industrial activity.[4] Standard Industrial Classification 4119 Local Passenger Transportation, Not Elsewhere

---

2 State Water Resources Control Board. NPDES Construction Stormwater General Permit Reissuance. Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/general_permit_reissuance.html. Accessed: August 2022.

3 SWRCB. 2020. Industrial General Permit. Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/igp_20140057dwq.html. Accessed July 2022.

4 California Water Boards. Facilities Covered by National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activities (General Permit). Available at:

Classified lists Aerial Tramways, except amusement and scenic. Therefore, the proposed Project may require coverage under the IGP.

Phase I Municipal Separate Storm Sewer System (MS4) Permit

In 1990, the EPA promulgated regulations for permitting stormwater discharges from municipal MS4s serving a population of 100,000 or more people (Phase I MS4 Permits). In 2012, the Regional Board issued a revised NPDES Permit and Waste Discharge Requirements (WDRs; Order No. R4-2012-0175; NPDES Permit No. CAS004001) under the CWA and the Porter-Cologne Act for discharges of urban runoff in public storm drains in Los Angeles County. The Regional Board issued a revised permit in September 2021 (Order No. R4-2021-0105; NPDES Permit No. CAS004004, the MS4 Permit), and the permittees include the City of Los Angeles. The MS4 Permit regulates stormwater discharges from MS4s in the proposed Project area, and details specific requirements for new development and significant redevelopment projects, including selection, sizing, and design criteria for LID, treatment control, and hydromodification control BMPs.[5]

Portions of the proposed Project are in right-of-way (ROW) covered by the Caltrans and County of Los Angeles MS4 permits. Permit requirements would be applicable to the portions of the proposed Project within the permit boundaries (see IGP section above).

California Ocean Plan

Ocean standards protect the beneficial uses of California's marine waters through establishing water quality objectives and implementation provisions in statewide water quality control plans and polices. Ocean standards plans and policies include the SWRCB's Water Quality Control Plan for Ocean Waters of California (Ocean Plan). The Ocean Standards Unit is responsible for developing and updating the statewide plans and policies involving marine waters, as well as providing scientific support and inter-agency coordination regarding marine pollution and resource management. This plan is applicable, in its entirety, to point source discharges to the ocean. Nonpoint sources of waste discharges to the ocean are subject to Chapter I, Chapter II, and Chapter III of the plan. This plan is not applicable to discharges to enclosed bays and estuaries or inland waters, or the control of dredged material.[6]

Local

Municipal NPDES Permit

Los Angeles County receives coverage under the NPDES stormwater municipal permit, also known as the Regional Phase I MS4 Permit (NPDES permit No. CAS004001), issued in 2001.[7] The permit regulates municipal stormwater and urban runoff discharges in the covered jurisdictions during construction and post-construction. Under the Regional Phase I MS4 permit,

---

https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/industrial/2014indgenpermit/atta.pdf. Accessed May 2022.

5 Note also Caltrans' discharges consist of stormwater and non-stormwater discharges from State-owned ROWs California Water Boards. Storm Water Program – Caltrans Permits. Available at: https://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/caltrans_permits/. Accessed May 2022.

6 State Water Resources Control Board. Revised 2019. California Ocean Plan. Available at: https://www.waterboards.ca.gov/water_issues/programs/ocean/docs/oceanplan2019.pdf. Accessed August 2022.

7 California Water Boards. Los Angeles R4 Municipal Storm Water Permit. Available at: https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/los_angeles_ms4/index.html. Accessed May 2022.

the City of Los Angeles as a permittee is responsible for the management of storm drain systems in its jurisdiction. Permittees must comply with the applicable stormwater program requirements of 40 CFR 122.26(d)(2), and additional controls, where necessary, to reduce the discharges of pollutants in stormwater to the maximum extent practical. The proposed Project would need to comply with the applicable MS4 Permit requirements.

City of Los Angeles General Plan

The City of Los Angeles General Plan is a comprehensive policy document that informs future land use decisions by identifying land use categories and corresponding zones, and includes sections, known as "elements," for land use, air quality, conservation, health, safety, mobility, infrastructure systems, open space, public facilities and services, noise, and housing, as well as the Framework Element, which is considered the organizing Element that connects all the Elements of the General Plan.[8] Of these, the Conservation, Health and Wellness, Safety, and Framework Element are relevant to this document. The Conservation Element addresses the conservation, protection, development, utilization, and reclamation of natural resources. The Health and Wellness Element addresses water quality, and sets objectives to prioritize and safeguard health and the environment. The Safety Element addresses the issue of protection for people from unreasonable risks associated with natural disasters such as fires, earthquakes, and floods. The Framework Element presents a strategy for long-term growth, and provides population forecasts to guide the update of the community plan and Citywide elements. Additionally, Chapter 9 of the Framework Element includes goals, objective, and polices for infrastructure and public services, including stormwater infrastructure.

City of Los Angeles Municipal Code

The Los Angeles Municipal Code is a body of regulations developed for the preservation of the public peace, health, and safety. Per the Los Angeles Municipal Code, stormwater discharge is regulated under Chapter VI – Public Works and Property, Article 4.4 – Stormwater and Urban Runoff Pollution Control. Article 4.4, Section 64.70 et seq. provides for the control and regulation of discharges to the storm drain system and receiving waters, through a program of education and enforcement of specific and general requirements and prohibitions.

According to Article 4.4, discharge of non-stormwater is permissible only if the discharge is exempted or conditionally exempted by the Regional Phase I MS4 Permit, a special waiver or exemption is granted by the Regional Board, or authorized by an applicable NPDES permit. In addition, projects in the City are required to comply with the requirements of the CGP and the MS4 Permit, which include preparation of a SWPPP and implementation of construction and post-construction BMPs. Additionally, Article 4.4 establishes authority to inspect for compliance with the provisions of the article, and provides reporting requirements for accidental discharge to the storm drain system.

City of Los Angeles One Water LA 2040 Plan

The One Water LA 2040 Plan is a collaborative approach to develop an integrated framework for managing the City's water resources, watersheds, and water facilities in an environmentally, economically, and socially beneficial manner. The One Water LA 2040 Plan identifies projects,

---

8 City of Los Angeles Department of City Planning, General Plan Overview. Available at: https://planning.lacity.org/plans-policies/general-plan-overview. Accessed May 2022.

programs, and policies intended to yield sustainable, long-term water supplies for the City, and provide greater resiliency to drought conditions and climate change.

City of Los Angeles Stormwater LID Ordinance (Ordinance #181899 and Ordinance #183833)

The City of Los Angeles adopted the Stormwater LID Ordinance in November 2011 to ensure that development and redevelopment projects mitigate runoff in a manner that captures rainwater at its source, while using natural resources. The LID Ordinance amended Los Angeles Municipal Code Sections 64.70.01 and 64.72, and expanded on the existing Standard Urban Stormwater Mitigation Plan (SUSMP) requirements by incorporating LID practices and principles and expanding the applicable development categories. Depending on the scope and size of the project (and the impervious surfaces involved), all development and redevelopment projects that create, add, or replace impervious area must comply with the LID Ordinance. Projects subject to the LID Ordinance must prepare and submit an LID Plan.

The LID Ordinance was updated in September 2015 (Ordinance #183833) to amend the Los Angeles Municipal Code Section 64.70 et seq., expanding on the LID requirements and eliminating the requirement for a Standard Urban Stormwater Mitigation Plan.

LID stormwater management practices seek to mitigate the stormwater runoff and pollution impacts as close to their source as possible. LID practices involve a combination of site designs and BMPs that promote the use of natural drainage systems that favor infiltration, evapotranspiration, and stormwater re-use so that the proposed project would have features that mimic the site’s predevelopment drainage characteristics. These practices improve the removal of nutrients, bacteria, and metals from stormwater while reducing the volume and intensity of site runoff.

By promoting infiltration design features in a project, impervious surface area can be reduced that simultaneously minimizes off-site stormwater discharge. Where infiltration is infeasible, the use of bioretention, rain gardens, vegetated rooftops, and rain barrels that can store, evaporate, detain, and/or treat runoff are also useful.

City of Los Angeles Bureau of Sanitation LID Handbook

In line with the City’s LID Ordinance 183833, in 2016, the City’s Sanitation Bureau published the Planning and Land Development Handbook for Low Impact Development[9]. This LID Handbook was adopted by the City of Los Angeles, Board of Public Works on May 9, 2016, as authorized by Section 64.72 of the Los Angeles Municipal Code approved by Ordinance 183833. The LID Handbook serves to assist developers “in complying with the requirements of the Development Planning Program regulations of the City’s Stormwater Program.” The LID Handbook summarizes the City’s project review and permitting process, identifies stormwater mitigation measures (as required), and references source and treatment control BMP information. It provides guidance for individuals involved in new development and redevelopment projects. The target audience for this handbook includes developers, designers, contractors, homeowners, and City staffs that are engaged in plan-checking, permitting, and inspections related to land development activities. This handbook also contains the necessary forms and worksheets required to be completed by the developer for approval.

[9] City of Los Angeles Bureau of Sanitation. 2016. *Planning and Land Development Handbook for Low Impact Development (LID),* 5th edition.

LID Manual-identified performance measures and practices include:

(1) Lessen the water quality impacts of development by using smart growth practices such as compact development, directing development towards existing communities via infill or redevelopment, and safeguarding of environmentally sensitive areas.

(2) Minimize the adverse impacts from stormwater runoff on the biological integrity of Natural Drainage Systems and the beneficial uses of water bodies in accordance with requirements under the California Environmental Quality Act (CEQA; Cal. Pub. Resources Code § 21000 et seq.).

(3) Minimize the percentage of impervious surfaces on land developments by minimizing soil compaction during construction, designing projects to minimize the impervious area footprint, and employing LID design principles to mimic predevelopment hydrology through infiltration, evapotranspiration, and rainfall harvest and use.

(4) Maintain existing riparian buffers and enhance riparian buffers when possible.

(5) Minimize pollutant loadings from impervious surfaces such as roof tops, parking lots, and roadways through the use of properly designed, technically appropriate BMPs (including Source Control BMPs such as good housekeeping practices), LID Strategies, and Treatment Control BMPs.

(6) Properly select, design, and maintain LID and Hydromodification Control BMPs to address pollutants that are likely to be generated, reduce changes to pre-development hydrology, assure long-term function, and avoid the breeding of vectors.

(7) Prioritize the selection of BMPs to remove stormwater pollutants, reduce stormwater runoff volume, and beneficially use stormwater to support an integrated approach to protecting water quality and managing water resources in the following order of preference:

(a) On-site infiltration, bioretention, and/or rainfall harvest and use.

(b) On-site biofiltration, off-site groundwater replenishment, and/or off-site retrofit.

City of Los Angeles Water Quality Compliance Master Plan for Urban Runoff (WQCMPUR)

The City of Los Angeles completed and adopted the Water Quality Compliance Master Plan for Urban Runoff (WQCMPUR), a 20-year strategy for clean stormwater and urban runoff, in April 2009, as a strategy to comply with current and emerging water quality regulations. The WQCMPUR was developed to provide a water quality master plan with strategic directions for budgeting, planning, and funding to reduce pollution from urban runoff in the City. The WQCMPUR seeks a broad watershed-based perspective to improve water quality and bring the City into sustainable compliance with water quality regulations. Specifically, the WQCMPUR identifies the City's four watersheds; summarizes water quality conditions in the City's receiving waters, as well as known sources of pollutants; summarizes regulatory requirements for water quality; describes BMPs required by the City for stormwater quality management; and discusses related plans for water quality that are implemented in the Los Angeles region.

Los Angeles County Department of Public Works Hydrology Manual

Per the City's Special Order No. 007-1299, issued on December 3, 1999, the City has adopted the Los Angeles County Department of Public Works' Hydrology Manual as its basis of design for storm drainage facilities. The Los Angeles County Department of Public Works Hydrology Manual establishes the hydrologic design procedures and serves as a reference and training guide. The manual contains the information necessary to conduct a hydrologic study within the County. The manual compiles information from previous editions of the County of Los Angeles Hydrology Manual, the 2002 Hydrology Manual Addendum, and other reference materials, and the standards in the manual govern all hydrology calculations under Public Works' jurisdiction.[10]

City of Los Angeles Bureau of Engineering "B" Permit (LAMC 62.106.b)

A 'B' Permit is issued for extensive public works improvements, including the widening of streets and alleys, the changing of existing street grade, construction of bridges, retaining walls, and the installation of sewer, storm drains, street lighting, and traffic signals. Construction plans are usually required, which must be signed by a California licensed Civil and/or Electrical and/or Traffic Engineer.

'B' Permits have four phases: bond estimate, design, construction, and post-construction. The permit covers plan check engineering, installation of traffic control devices, inspection, testing during construction, and maintenance of street trees.

'B' Permits are most frequently issued for public works improvements adjacent to land being developed. In these instances, the extent and type of improvements depend on conditions imposed by the Council, City Engineer, Department of City Planning, or some other jurisdictional body in accordance with the Municipal Code, City Charter, State Law, or City Ordinance.

Specific Plan for the Management of Flood Hazards Ordinance No. 172801

Ordinance 172801 amends the Specific Plan for the Management of Flood Hazards, originally established by Ordinance No. 154, 405 and amended by Ordinance No. 163, 913. The Plan is intended to provide for the establishment, management, and regulatory control of flood hazards, and provides sections designed to deal with flood hazards in addition to Citywide policies and goals.

City of Los Angeles Bureau of Engineering 2020 Floodplain Management Plan

The 2020 Floodplain Management Plan (FMP) (October 2020) is an overall strategy of programs, projects, and measures aimed at reducing the adverse impacts of flood hazards on the community. The FMP identifies and addresses the impacts caused by flood hazards, and provides specific mitigation measures to help protect the properties and their occupants. The National Flood Insurance Program requires the City to update its FMP every 5 years.

3.10.2 Environmental Setting

This section provides a description of the existing hydrology, floodplains, and surface water and groundwater quality conditions in the Project study area, which includes the footprint of the proposed Project alignment and components, and the areas surrounding the Project alignment.

Climate and Precipitation

The climate in Los Angeles is Mediterranean, characterized by warm, dry summers and mild, wet winters. The average maximum temperature is 83.1 degrees Fahrenheit (°F) in August, with an

[10] Los Angeles County Department of Public Works. 2006. *Hydrology Manual*.

average minimum temperature of 48.3°F in January. The average precipitation in the Project study area is approximately an inch or less per month from April through October, and close to zero (less than 0.06 inch) monthly from June through August. The average monthly precipitation for the months of November through March is 1.25 inches, 2.41 inches, 3.20 inches, 3.38 inches, and 2.40 inches. In contrast to the mostly arid climate, the rainy season from November through March can result in high flows in rivers and channels and increased runoff. The area receives an average annual precipitation of approximately 14.77 inches.[11]

Surface Water

Watershed and Hydrological Characteristics

The Project study area is in the Los Angeles River watershed (Figure 3.10-1). The watershed covers approximately 824 square miles, the majority of which is in southern Los Angeles County, California. The watershed is drained by the Los Angeles River and its tributaries. The Los Angeles River flows approximately 51 miles from its headwaters in the upper San Fernando Valley to San Pedro Bay and the Pacific Ocean, draining the Santa Monica, Santa Susana, and San Gabriel Mountains.[12] Much of the natural hydrology of the watershed has been altered by construction of dams and flood control reservoirs, and channelization of rivers and streams.[13] Approximately 47.9 miles of the total length of the Los Angeles River is lined with concrete.[14]

The Project study area is in the Central Subbasin (Central Basin) of the Coastal Plain of Los Angeles River Basin.[15] According to the Basin Plan, the proposed Project is in an area where the beneficial uses of surface water have been designated as: municipal and domestic supply; industrial service supply; groundwater recharge; water contact recreation; noncontact water (recreation); warm freshwater habitat; wildlife habitat; and wetland habitat. Surface waters of the Los Angeles River watershed are divided into a hierarchical system of hydrologic units, areas, and subareas. Based on the Overlay #1 Exhibit in the Basin Plan Appendix 2, the proposed Project alignment is in the Los Angeles-San Gabriel Hydraulic Unit (405.00), in the Coastal Plain Hydraulic Area (405.10), and in the Central Hydraulic Subarea Split (405.15).[16]

---

11 Western Regional Climate Center. 2022. Los Angeles Downtown USC Campus, California (045115), Period of Record Monthly Climate Summary (7/1/1877 to 6/9/2016). Available at: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5115. Accessed May 2022.

12 Los Angeles County Department of Public Works (LACDPW). June 1996. Los Angeles River Master Plan. Available at: http://ladpw.org/wmd/watershed/LA/LARMP/. Accessed May 2022.

13 Los Angeles County Flood Control District. April 2015. *District Enhanced Watershed Management Programs Draft Environmental Impact Report.* Available at: https://dpw.lacounty.gov/LACFCD/ewmppeir/. Accessed May 2022.

14 Los Angeles Gateway Region Integrated Regional Water Management Joint Powers Authority. June 2013. *Gateway Integrated Regional Water Management Plan.* Available at: https://gatewaywater.org/download/irwmp_general_documents/gateway-irwm-plan/Gateway-IRWMP-Report-Final.pdf. Accessed May 2022.

15 California Department of Water Resources. 2004. *Bulletin 118. Coastal Plain of Los Angeles Groundwater Basin, Central Subbasin.* Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/4_011_04_CentralSubbasin.pdfhttps://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/4_011_04_CentralSubbasin.pdf. Accessed July 2022.

16 Los Angeles Regional Water Quality Control Board. September 2014. *Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties.* Available at: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.html. Accessed May 2022.

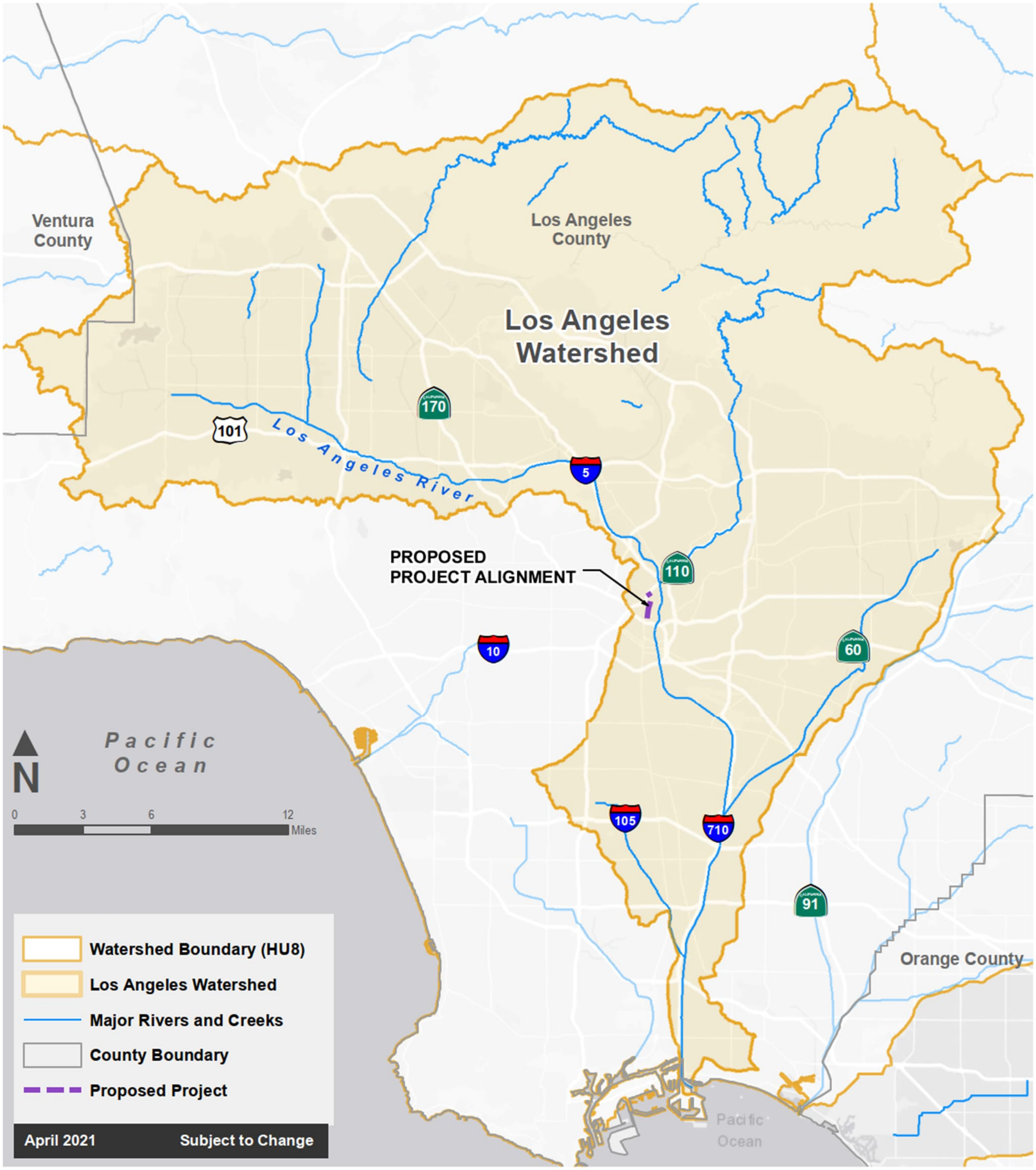


Figure 3.10-1: Los Angeles River Watershed Boundary

Surface water resources in the vicinity of the Project study area are composed of the Los Angeles River and local runoff, which discharges to the Los Angeles River. The Los Angeles River is east of the Project study area, and constitutes the primary drainage in the vicinity (Figure 3.10-2). The portion of the Los Angeles River near the proposed Project alignment is channelized and lined with concrete. The portion of the river that flows from Figueroa Street, City of Los Angeles to Carson Street, City of Long Beach is designated as Reach 2 in the Basin Plan.[17]

Drainage

Most of the land surfaces in the Project study area are developed and covered by impervious surfaces, except for existing public parks and landscaped areas along public ROWs and on private property, including private yards on residential properties near the proposed Project alignment. Elevation in the Project study area slopes gently from north to south, with ground surface elevations ranging from approximately 515 to 280 feet above mean sea level (msl).[18]

Runoff from the Project study area flows to storm drain inlets, including curbside catch basins and inlets along the streets, each of which ultimately discharge to Reach 2 of the Los Angeles River without treatment.[19] Storm drain inlets along the proposed Project alignment, which drain the Project study area, include those on North Alameda Street, North Broadway, and Bishops Road. Runoff from the southern portion of the Project study area between the Alameda Station and the area just southwest of the southernmost portion of the Los Angeles State Historic Park property is collected in storm drain inlets along Alameda Street, and drains into a 120-inch reinforced-concrete pipe in East Cesar E. Chavez Avenue, which ultimately discharges to the Los Angeles River. Runoff from the northern portion of the Project study area between the Los Angeles State Historic Park property and Dodger Stadium is collected in storm drain inlets along North Spring Street and neighboring roads, including Broadway and Bishops Road, and Academy Road and Stadium Way near Dodger Stadium, and drains into a 96-inch reinforced-concrete pipe that follows street alignments to Leroy Street before ultimately discharging to the Los Angeles River.[20] Drainage in the Project study area is managed by the City of Los Angeles, Metro, Southern California Regional Rail Authority, and Caltrans.

Flood Hazards and Flood Control

Floodplains are generally defined as the typically flat land adjacent to a river or stream that experiences periodic flooding. The 100-year floodplain is defined as an area that is predicted to have a 1 percent probability of flooding in any given year. FEMA administers the National Flood Insurance Program, which provides flood insurance for those properties within mapped 100-year floodplains.

[17] Ibid.

[18] LACDPW. Los Angeles County Topography Maps Web Viewer. Available at: https://pw.lacounty.gov/smpm/cetopo/. Accessed May 2022.

[19] Los Angeles Gateway Region. January 2015. *Los Angeles River Upper Reach 2 Watershed Management Area, Revised Watershed Management (WMP) Plan.* Available at: https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/los_angeles/upper_reach2/15-01-27LARUR2WMARevWMP.pdf. Accessed May 2022.

[20] LACDPW. Los Angeles County Storm Drain System. Available at: https://pw.lacounty.gov/fcd/stormdrain/disclaimer.cfm. Accessed May 2022.

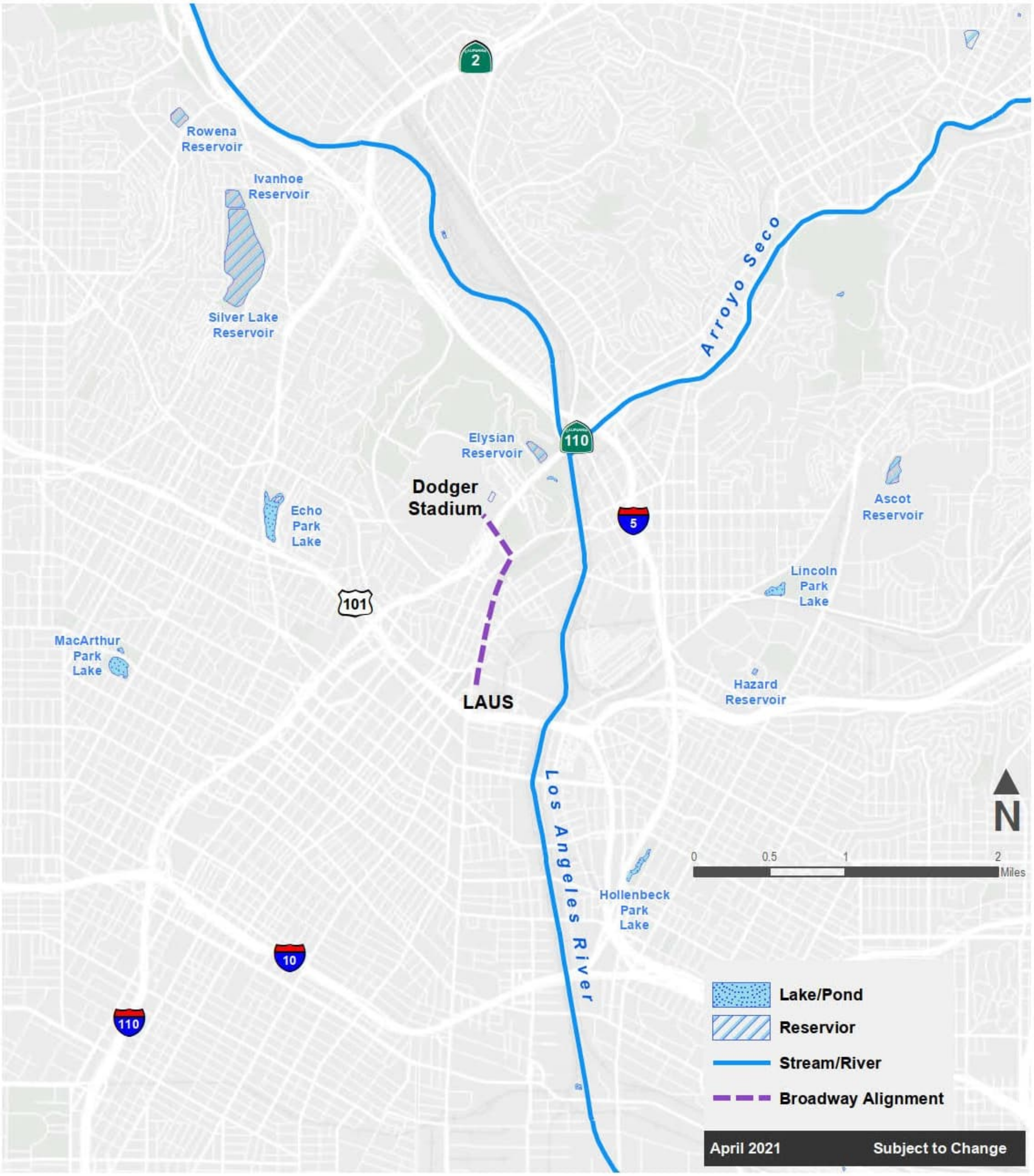


Figure 3.10-2: Surface Water Features in the Project study area

The FEMA flood maps for the Project study area include Panel 060137-1628F, effective September 26, 2008, and Panel 060137-1636G, revised December 21, 2018.[21] These panels show the 100-year flood inundation area is not mapped as extending west of the Los Angeles River Flood Control Channel; therefore, the Project study area is not included in the 100-year flood inundation area. The Project study area is in Zone X, defined as Areas of Minimal Flooding (Figure 3.10-3). In the Project study area, drainage and flood control structures and improvements are under the jurisdiction of the City of Los Angeles Bureau of Engineering, Southern California Regional Rail Authority, and Caltrans.

Dam Failure

The proposed Project alignment is depicted in the California Dam Breach and Inundation Maps as not being located within the footprint of a dam failure inundation zone (Figure 3.10-4).[22] The Elysian Dam is approximately 0.4 mile northeast of the proposed Project site (Figure 3.10-4). The Elysian Dam is owned by City of Los Angeles Water and Power. The inundation boundary runs south along the Los Angeles River and includes the area to the east of Dodger Stadium, portions of SR-110, N. Spring Street, and N. Broadway. The Devil's Gate Dam is over nine miles northeast of the proposed Project; if a breach were to occur, the waters would generally follow the Los Angeles River. Silver Lake Dam is approximately 2.5 miles northwest of the proposed Project. The proposed Project is not in the inundation zones for these dams. Dams in California are monitored by government agencies such as the US Army Corps of Engineers (USACE) and the State of California Division of Safety of Dams to protect against the threat of dam failure.

Seiches and Tsunamis

Seiches are seismically or wind-induced tidal phenomena that occur in enclosed bodies of water. Seismic seiches occur when seismic waves from an earthquake pass through the area. Wind-induced seiches are waves caused by strong winds and rapid changes in atmospheric pressure pushing water from one end to another in a body of water. When the wind stops, the water bounces back to the other side of the enclosed area and continues to oscillate back and forth.

The proposed Project alignment is situated inland at elevations ranging from approximately 515 to 280 feet above msl. The Project study area is in a seismically active area. There are two standing bodies of water within one mile of the proposed Project alignment. One is Solano Reservoir, approximately 0.10 mile northeast of the proposed Dodger Stadium Station. This body of water is at an elevation of approximately 600 feet, approximately 80 feet higher than the proposed Dodger Stadium Station, and is concrete-lined, and covered with an aluminum roof.[23] A wind-induced seiche on Solano Reservoir is unlikely because it is covered; however, a seismically induced seiche could be generated that could affect the proposed Dodger Stadium Station because Solano Reservoir is at a higher elevation than the proposed station.

---

21 Federal Emergency Management Agency (FEMA). Flood Insurance Rate Maps; 06037C1628F (effective September 2008) and 06037C1636G (effective December 2018). Available at: https://msc.fema.gov/portal/search. Accessed May 2022.

22 California Dam Breach and Inundation Maps, 2022. Available at: https://fmds.water.ca.gov/maps/damim/. Accessed May 2022.

23 University of California Libraries. 2022. Los Angeles Public Library. Department of Water and Power Photo Collection: Solano Reservoir. Available at: https://calisphere.org/item/3f413ecf3009034d6f503455292bc7de/. Accessed June 2022.

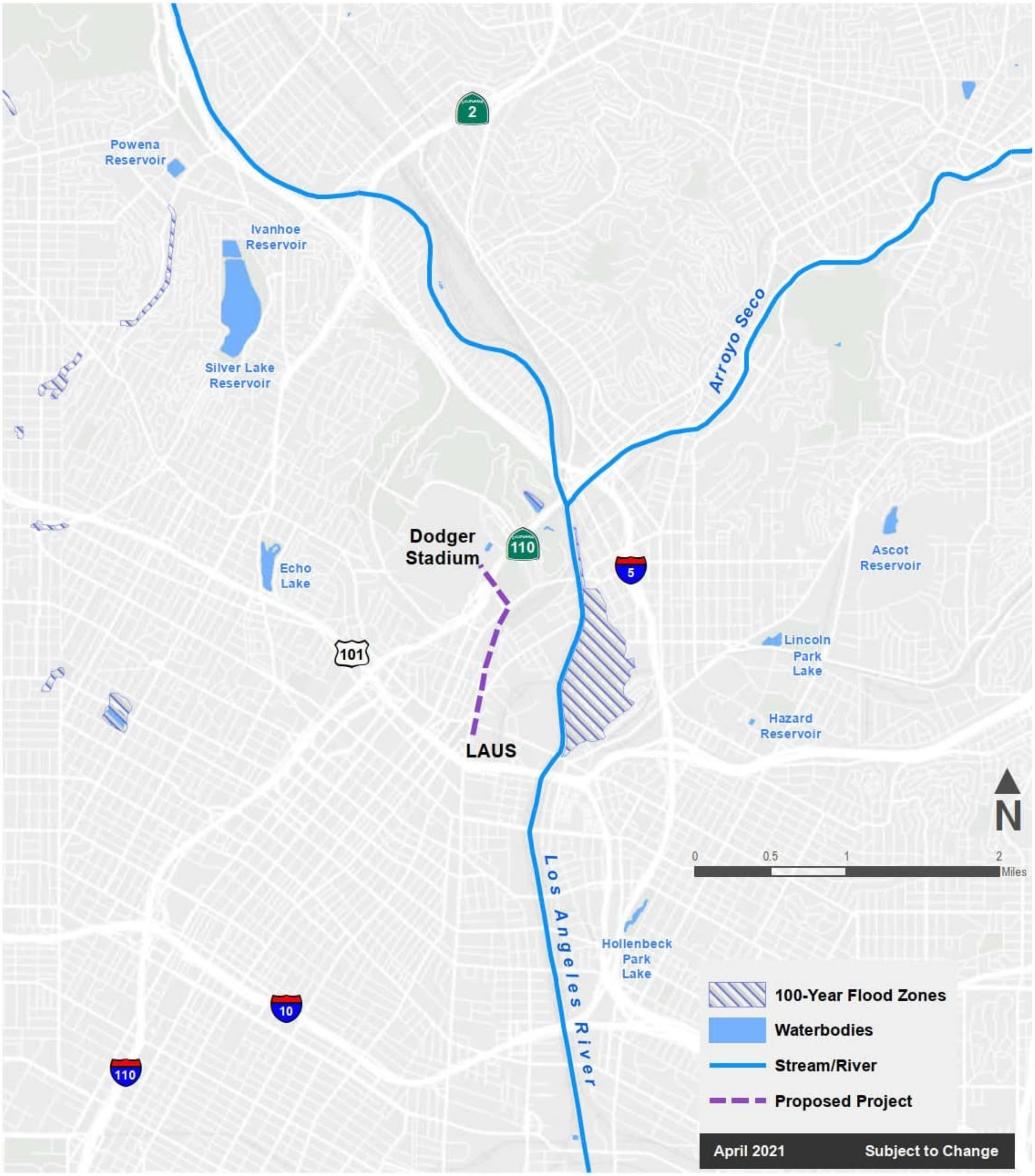


Figure 3.10-3: 100-Year Flood Zones in the Project study area

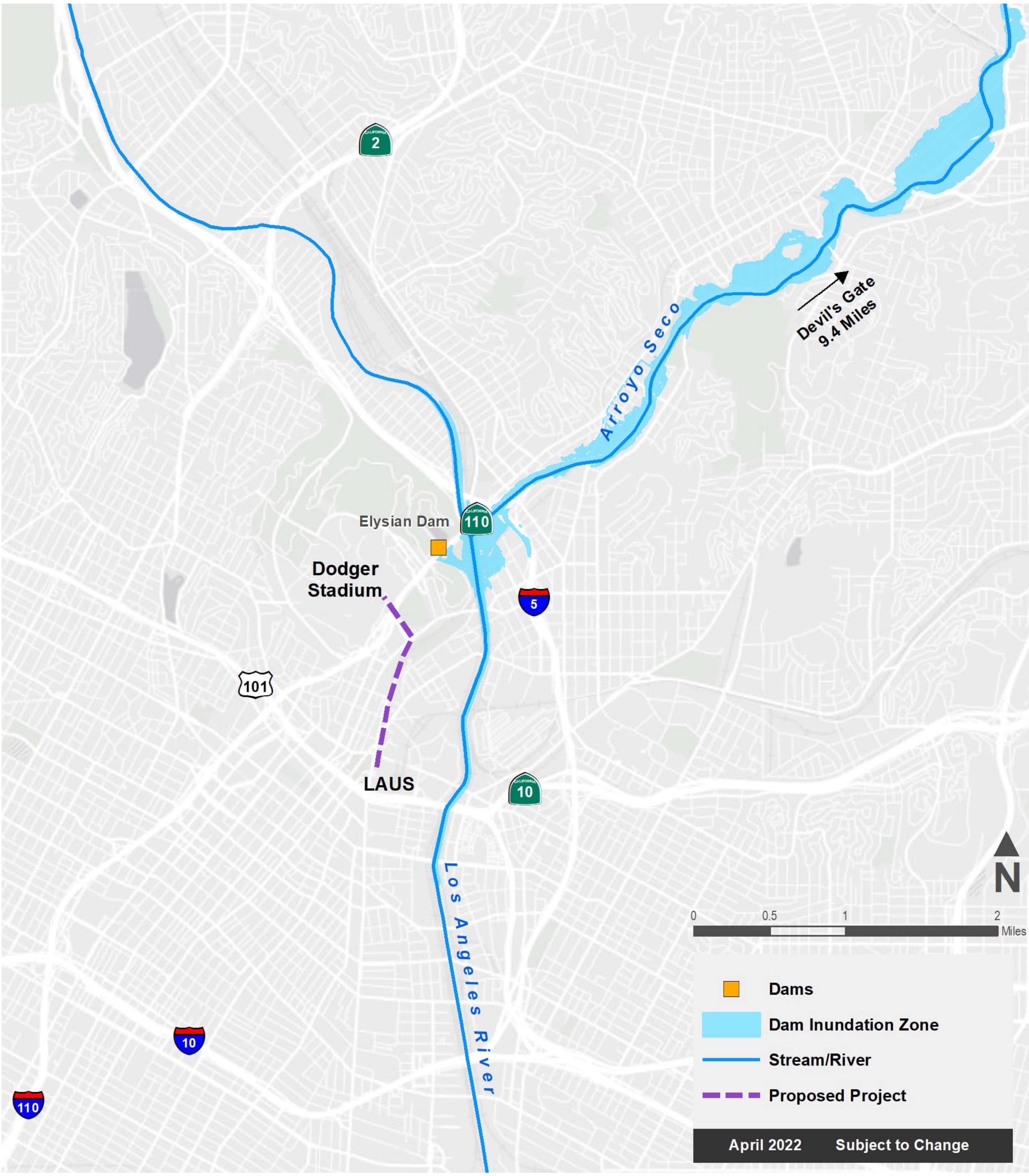


Figure 3.10-4: Dam Inundation Zones in the Project Study Area

The next closest body of water is the Elysian Reservoir, approximately 0.4 mile northeast of the proposed Dodger Stadium Station. The Elysian Reservoir is at an elevation of 460 feet, an elevation of approximately 60 feet lower than the proposed Dodger Stadium Station. A wind-induced seiche on the Elysian Reservoir is unlikely because it is covered. A seismically induced seiche would not affect the proposed Project because the reservoir is at a lower elevation and water generated from the seiche would not reach the proposed Project footprint.

Tsunamis are large ocean waves that are generated by major seismic events with the potential of causing flooding in low-lying coastal areas. The proposed Project alignment is approximately 14 miles northeast of the Pacific Ocean, and outside of the areas that would be potentially impacted by a tsunami.

Surface Water Quality

Surface water quality in the region is typically better in the upper reaches and headwaters of a watershed, and deteriorates as it receives urban runoff in the developed portions of the lower watershed prior to discharging to the Pacific Ocean.[24] Typical contaminants in urban runoff in the region include sediment, nutrients, bacteria, oil, metals, organic compounds, and trash.

Surface water quality in portions of the Los Angeles Watershed is impaired due to urban runoff from industrial, commercial, and residential land uses, and tertiary-treated effluent from several municipal wastewater treatment facilities.[25] The water quality of the Los Angeles River and its tributaries is impaired as a result of these activities, including Reach 2 of the Los Angeles River in the Project study area. The impaired waters designation indicates that these waters do not meet water quality standards, and that a total maximum daily load is needed to improve receiving water quality for the impaired parameters listed. Based on the 2022 303(d) list, and summarized in Table 3.10-1, the following parameters are listed as having approved total maximum daily loads in Reach 2 of the Los Angeles River: ammonia, copper, indicator bacteria (fecal), lead, nutrients (causing algae), oil, and trash.[26]

---

[24] Greater Los Angeles County Integrated Regional Water Management Region. 2014. The Greater Los Angeles County Integrated Regional Water Management Plan, 2013 Update. Available at: https://dpw.lacounty.gov/wmd/irwmp/FileList.aspx?path=docs\2014%20Public%20IRWMP%20Update, accessed May 2022.

[25] Los Angeles Gateway Region. January 2015. *Los Angeles River Upper Reach 2 Watershed Management Area, Revised Watershed Management (WMP) Plan.* Available at: https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/los_angeles/upper_reach2/15-01-27LARUR2WMARevWMP.pdf. Accessed May 2022.

[26] California Water Boards. 2022. Impaired Water Bodies. Available at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2022/rs2022_0006.pdf. Accessed May 2022.

Table 3.10-1: Source Pollutants of Los Angeles River Watershed – Reach 2

Reach 2 Impairment:	Ammonia	Copper	Indicator Bacteria (Fecal)	Lead	Nutrients (Causing Algae)	Oil	Trash
Pollutant Potential Sources:	Nonpoint Source Point Source	A Source Unknown	A Source Unknown	Nonpoint Source Point Source	Nonpoint Source Point Source	Natural Sources	Nonpoint Source Surface Runoff Urban Runoff/Storm Sewers
EPA TMDL Approved Date:	3/18/2004	12/22/2005	3/23/2012	12/22/2005	3/18/2004	None Cited	7/24/2008

Source: SWRCB. 2020. Category 5, 2020 California 303(d) List of Water Quality Limited Segments. Available at: https://www.waterboards.ca.gov/water_issues/programs/tmdl/2020_2022state_ir_reports_revised_final/apx-c-catreports/category5_report.shtml. Accessed August 2022.

Surface water beneficial uses for Reach 2 of the Los Angeles River, summarized in Table 3.10-2, include municipal and domestic supply, industrial service supply, groundwater recharge, recreation, and waters that support various habitats and ecosystems.

Table 3.10-2: Beneficial Uses of Los Angeles River Watershed – Reach 2

Reach 2 Segment	Municipal and Domestic Supply (MUN)	Industrial Service Supply (IND)	Groundwater Recharge (GWR)	Warm Freshwater Habitat (WARM)	Wildlife Habitat (WILD)
Carson Street to Rio Hondo Reach 1	Potential*	Potential	Existing	Existing	Potential
Rio Hondo Reach 1 to Figueroa Street	Potential*	Potential	Existing	Existing	Potential

*Asterisked MUN designations are designated under SB 88-63 and RB 89-03. Some designations may be considered for exemption at a later date

Source: SWRCB. 2020. Table 2-1: Beneficial Uses of Inland Surface Waters. Available at: https://www.waterboards.ca.gov/rwqcb4/water_issues/programs/basin_plan/2020/Chapter_2/Chapter_2_Table_2-1/Chapter_2_-_Table_2-1.pdf. Accessed August 2022.

Groundwater Resources

Groundwater Occurrence

The Project study area is in the South Coast Hydrologic Region, which covers approximately 11,100 square miles in Southern California and includes portions of Los Angeles County.[27] The South Coast Hydrologic Region is divided into alluvial groundwater basins, which are subdivided into subbasins. The Project study area is in the Central Basin (basin number 4-11.04) of the Coastal Plain of Los Angeles Groundwater Basin (basin number 4-11), in the South Coast Hydrologic Region.[28]

27 State of California Natural Resources Agency. April 2015. *California's Groundwater Update 2013.* Available at: https://cawaterlibrary.net/document/californias-groundwater-update-2013-south-coast-hydrologic-region/. Accessed May 2022.

28 Ibid.

The Coastal Plain of Los Angeles Groundwater Basin covers approximately 836 square miles, and comprises four groundwater subbasins. The Coastal Plain of Los Angeles Groundwater Basin is bounded on the north by the Hollywood Fault, the Santa Monica Mountains, and the Repetto, Merced, Puente, Elysian, and Chino Hills; on the east by the Santa Ana Mountains; on the south by the San Joaquin Hills and the Pacific Ocean; and on the west by the Pacific Ocean.

The Central Basin, which underlies the majority of the Project study area, occupies approximately 277 square miles in the southeastern portion of the Coastal Plain of Los Angeles Groundwater Basin (Figure 3.10-5).[29] The remaining portion of the proposed Project is underlain by less-permeable rocks of the Elysian Hills, and is not in a mapped groundwater basin. The Central Basin is bounded on the northeast and east by the Elysian, Repetto, Merced and Puente Hills; on the southeast by Coyote Creek, which forms a drainage divide between the Central Basin and the Orange County Groundwater Basin; on the southwest by the Newport-Inglewood fault system; and on the north by a surface divide known as the La Brea high.

Groundwater in the Central Basin generally occurs in Holocene and Pleistocene age unconsolidated and semi-consolidated sediments at relatively shallow depths, and enters the basin through surface flow through Whittier Narrows and subsurface flow from the San Gabriel Valley, as well as direct percolation of precipitation and stream flow from the Los Angeles and San Gabriel Rivers and their tributaries.[30] Percolation in developed areas is largely restricted due to paving. Additional recharge occurs through replenishment via imported and recycled water, under the authority of The Water Replenishment District of Southern California.[31]

The primary aquifers in the Central Basin are the Holocene age Gaspur aquifer, and the Pleistocene age Gardena, Gage, Silverado, Lynwood, and Sunnyside aquifers, which are primarily permeable sands and gravels separated by thick, semi-permeable to impermeable aquitards composed of sandy clay to clay. Vertical percolation into the deeper age aquifers from the surface is generally restricted by the presence of the Bellflower aquiclude, creating local semi-perched groundwater conditions.[32] The main sources of potable groundwater in the Central Basin are the deeper Pleistocene age aquifers.[33] The uppermost aquifer beneath the Project study area is the Gaspur aquifer, which consists of coarse sand and gravel and extends to a thickness of

---

29 California Department of Water Resources. 2004. *Bulletin 118, Coastal Plain of Los Angeles Groundwater Basin, Central Subbasin.* Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/4_011_04_CentralSubbasin.pdf. Accessed May 2022.

30 California Department of Water Resources. 1968. *Bulletin 104, Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County.* Available at: https://semspub.epa.gov/work/09/1144638.pdf. Accessed May 2022.

31 Water Replenishment District of Southern California. September 2016. *Groundwater Basins Master Plan.* Available at: https://www.wrd.org/sites/pr/files/GBMP_FinalReport_Text%20and%20Appendicies.pdf. Accessed May 2022.

32 California Department of Water Resources. 2004. *Bulletin 118, Coastal Plain of Los Angeles Groundwater Basin, Central Subbasin.* Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/4_011_04_CentralSubbasin.pdf. Accessed May 2022.

33 The Metropolitan Water District of Southern California. November 2016. *Potential Regional Recycled Water Program Feasibility Study.* Available at: https://www.ocwd.com/media/4888/wic05xcarson-rrwp-feasibility-main-report.pdf. Accessed May 2022.

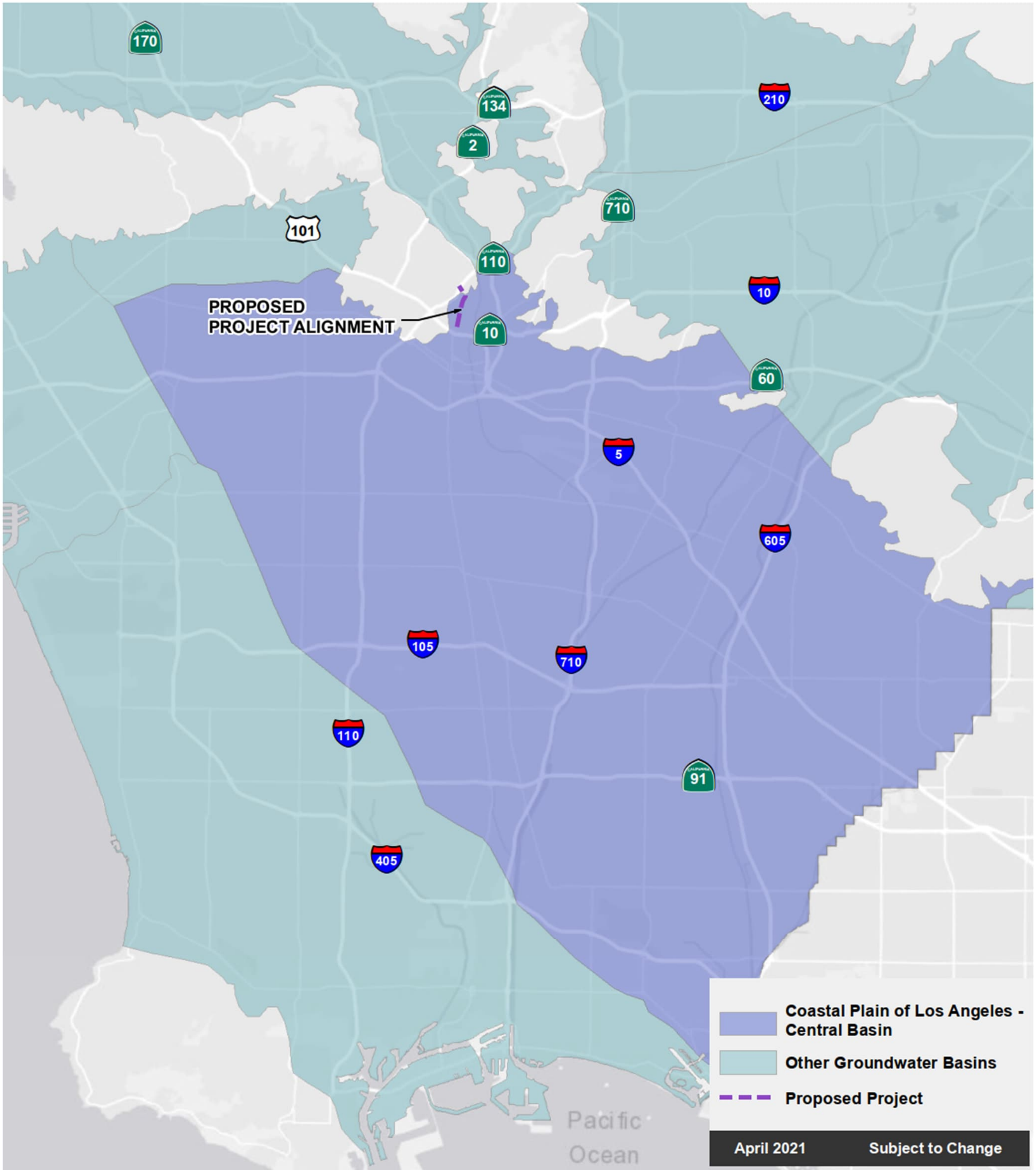


Figure 3.10-5: Groundwater Basin – Central Basin

approximately 120 feet.[34] Total storage capacity of the Central Basin is estimated at approximately 13.8 million acre-feet,[35] with approximately 330 thousand acre-feet available for storage.[36] Groundwater levels in the Project study area generally range from depths of approximately 20 to 60 feet below ground surface (bgs).[37, 38] Groundwater levels range from 20 to 25 feet bgs in the vicinity of LAUS, 25 feet bgs near the intersection of North Alameda Street and North Main Street, 27 to 35 feet bgs in the vicinity of the southern portion of the Los Angeles State Historic Park, more than 60 feet bgs in the vicinity of the intersection of North Broadway and Bishops Road, and estimated at 60 feet bgs below the proposed Dodger Stadium Station.[39]

Groundwater Quality

Regional groundwater basin water quality is poor in some areas due to natural conditions resulting in high total dissolved solids (TDS) levels, while in other areas groundwater quality has been degraded due to infiltration from commercial and industrial discharges, agricultural chemical application, and contaminants from urban runoff.[40] Deterioration of water quality in some areas has occurred due to inadequate storage, handling, and disposal of chemicals resulting in releases to groundwater. The groundwater in the portions of the Central Basin is known to contain elevated levels of TDS, volatile organic chemicals, perchlorate, nitrate, iron, manganese, and chromium.[41]

There are multiple records of sites in the Project study area at which commercial and industrial activities resulted in documented releases; these cases are generally overseen by the SWRCB, LARWQCB, and/or California Department of Toxic Substances Control (DTSC) cleanup programs.[42,43]

There are three properties in the proposed Project alignment identified with documented release cases (Figure 3.10-6), two of which are listed as having closed cases; the location of the Broadway Junction at 1201 North Broadway property is identified as a completed-closed leaking underground storage tank (LUST) case as of 2001,[44] and one of the proposed locations for

34 State of California Natural Resources Agency. April 2015. *California's Groundwater Update 2013.* Available at: https://cawaterlibrary.net/document/californias-groundwater-update-2013-south-coast-hydrologic-region/. Accessed May 2022.

35 California Department of Water Resources. 2004. *Bulletin 118, Coastal Plain of Los Angeles Groundwater Basin, Central Subbasin.* Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/4_011_04_CentralSubbasin.pdf. Accessed May 2022.

36 Water Replenishment District of Southern California. September 2016. *Groundwater Basins Master Plan.* Available at: https://www.wrd.org/sites/pr/files/GBMP_FinalReport_Text%20and%20Appendicies.pdf. Accessed May 2022.

37 LACDPW. 2022. Groundwater Wells Online Data. Available at: https://dpw.lacounty.gov/general/wells/. Accessed May 2022.

38 State Water Resources Control Board. 2022. GeoTracker. Available at: https://geotracker.waterboards.ca.gov/map/, accessed May 2022.

39 ENGEO Incorporated. September 2022. *Los Angeles Aerial Rapid Transit Project Geotechnical Document in Support of the Environmental Impact Report*.

40 Greater Los Angeles County Integrated Regional Water Management Region. 2014. The Greater Los Angeles County Integrated Regional Water Management Plan, 2013 Update. Available at: https://dpw.lacounty.gov/wmd/irwmp/FileList.aspx?path=docs\2014%20Public%20IRWMP%20Update, accessed May 2022.

41 Ibid.

42 State Water Resources Control Board. 2022. GeoTracker. Available at: https://geotracker.waterboards.ca.gov/map/, accessed May 2022.

43 California Department of Toxic Substances Control. 2022. EnviroStor. https://www.envirostor.dtsc.ca.gov/public/.

44 State Water Resource Control Board. 2020. GeoTracker®, Domenich Basso, Inc. (T0603790010). Available at: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0603790010. Accessed May 2022.

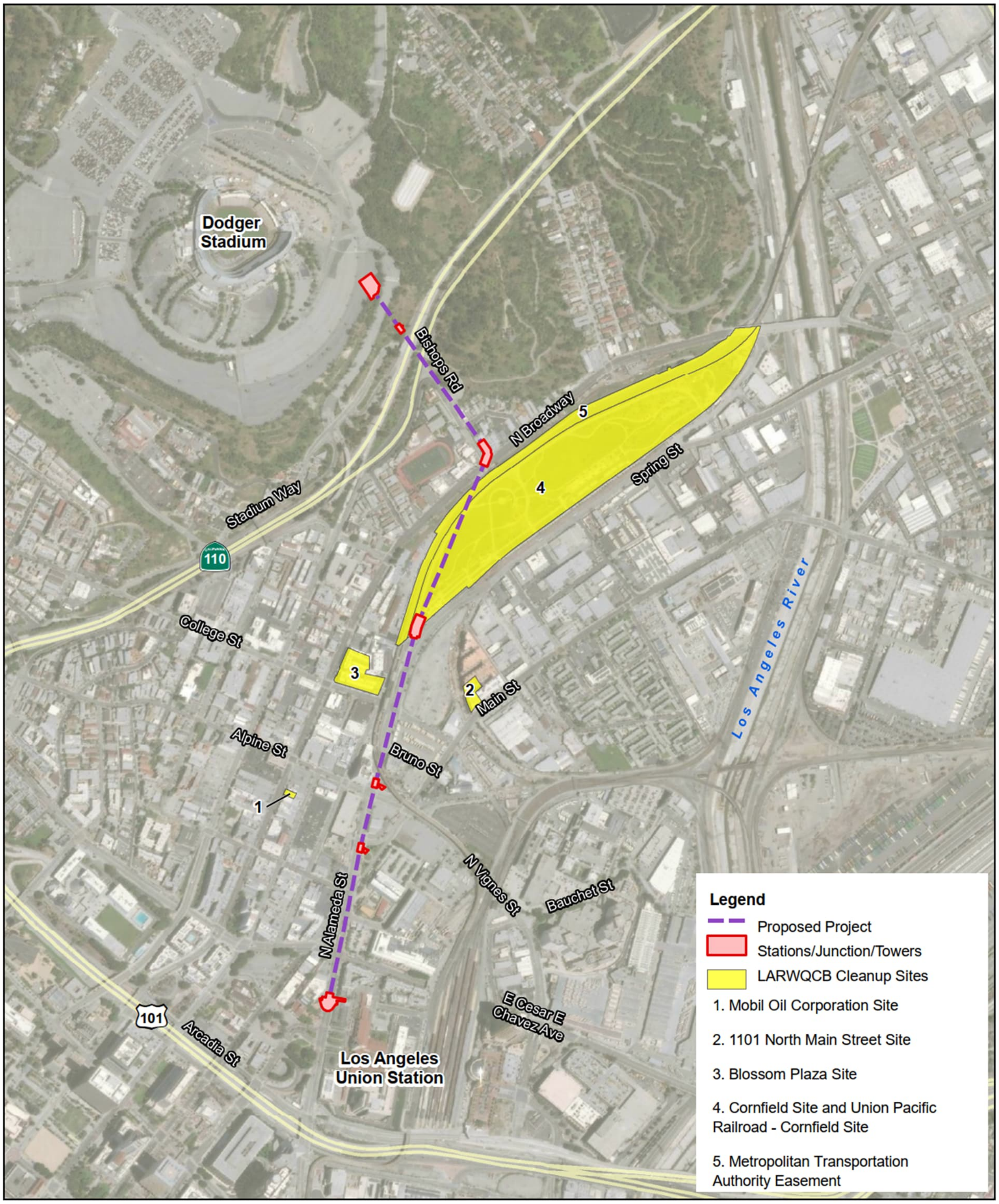


Figure 3.10-6: Cleanup Sites Near the Project Alignment

construction support space and vertical circulation elements for the Alameda Station at Los Angeles Union Station (800 North Alameda Street) is listed with a closed Cleanup Program Sites-Spills, Leaks, Investigations, and Cleanups (CPS-SLIC) case as of 1996.[45]

The other property in the proposed Project alignment is the Cornfield Yard Site and Union Pacific Railroad (UPRR) – Cornfield Yard Site at 1245 North Spring Street, which is the location of the Chinatown/State Park Station.[46,47] This 50-acre site is the former Southern Pacific Railroad (now UPRR) Company's Freight Yards, which included transfer station and storage yard activities, that has been converted to use for the Metro L Line (Gold) (10-acre easement), Los Angeles State Historic Park (32-acre portion), and a vacant area that is planned for residential development (8-acre portion along the 40-foot-high escarpment along North Broadway). Historic operations at the former railroad transfer station and storage yard resulted in impacts to soil and groundwater. Soil removal action has been completed in portions of the Los Angeles State Historic Park site, but additional removal action is required in the northeastern portion, outside of the proposed Project site. Annual groundwater monitoring has been ongoing at this site since 2001 at the request of the LARWQCB, and groundwater monitoring wells are located throughout the site. The 2021 "Annual Report" filed by Arcadis U.S., Inc. (Arcadis) on behalf of UPRR, reports depth to groundwater at the site ranged from 27.95 feet bgs to 60.07 feet bgs. The Annual Report stated that concentrations of fuel-related petroleum hydrocarbons and benzene toluene, ethylbenzene, and xylenes (BTEX) had generally decreased compared to the previous annual groundwater monitoring events; however, concentrations of benzene were detected in groundwater above the California maximum contaminant level (MCL) in 2021.[48] The construction and operation of the proposed Project's Chinatown/State Park Station would not interfere with existing groundwater monitoring wells, and the wells will remain accessible during and after construction activities.

There are 10 properties within approximately 500 feet of the proposed Project alignment that are identified with documented release cases on the online GeoTracker® database; of the 10 properties, nine are identified with closed case statuses. The one remaining open case within 500 feet of the proposed Project is at 1060 North Vignes Street, and it is listed as inactive as of March 7, 2022.[49] Based on information available on the online GeoTracker®, this site was recently referred to the LARWQCB by the LAFD, due to post-UST removal soil sample results exceeding LARWQCB and LAFD action levels, and historical groundwater data indicating that groundwater at the site had been impacted by total petroleum hydrocarbons.

Although the groundwater quality in the Project study area is not specifically known, due to the available information for the Project study area, it is anticipated that the area may contain elevated levels of constituents such as petroleum hydrocarbons and volatile organic compounds resulting

---

45 State Water Resource Control Board. 2022. GeoTracker®. Metro Rail Union Station (SLT43207205). Available at https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SLT43207205. Accessed May 2022.

46 State Water Resource Control Board. 2020. GeoTracker®, Union Pacific - Cornfield Yard (2047T1683). Available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL2047T1683, accessed May 2022.

47 California Department of Toxic Substances Control. 2022. EnviroStor, Cornfield Site (19400013). Available at: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19400013, accessed May 2022.

48 State Water Resources Control Board. 2022. GeoTracker, Union Pacific - Cornfield Yard (2047T1683), 2021 Annual Groundwater Monitoring Report. Available at: https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/2092456221/SL2047T1683.PDF. Accessed May 2022.

49 State Water Resources Control Board. 2022. GeoTracker®, Los Angeles County Department of Public Works (T10000018616). Available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000018616. Accessed May 2022.

from commercial and industrial discharges from surrounding uses, in addition to potentially elevated TDS and metals related to natural conditions.[50]

Adjudication Status

The Central Basin was adjudicated in 1965, and the judgement was subsequently amended in 1991. The judgement set out the annual pumping rights of each of the listed parties, and appointed the California DWR as Watermaster for the Central Basin.[51] The judgment was amended again in 2013, leading to the retirement of DWR as Watermaster, and creation of a new Watermaster composed of three bodies, including a Water Rights Panel, an Administrative Body, and a Storage Panel.[52]

3.10.3 Methodology

To establish baseline conditions, a search of publicly accessible databases and information from various sources and agencies was conducted. The data sources include but are not limited to the SWRCB, California DWR, State of California Natural Resources Agency, FEMA, Los Angeles RWQCB, Los Angeles County Department of Public Works, Los Angeles County Flood Control, City of Los Angeles Department of City Planning, LADWP, and Metropolitan Water District of Southern California.

To assess potential impacts, proposed Project activities have been divided into construction activities and operational activities. Preconstruction and post-construction drainage conditions in the Project study area were reviewed, and stormwater management BMPs were identified to avoid or minimize Project impacts on hydrology and water quality. Procedures and practices that would be applied to reduce potential for Project-related impacts on drainage systems and stormwater management were also considered as part of the evaluation.

Potential Project impacts were determined by evaluating the proposed Project changes to existing conditions with respect to the significance criteria presented below. The changes were then evaluated for significant impacts based on the State significance thresholds, if relevant, and taking into account required compliance with applicable regulations.

Thresholds of Significance

For purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;

50 Los Angeles Regional Water Quality Control Board. September 2014. *Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties.* Available at: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.html. Accessed May 2022.

51 US Department of the Interior Bureau of Reclamation. 2014. Los Angeles Basin Groundwater Adjudication Summary. Available at: https://www.usbr.gov/lc/socal/basinstudies/LA%20Adjudication%20Dec%202014.pdf. Accessed May 2022.

52 Central Basin Watermaster. Central Basin Watermaster Website. Available at: http://www.cbwatermaster.org/about.html. Accessed May 2022.

- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
- Result in substantial erosion or siltation on- or off-site;
- Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
- Create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
- Impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

3.10.4 Environmental Impacts

HWQ-1: *Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Construction Impacts

Less Than Significant Impact. Construction of the proposed Project components would include site preparation and installation of foundations and columns; erection of stations, towers, and the junction; replacement or restoration of paving, sidewalk, and landscaping; and cable and cabin installation.

Groundwater

Construction activities associated with foundations would involve general earthwork and concrete work to prepare the foundations, with excavations for foundations at depths ranging between seven feet and 42 feet, and piles to be installed between 55 feet and 125 feet below pile depth. Groundwater levels in the Project study area generally range from depths of approximately 20 to 60 feet bgs, with deeper groundwater depths occurring below the Dodger Stadium parking lot in the area of the proposed Dodger Stadium Station at approximately 60 feet bgs; therefore, the proposed Project may require the removal of nuisance water that seeps into boreholes during construction. Water removed from the boreholes would be containerized, and analyzed to determine the proper disposal method.

Groundwater levels range from 20 to 25 feet bgs in the vicinity of LAUS. The foundations for the Alameda Station would be at a depth of 10 feet. Based on these anticipated depths to groundwater, it is considered unlikely groundwater would be encountered during construction of the foundations; however, piles would be drilled to 125 feet below pile depth, and may require removal of nuisance water that seeps into boreholes during installation of the piles of this station.

Groundwater occurs at a depth of approximately 25 feet bgs near the intersection of North Alameda Street and North Main Street. The foundations for the Alameda Tower and the Alpine Tower would be at a depth of 10 feet. Based on these anticipated depths to groundwater, it is considered unlikely groundwater would be encountered during construction of the foundations; however, piles for the Alameda Tower and the Alpine Tower would be drilled to 120 feet below pile depth, and may require removal of nuisance water that seeps into boreholes during installation of the piles of these towers.

Groundwater levels range from 27 to 35 feet bgs in the vicinity of the southern portion of the Los Angeles State Historic Park. The foundations for the Chinatown/State Park Station would be located at a depth of 10 feet, with piles drilled to 80 feet below pile depth. Based on these anticipated depths to groundwater, it is considered unlikely groundwater would be encountered during construction of the foundations for the Chinatown/State Park Station. However, because the proposed piles at this station would be drilled to 80 feet below pile depth, removal of nuisance water that seeps into boreholes during construction may be required for the pile installations of the Chinatown/State Park Station.

Groundwater occurs at depths of more than 60 feet bgs in the vicinity of the intersection of North Broadway and Bishops Road. The foundations for the Broadway Junction would be at a depth of 7 feet. Based on these anticipated depths to groundwater, it is considered unlikely groundwater would be encountered during construction of the foundations for the Broadway Junction; however, piles would be drilled to 120 feet below pile depth, and may require removal of nuisance water that seeps into boreholes during installation of the piles of this junction.

Groundwater in the southeastern portion of the Dodger Stadium property occurs at approximately 60 feet bgs. The foundation for the Stadium Tower would be at a depth of 7 feet, with piles drilled to 120 feet below pile depth. The foundations for the Dodger Stadium Station would be at a depth of 42 feet, with piles drilled to 55 feet below pile depth. Based on these anticipated depths to groundwater, it is considered unlikely groundwater would be encountered during construction of the foundations for the Stadium Tower and Dodger Stadium Station. However, the proposed piles for the Stadium Tower would be drilled to 120 feet below pile depth. Additionally, although not anticipated, it is possible that groundwater may be encountered during installation of piles at the Dodger Stadium Station. Therefore, removal of nuisance water that seeps into boreholes during construction may be required for the pile installations of the Stadium Tower and the Dodger Stadium Station.

Based on groundwater depths, none of the proposed excavations for foundations are anticipated to encounter groundwater; however, removal of nuisance water that seeps into boreholes during construction may be required for the pile installations at each of the components. Groundwater may be encountered during installation of piles, and any nuisance water removed would need to be analyzed prior to disposal. Detections of total petroleum hydrocarbons and volatile organic compounds including BTEX are known to be present in groundwater at the Los Angeles State Historic Park property, which is directly beneath the proposed Project alignment.[53] Although the groundwater quality in the remainder of the Project study area is not specifically known, it may contain elevated levels of constituents such as petroleum hydrocarbons and solvents resulting from commercial and industrial discharges, in addition to potentially elevated TDS and metals related to natural conditions. Uncontrolled discharge of groundwater carrying these potential pollutants could result in degradation of groundwater and surface water if it is not properly

53 Arcadis. January 2009. Summary of Site Conditions and Request for Closure, Former Cornfield Yard, 1245 North Spring Street, Los Angeles, California, SLIC Site SL2047T1683. Available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL2047T1683. Accessed May 2022.

managed during construction activities. Nuisance seepage water removed from the boreholes would be containerized and analyzed consistent with existing applicable regulations to determine the proper disposal method. Additionally, as stated in Section 3.9, Hazards and Hazardous Materials, a Soil and Groundwater Management Plan would be prepared to specify methods for handling and disposal in the event contaminated groundwater is encountered during construction. Because Project construction would require grading and excavation activities, there is the potential that excavation in certain areas would encounter groundwater, and therefore, dewatering could be required. Dewatering operations are practices that discharge groundwater that must be removed from a work location into the storm drain system to proceed with construction. Discharges from dewatering operations can contain high levels of fine sediments, which if not properly treated, could lead to exceedance of the NPDES requirements. Therefore, if required, temporary pumps and filtration would be used. The temporary system would comply with all relevant NPDES requirements related to construction and discharges from dewatering operations. If dewatering is required, the treatment and disposal of the removed water would occur in accordance with the requirements of LARWQCB’s WDRs for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties.

Surface Water

Construction activities such as demolition of existing site structures and excavation for foundations would temporarily expose bare soil at each Project component, which would be at increased risk for erosion. Exposed or stockpiled soils would also be at increased risk for erosion. Sediments resulting from erosion might accumulate, blocking storm drain inlets and causing downstream sedimentation. Erosional sediments might be carried by stormwater runoff into storm drain inlets, which ultimately empty into the Los Angeles River.

In addition to sediments, trash, concrete waste, and petroleum products, including heavy equipment fuels, solvents, and lubricants, and landscape fertilizers and pesticides, could degrade water quality and contribute to water pollution. The use of construction equipment and other vehicles during Project construction could result in spills of oil, brake fluid, grease, antifreeze, or other vehicle-related fluids, which could contribute to water pollution. Improper handling, storage, or disposal of fuels and vehicle-related fluids or improper cleaning and maintenance of equipment could result in accidental spills and discharges, which could contribute to water pollution.

Uncontrolled erosion and discharge of sediments and other potential pollutants could result in adverse effects to water quality in the Los Angeles River, violating water quality standards and WDRs, if not appropriately managed.

As part of the proposed Project, the Sponsor would be required to comply with all applicable federal, State, regional, and local agency water quality protection laws and regulations, as well as commonly used industry standards. These would include: Clean Water Act of 1972 (including 1977 and 1987 Amendments); Antidegradation Policy of 1968; Porter-Cologne Water Quality Control Act of 1969; State of California Antidegradation Polices – State Water Resources Control Board Resolution 68-16; 3.2.540 CFR 131.38 – California Toxics Rule; NPDES General Construction Permit regulations; MS4 Permit regulations; Los Angeles Regional Water Quality Control Board Basin Plan; City of Los Angeles General Plan; the City of Los Angeles LID Ordinance; the City of Los Angeles Municipal Code; the City of Los Angeles Water Quality Compliance Master Plan; and all other applicable regulations for all construction activities. The existing Construction Stormwater General Permit expired on September 2, 2014, and is administratively extended until the effective date of a reissued permit; the proposed Project would comply with the CGP in effect at the time of construction. In accordance with the CGP, the proposed Project Sponsor would be required to prepare and submit a construction SWPPP to the SWRCB prior to—and adhered to during—construction. The construction SWPPP would identify the BMPs that would be in place prior to the start of construction activities and during construction. BMP categories would include erosion control, sediment control, tracking control, wind erosion, stormwater and non-stormwater management, and materials management. Although specific temporary construction-related BMPs would be selected at the time of the SWPPP preparation, potential BMPs would likely include fiber rolls, bonded-fiber matrix hydroseeding, soil furrowing, water bars, and check dams for erosion control, inlet protection (sand/gravel bags and geotextiles), silt fencing, sediment traps/basins for sediment controls, soil berming around disturbed areas, phasing of soil disturbance during the wet season (i.e., limiting widespread grading), and effective Rain Event Action Plans in accordance with CGP/SWPPP requirements.

With adherence to these laws, regulations, and permit requirements, impacts related to surface or groundwater quality during construction activities would be less than significant.

Operational Impacts

Less Than Significant Impact.

During operations, the proposed Project would not result in a significant increase in impervious surfaces because most of the land surfaces in the Project study area are developed, and covered by existing impervious surfaces (see Table 3.10-3 for existing and new impervious surface areas at each of the Project component sites). Components that would increase the existing impervious surface area include the Alameda Station, Alameda Tower, Chinatown/State Park Station, Stadium Tower, and Dodger Stadium Station. The actual footprint of the proposed Project at the ground level would be covered only by column footings and vertical circulation elements. However, to be conservative, the analysis includes aboveground elements of these components, including the station canopies and platforms, and tower cantilever structures, to calculate the total impervious area created by the Project components. The footprints of proposed Project components are nominal when compared to the area of the groundwater basin. Table 3.10-3 lists the estimated total impervious surface areas created, total footprint at ground level, existing impervious surface areas, and amount of new impervious surfaces added by Project component.

During operations, the cabins would travel on a continuous loop between the Alameda Station and the Dodger Stadium Station. The proposed Project would require routine maintenance that would be performed by the system operator. Oil and grease used during proposed Project operations and maintenance could contribute to water pollution if not properly stored or disposed. Maintenance activities associated with system operation, such as lubrication, would occur at each of the proposed Project component locations, while maintenance of the cabins would occur at the subterranean maintenance facility proposed at the Dodger Stadium Station. Uncontrolled discharge of runoff carrying these potential pollutants could result in adverse effects to water quality in the Los Angeles River, violating water quality standards and waste discharge requirements if not appropriately managed.

Table 3.10-3
Existing and New Impervious Surface Area

Component	Existing Impervious Surface Area at Component Site	Total Footprint of Project at Ground Level	Amount of New Impervious Surface Area Added by Project	Total Impervious Area Created by Component
Alameda Station	20,339 sf	1,980 sf	642 sf	20,981 sf
Alameda Tower	2,776 sf	900 sf	1,113 sf	3,889 sf
Alpine Tower	3,433 sf	1,030 sf	0 sf	3,433 sf
Chinatown/State Park Station	18,420 sf[c]	4,080 sf[b]	11,331 sf[d]	29,751 sf[a]
Broadway Junction	13,331 sf	1,460 sf	0 sf	13,331 sf
Stadium Tower	0 sf	870 sf	1,907 sf	1,907 sf
Dodger Stadium Station	62,956 sf	27,770 sf	12,868 sf	75,824 sf
Total	**121,255 sf**	**38,090 sf***	**27,861 sf**	**149,116 sf**

Note: sf = square feet

***** The total footprint of the Project component at ground level is provided for informational purposes only.

a. Including 5,840 sf of Park Amenities.
b. Including 1,508 sf of Park Amenities.
c. Including 4,357 sf of Park Amenities.
d. Including 1,483 sf of Park Amenities.

The proposed Project would be designed to incorporate several sustainability features, and would be in compliance with the LID Handbook. It would also comply with all applicable federal, State, regional, and local agency water quality protection laws and regulations, water quality control and/or sustainable groundwater management plans including the Basin Plan and City of Los Angeles General Plan, as well as commonly used industry standards. The proposed Project would comply with the City of Los Angeles Municipal Code and all other applicable regulations for all operational activities, including adherence to an approved LID Plan that would identify the BMPs for proposed Project operations.

The LID Plan would identify the BMPs for the proposed Project's post-construction design (i.e., operational characteristics to control/treat runoff). The proposed Project would incorporate BMPs to ensure the treatment of first flush or the equivalent of the greater between the 85th percentile storm and first 0.75-inch of rainfall for any storm event. Each drainage area on the Project site would include design elements that serve to capture and re-use stormwater in accordance with current LID requirements—thereby minimizing the potential for both on- and off-site erosion, siltation, and flooding while simultaneously providing irrigation supply and reducing potable water consumptive use. LID design features slow (detain or retain) stormwater that reduces the runoff volume discharged from the proposed Project, and decrease the peak runoff discharge velocity for design storms—also ultimately reducing the amount of stormwater runoff burden into the City's stormwater conveyance systems. As a result, less flow with fewer pollutants would be transported through the conveyance systems and ultimately into surface waters, including ancillary exfiltration to the groundwater table.

If the proposed Project requires IGP coverage[54], an IGP SWPPP would be prepared and submitted to the SWRCB prior to—and adhered to during—operations. IGP SWPPP BMPs could include, but not be limited to good housekeeping, prevention and maintenance activities, material handling and waste management, erosion and sediment controls, training, and recordkeeping. Other BMPs may also be employed, as appropriate.

With adherence to these existing laws and regulations, impacts related to surface or groundwater quality during operations would be less than significant.

HWQ-2: *Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

Construction Impacts

Less Than Significant Impact. Construction activities associated with foundations would include excavation and concrete work, and installation of drilled piles. As previously discussed, excavations for foundations would occur at depths ranging between seven feet and 42 feet, and piles to be installed at depths between 55 feet and 125 feet below pile depth. Groundwater levels in the Project study area generally range from depths of approximately 20 to 60 feet bgs, with deeper groundwater depths occurring below the Dodger Stadium parking lot in the area of the proposed Dodger Stadium Station at approximately 60 feet bgs; the proposed Project may require the removal of nuisance water that seeps into boreholes during construction. Nuisance water and seepage encountered during construction would be removed from the boreholes, containerized, and analyzed consistent with existing applicable regulations to determine the proper disposal method. Volumes generated would not be expected to be significant, and would be limited to the constructed phase only. No large volumes of groundwater would be extracted during construction that could decrease groundwater supplies. Additionally, refer to Section 3.9 (Hazards and Hazardous Materials) for further discussion should contaminated groundwater and/or soil be encountered. Therefore, construction activities are not anticipated to interfere substantially with groundwater recharge, groundwater resource supplies, or groundwater quality.

As part of the proposed Project, the Sponsor would be required to comply with all applicable federal, State, regional, and local agency water quality protection laws and regulations, as well as commonly used industry standards. These would include: State of California Constitution, Article X, Section 2; Porter-Cologne Water Quality Control Act of 1967; Sustainable Groundwater Management Act; Los Angeles Regional Water Quality Control Board Basin Plan; City of Los Angeles One Water LA 2020 Plan; and all other applicable regulations for all construction activities.

Due to the limited amount of nuisance seepage water anticipated to be encountered, and with adherence to existing regulations, potential impacts to groundwater supply and recharge during construction would be less than significant.

[54] The IGP, if applicable to ultimate project build-out, would apply to those portions of the proposed Project that are exposed to stormwater contact (i.e., outside and uncovered) that are defined as industrial activities, such as maintenance and equipment cleaning areas without treatment systems, mechanical repair areas, and storage of industrial materials.

Operational Impacts

No Impact. Operation of the proposed Project would not result in groundwater extraction or use of groundwater supply. During operation, the proposed Project would not result in a significant increase in impervious surfaces because most of the land surfaces in the Project study area are developed, and covered by existing impervious surfaces. As shown in Table 3.10-3, components that would result in an increase in the existing impervious surface area include the Alameda Station, Alameda Tower, Chinatown/State Park Station, Stadium Tower, and Dodger Stadium Station.

The total impervious area created by the Project components includes the station canopies and platforms and tower heads that would be above ground level. However, the actual footprint of the proposed Project at the ground level would be less than the total amount of impervious surface area created by the proposed Project components. The footprint of the proposed Project components is nominal when compared to the area of the groundwater basin.

As previously discussed, the proposed Project would be designed to incorporate several sustainability features (i.e., City of Los Angeles LID requirements), such as pervious pavement, landscaped stormwater conveyance, and other appropriate and applicable design features. These measures and practices would be incorporated at applicable component sites along the proposed Project alignment. Additionally, operation of the proposed Project would not involve the extraction of any groundwater. Therefore, operation of the proposed Project would not result in a decrease in groundwater supplies or interfere substantially with groundwater recharge to the extent that the Project may impede sustainable groundwater management of the basin. Depending on final design features, exfiltration from LID BMPs may improve groundwater recharge characteristics of the area. No impact would occur.

HWQ-3: *Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:*

- *(i) result in substantial erosion or siltation on- or off-site;*
- *(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;*
- *(iii) create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*
- *(iv) impede or redirect flood flows?*

Construction Impacts

Less Than Significant Impact. There are no natural water or drainage features that coincide with the proposed Project alignment. Current flow of stormwater runoff from the southern portion of the Project alignment between the Alameda Station and the area just southwest of the southernmost portion of the Los Angeles State Historic Park property is collected in storm drain inlets along Alameda Street, and drains into a 120-inch reinforced-concrete pipe in East Cesar E. Chavez Avenue, which ultimately discharges to the Los Angeles River. Runoff from the northern portion of the Project study area between the Los Angeles State Historic Park property and Dodger Stadium is collected in storm drain inlets along North Spring Street and neighboring roads, including Broadway and Bishops Road, and Academy Road and Stadium Way near Dodger Stadium, and drains into a 96-inch reinforced-concrete pipe that follows street alignments to Leroy Street before ultimately discharging to the Los Angeles River.

The majority of Alameda Station, the Alpine Tower, and Broadway Junction would be constructed on parcels that currently contain existing asphalt and concrete pavement on and/or adjacent to the road ROW, and surrounded by existing development and structures. Construction on these sites would expose soils in areas that are completely developed with impervious surfaces, which could increase the rate of runoff from these sites. Additionally, placement of construction equipment and materials may temporarily affect existing drainage patterns.

The Alameda Tower, Chinatown/State Park Station, and Dodger Stadium Station sites are developed with existing impervious surfaces and pervious groundcover. The Alameda Tower site and the Chinatown/State Park Station site include landscaped areas; and the Dodger Stadium Station would be partially constructed on an existing landscaped berm. The existing pervious surfaces could help reduce the rate of runoff from these sites; however, placement of construction equipment and materials may temporarily affect existing drainage patterns.

The Stadium Tower would be constructed on a site that currently consists of pervious surfaces. The existing pervious surfaces would help reduce the rate of runoff from these sites; however, placement of construction equipment and materials may temporarily affect existing drainage patterns.

Construction of the Project components would be conducted in several phases, including site preparation and installation of foundations and columns; erection of structural steel and gondola equipment; and construction of ancillary components, including replacement or restoration of paving, sidewalk, and landscaping. Following completion of the ancillary components, the gondola system, which consists of installation of cables and cabins, would be installed.

Construction activities such as demolition of existing site structures and excavation for foundations would temporarily expose bare soil, which would be at increased risk for erosion. Exposed or stockpiled soils would also be at increased risk for erosion. Sediments resulting from erosion might accumulate, blocking storm drain inlets and causing downstream sedimentation. Erosional sediments might be carried by stormwater runoff into storm drain inlets that ultimately empty into the Los Angeles River.

In addition to sediments, trash, concrete waste, and petroleum products, including heavy equipment fuels, solvents, and lubricants, could contribute to water pollution. The use of construction equipment and other vehicles during Project construction could result in spills of oil, brake fluid, grease, antifreeze, or other vehicle-related fluids, which could contribute to water pollution. Improper handling, storage, or disposal or fuels and vehicle-related fluids or improper cleaning and maintenance of equipment could result in accidental spills and discharges, which could contribute to water pollution.

Uncontrolled erosion and discharge of sediments and other potential pollutants could result in adverse effects to water quality in the Los Angeles River, violating water quality standards and waste discharge requirements and substantial erosion or siltation, if not appropriately managed.

As previously discussed, the proposed Project would be required to comply with all applicable federal, State, regional and local agency water quality protection laws and regulations, as well as commonly utilized industry standards. These would include: Clean Water Act of 1972 (Including 1977 and 1987 Amendments); Antidegradation Policy of 1968; Porter-Cologne Water Quality

Control Act of 1967; State of California Antidegradation Polices – State Water Resources Control Board Resolution 68-16; NPDES General Construction Permit regulations; Los Angeles Regional Water Quality Control Board Basin Plan; City of Los Angeles General Plan; the City of Los Angeles Municipal Code; the City of Los Angeles Water Quality Compliance Master Plan; and all other applicable regulations for all construction activities.

In accordance with the CGP, the proposed Project would be required to prepare and submit a construction SWPPP, which must be submitted to the SWRCB prior to and adhered to during construction. The construction SWPPP would identify the BMPs that would be in place prior to the start of construction activities and during construction. BMPs categories would include, but not be limited to, erosion control, sediment control, non-stormwater management, and materials management BMPs. Although specific temporary construction-related BMPs would be selected at the time of the SWPPP preparation, potential BMPs would likely include fiber rolls, bonded-fiber matrix hydroseeding, soil furrowing, water bars, and check dams for erosion control, inlet protection (sand/gravel bags and geotextiles), silt fencing, sediment traps/basins for sediment controls, soil berming around disturbed areas, phasing of soil disturbance during the wet season (i.e., limiting widespread grading), and effective Rain Event Action Plans, in accordance with CGP/SWPPP requirements.

With adherence to these laws and regulations, impacts during construction related to substantial erosion or siltation, substantial increase in the rate or amount of surface runoff, creation of runoff that would exceed drainage system capacity or provide additional sources of polluted runoff, and impeding or redirecting flood flows would be less than significant.

Operational Impacts

Less Than Significant Impact. Operation of the proposed Project would not result in a substantial increase in impervious surfaces because most of the land surfaces in the Project study area are developed, and covered by existing impervious surfaces, including the footprints of proposed Project components. As shown in Table 3.10-3, components that would increase the existing impervious surface area include the Alameda Station, Alameda Tower, Chinatown/State Park Station, Stadium Tower, and Dodger Stadium Station.

The proposed Project alignment and components would generally be in the public ROW and on impervious/paved surfaces, with the exception of the Stadium Tower and the Dodger Stadium Station, which would be constructed on an undeveloped hillside and at the Dodger Stadium parking lot, respectively. Additionally, each Project component would be on parcels containing some existing pervious surfaces, except for the Alpine Tower and the Broadway Junction. The total impervious area created by the Project components includes the station canopies and platforms and tower heads that would be above ground level. However, the actual footprint of the Project at the ground level would be less than the total amount of impervious surface area created by the Project components. The footprints of the Project components are nominal when compared to the area of the groundwater basin.

As described above, the proposed Project would be designed to incorporate several sustainability features and would be in compliance with the LID Handbook, as applicable. It would also comply with all applicable federal, State, regional, and local agency water quality protection laws and regulations, water quality control and/or sustainable groundwater management plans, including the Basin Plan, City of Los Angeles General Plan, the MS4 Permit, as well as commonly used industry standards. The proposed Project would comply with the City of Los Angeles Municipal Code and all other applicable regulations for all operational activities, including adherence to an approved LID Plan that would identify the BMPs for proposed Project operations.

The LID Plan would identify the BMPs for the proposed Project's post-construction design (i.e., operational characteristics to control/treat runoff). The proposed Project would incorporate BMPs to ensure the treatment of first flush or the equivalent of the greater between the 85th percentile storm and first 0.75 inch of rainfall for any storm event. Each drainage area on the Project site would include design elements that serve to capture and re-use stormwater in accordance with current LID requirements—thereby minimizing the potential for both on- and off-site erosion, siltation, and flooding, while simultaneously providing irrigation supply and reducing potable water consumptive use. LID design features slow (detain or retain) stormwater that reduces the runoff volume discharged from the proposed Project, and decrease the peak runoff discharge velocity for design storms—also ultimately reducing the amount of stormwater runoff burden into the City's stormwater conveyance systems. As a result, less flow with fewer pollutants would be transported through the conveyance systems, and ultimately into surface waters, including ancillary exfiltration to the groundwater table.

If the proposed Project requires IGP coverage[55], an IGP SWPPP would be prepared and submitted to the SWRCB prior to—and adhered to during—operations. IGP SWPPP BMPs could include, but not be limited to, good housekeeping, prevention and maintenance activities, material handling and waste management, erosion and sediment controls, training, and recordkeeping. Other BMPs (e.g., indoor/covered areas for gondola maintenance, approved flammable/hazmat storage lockers for lubricants and other industrial liquids, drip/spill protection in maintenance areas, and similar BMPs when conducting tower maintenance, dry clean-up practices, and dedicated enclosed areas for metal working, painting, and welding) may also be employed, as appropriate. Therefore, operation of the proposed Project would not result in substantial erosion or siltation; would not result in a substantial increase in stormwater runoff in comparison to the existing stormwater runoff; would not exceed the capacity of the existing stormwater drainage system; and would not impede or redirect flood flows. With adherence to existing laws and regulations, the impact resulting from operation of the proposed Project would be less than significant.

HWQ-4: ***Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?***

Construction and Operational Impacts

Less Than Significant Impact. The proposed Project would be constructed outside of the FEMA-designated 100-year floodplain, and would be located in an inland area that is not in close proximity to the ocean, so the risk of inundation by a tsunami is considered low. There are two standing bodies of water within one mile of the proposed Project alignment. The Solano Reservoir is approximately 0.10 mile northeast of the proposed Dodger Stadium Station. This body of water is at an elevation of approximately 600 feet, approximately 80 feet higher than Dodger Stadium Station, and is covered. Significant adverse impacts from wind-induced seiches at Solano Reservoir are not anticipated, because the reservoir has a permanent protective cover. The Los Angeles Department of Public Works is responsible for the flood protection of the public and environment surrounding Solano Reservoir, which would be expected to be integrated into the design of the reservoir's protective cover. Should potable water be inadvertently released from the reservoir during a seismic event due the reservoir's high elevation, spillage would be infiltrated and buffered by the dense vegetation surrounding the reservoir. Due to its flat position on a hilltop,

55 The IGP, if applicable to ultimate project build-out, would apply to those portions of the proposed Project that are exposed to stormwater contact (i.e., outside and uncovered) that are defined as industrial activities, such as maintenance and equipment cleaning areas without treatment systems, mechanical repair areas, and storage of industrial materials.

spillover would be expected to discharge from the facility from all sides, and not likely in a concentrated flow regime that would be expected to cause significant damage to the proposed Dodger Stadium Station. Therefore, given the Project's distance from the Solano Reservoir and the reservoir's protective cover, any oscillation and subsequent release of water in the reservoir as part of a seiche would not inundate the Project. Therefore, there would be no potential for risk of release of pollutants due to inundation by seiche.

The Elysian Reservoir is approximately 0.4 mile northeast of the proposed Dodger Stadium Station. The Elysian Reservoir is at an elevation of 460 feet, an elevation of approximately 60 feet lower than the proposed Dodger Stadium Station. This reservoir has a floating cover; therefore, a wind-induced seiche on the Elysian Reservoir is unlikely. A seismically induced seiche on the Elysian Reservoir would not affect the proposed Project because the reservoir is at a lower elevation, and water generated from the seiche would not reach the proposed Project footprint.

The proposed Project alignment is not depicted in the California Dam Breach and Inundation Maps as being in the footprint of a dam failure inundation zone (Figure 3.10-4). Dams in California are monitored by government agencies such as the USACE and the State of California Division of Safety of Dams to protect against the threat of dam failure.

Due to the regulatory monitoring of dams and typical flood control measures that are currently in place, the impact of inundation due to upstream dam failure is not considered a significant constraint to the proposed Project. Therefore, the impacts associated with risk of release of pollutants due to Project inundation by flood, tsunami, or seiche would be less than significant.

HWQ-5: ***Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?***

Construction Impacts

Less Than Significant Impact. The proposed Project alignment is near Reach 2 of the Los Angeles River as designated by the Basin Plan. Surface water beneficial uses for Reach 2 of the Los Angeles River include municipal and domestic supply, industrial service supply, groundwater recharge, recreation, and water that support various habitats and ecosystems. Groundwater beneficial uses for the Central Basin include water supply for municipal, domestic, industrial process, and agricultural uses.

Construction of the Project components would be conducted in several phases, including site preparation and installation of foundations and columns; erection of structural steel and gondola equipment; and construction of ancillary components, including replacement or restoration of paving, sidewalk, and landscaping. Following completion of the ancillary components, the gondola system, which consists of installation of cables and cabins, would be installed.

The majority of Alameda Station, as well as the Alpine Tower and the Broadway Junction, would be constructed on parcels that currently contain existing asphalt and concrete pavement on and/or adjacent to the road ROW, and surrounded by existing development and structures. The Alameda Tower, Chinatown/State Park Station, and Dodger Stadium Station sites are developed with existing impervious surfaces and pervious groundcover. The Stadium Tower would be constructed on a site that currently consists of pervious surfaces. The existing asphalt and concrete pavement on and adjacent to the Alameda Station, Alpine Tower, and Broadway Junction sites could increase the rate of runoff from these sites. Additionally, placement of temporary construction equipment and materials may affect existing drainage patterns in the short term.

Construction of the proposed Project has the potential to impact the water quality of the Los Angeles River if applicable and appropriate BMPs are not implemented. Construction activities such as demolition of existing site structures and excavation for foundations would temporarily expose bare soil, and temporarily increase erosion. Exposed or stockpiled soils would also be at increased risk for erosion. Sediment transport as a result of improper erosion controls could cause storm drain blockage, and possibly downstream sedimentation in the Los Angeles River.

In addition to sediments, trash, concrete waste, and petroleum products (e.g., heavy equipment fuels, solvents, and lubricants) could contribute to stormwater pollution. The use of construction equipment and other vehicles during Project construction could result in spills of oil, brake fluid, grease, antifreeze, or other vehicle-related fluids that could contribute to water quality impacts. Improper handling, storage, or disposal or fuels and vehicle-related fluids or improper cleaning and maintenance of equipment could result in accidental spills and discharges that could contribute to water pollution.

Uncontrolled erosion and discharge of sediment and other potential pollutants could result in adverse effects to water quality in the Los Angeles River, violating water quality standards, as defined in the Basin Plan, and waste discharge requirements, if not appropriately managed.

Nuisance groundwater may be encountered during installation of piles for each of the components, which may result in degradation of groundwater quality if not addressed properly. Additionally, potentially impacted groundwater may result in degradation of surface water if it is not properly managed during construction activities. Refer to Section 3.9 (Hazards and Hazardous Materials) for additional details should contaminated groundwater and/or soil be encountered. However, construction activities are not anticipated to interfere substantially with groundwater recharge, groundwater resource supplies, or groundwater quality.

As discussed previously, the proposed Project would be required to comply with all applicable federal, State, regional, and local agency water quality protection laws and regulations, water quality control, and/or sustainable groundwater management plans, including the Basin Plan and City of Los Angeles General Plan, as well as commonly used industry standards. The proposed Project would comply with NPDES General Construction Permit requirements, the MS4 Permit, the City of Los Angeles LID Ordinance, the City of Los Angeles Municipal Code, and all other applicable regulations for all construction activities. In accordance with CGP, the proposed Project will have a construction SWPPP, which must be submitted to the SWRCB prior to construction, and adhered to during construction. The construction SWPPP would identify the BMPs that would be in place prior to the start of construction activities and during construction. The BMP categories would include, but not be limited to, erosion control, sediment control, non-stormwater management, and materials management BMPs. Although specific temporary construction-related BMPs would be selected at the time of the SWPPP preparation, potential BMPs would likely include fiber rolls, bonded-fiber matrix hydroseeding, soil furrowing, water bars, and check dams for erosion control, inlet protection (sand/gravel bags and geotextiles) silt fencing, sediment traps/basins for sediment controls, soil berming around disturbed areas, phasing of soil disturbance during the wet season (i.e., limiting widespread grading), and effective Rain Event Action Plans in accordance with CGP/SWPPP requirements.

With adherence to these laws and regulations, impacts related to implementation of a water quality control plan or sustainable groundwater management plan during construction would be less than significant.

Operational Impacts

Less Than Significant Impact. During operation of the proposed Project, the cabins would travel on a continuous loop between the Alameda Station and the Dodger Stadium Station. The proposed Project would require routine maintenance that would be performed by the system operator. Oil and grease used during proposed Project operations and maintenance could contribute to water pollution. Uncontrolled discharge of runoff carrying these potential pollutants could result in adverse effects to water quality in the Los Angeles River, violating federal, State, and local water quality standards and waste discharge requirements, if not appropriately managed. As discussed above, the Sponsor would comply with all applicable federal, State, regional, and local agency water quality protection laws and regulations, water quality control and/or sustainable groundwater management plans, including the Basin Plan and City of Los Angeles General Plan, as well as commonly used industry standards.

Los Angeles City ordinances related to stormwater control and its LID requirements for sustainability contain compliance provisions for any BMPs that must address water infiltration, filtering, treatment, and peak-flow discharge. The City provides guidance to developers of newly developed projects for compliance with regulatory standards through the LID Handbook (City of LA 2016). The Project is also within the jurisdiction of the Water Quality Compliance Master Plan for Urban Runoff, which was developed by the City's Department of Public Works, and includes the description of BMPs required by the City for stormwater quality management.

The proposed Project would incorporate into its design an on-site drainage system that would meet regulatory requirements of the applicable plans for the protection of water resources.

As described above, the proposed Project would be designed to incorporate several sustainability features, and would be in compliance with the LID Handbook, as applicable. It would also comply with all applicable federal, State, regional, and local agency water quality protection laws and regulations, water quality control and/or sustainable groundwater management plans, including the Basin Plan and City of Los Angeles General Plan, the MS4 Permit, as well as commonly used industry standards. The proposed Project would comply with the City of Los Angeles Municipal Code and all other applicable regulations for all operational activities, including adherence to an approved LID Plan which would identify the BMPs for proposed Project operations.

The LID Plan would identify the BMPs for the proposed Project's post-construction design (i.e., operational characteristics to control/treat runoff). The proposed Project would incorporate BMPs to ensure the treatment of first flush or the equivalent of the greater between the 85th percentile storm and first 0.75 inch of rainfall for any storm event. Each drainage area on the Project site would include design elements that serve to capture and re-use stormwater in accordance with current LID requirements—thereby minimizing the potential for both on- and off-site erosion, siltation, and flooding while simultaneously providing irrigation supply and reducing potable water consumptive use. LID design features slow (detain or retain) stormwater that reduces the runoff volume discharged from the proposed Project and decreases the peak runoff discharge velocity for design storms—also ultimately reducing the amount of stormwater runoff burden into the City's stormwater conveyance systems. As a result, less flow with fewer pollutants would be transported through the conveyance systems and ultimately into surface waters, including ancillary exfiltration to the groundwater table.

If the proposed Project requires IGP coverage, an IGP SWPPP would be prepared and submitted to the SWRCB prior to operations, and adhered to during operations. IGP SWPPP BMPs could include, but would not be limited to indoor/covered areas for gondola maintenance, approved flammable/hazmat storage lockers for lubricants and other industrial liquids, drip/spill protection in maintenance areas, and similar BMPs when conducting tower maintenance, dry clean-up practices, and dedicated enclosed areas for metal working, painting, and welding.

With adherence to these laws and regulations, and groundwater management plans, impacts related to implementation of a water quality control plan or sustainable groundwater management plan during operations would be less than significant.

3.10.5 Mitigation Measures

With adherence to applicable federal, State, regional, and local laws and regulations, including compliance with applicable stormwater permits, wastewater permits, and other water quality regulations, construction and operation of the proposed Project would result in less than significant impacts to hydrology and water quality. No mitigation measures are required for the proposed Project.

3.10.6 Level of Significance after Mitigation

Impacts regarding existing drainage patterns, and the release of pollutants due to project inundation, were determined to be less than significant without mitigation. Impacts regarding water quality, groundwater recharge, and conflict with or obstructing a water quality control plan or sustainable groundwater management plan were determined to be less than significant without mitigation. The proposed Project would be required to comply with all applicable federal, State, regional, and local agency water quality protection laws and regulations, as well as commonly used industry standards, and no mitigation measures are required.

3.11 Land Use and Planning

This section describes the proposed Project's potential impacts to land use and consistency with relevant land use plans, policies, and regulations adopted for the purpose of avoiding environmental effects, and evaluates the potential of the proposed Project to physically divide an established community. In order to characterize the existing land use conditions in the vicinity of the proposed Project, a 0.25-mile buffer around the proposed Project alignment has been established as the Project Study Area.

3.11.1 Regulatory Setting

Development along the Project alignment is subject to the designations and regulations of several regional and local land use and zoning plans and policies. A portion of the Chinatown/State Park -Station would be constructed within the boundaries of the State-owned Los Angeles State Historic Park property. As such, the proposed Project would be subject to the development regulations of the Los Angeles State Historic Park General Plan and Los Angeles State Historic Park Interpretive Master Plan at the State level. At the regional level, the Project alignment is located within the planning area of the Southern California Association of Governments (SCAG), the region's federally-designated metropolitan planning organization and State-designated Regional Transportation Planning Agency. The Project alignment is also located within the City of Los Angeles. Therefore, at the local level, the parcels along the Project alignment are subject to the development regulations and policies set forth in the City of Los Angeles General Plan, and the City of Los Angeles Municipal Code, including the Zoning Code (LAMC).

State

California Green Building Standards Code

The California Green Building Standards Code (Part 11, Title 24 of the California Code of Regulations), or CALGreen, is California's green building code, the purpose of which is to improve public health, safety, and general welfare through the enhanced design and construction of buildings sing concepts which reduce negative impacts. CALGreen was adopted to address the five divisions of building construction, including planning and design, energy efficiency, water efficiency and conservation, materials conservation and resource efficiency, and environmental quality, and CALGreen applies to the planning, design, operation, construction, use, and occupancy of every newly-constructed building or structure on a statewide basis unless otherwise indicated.[1] The mandatory green building standards code was developed to meet the goals of Assembly Bill (AB) 32, to reduce greenhouse gases (GHG) to 1990 levels by 2020. These standards apply to "nonresidential structures that include new buildings or portions of new buildings, additions and alterations, and all occupancies where no other State agency has the authority to adopt green building standards applicable to those occupancies" and provide regulations for energy, water, material, and resource efficiency and conservation.

Classification of State Parks Historical Units

California Public Resources Code § 5019.59 provides authority to the California State Park and Recreation Commission to name historical units "appropriately and individually." Specifically, it states that "Historical units shall be named to perpetuate the primary historical theme of the

[1] California Department of Housing and Community Development. CALGreen. Available at https://www.hcd.ca.gov/calgreen. Accessed August 2022.

individual units." This code section further states that these non-marine areas are to be established primarily to preserve objects of historical, archaeological, and scientific interest, and archaeological sites and places commemorating important persons or historic events. The areas should be of sufficient size, where possible, to encompass a significant proportion of the landscape associated with the historical objects. The only facilities that may be provided are those required for the safety, comfort, and enjoyment of the visitors, such as access, parking, water, sanitation, interpretation, and picnicking.

Los Angeles State Historic Park General Plan and Interpretive Master Plan

The northern portion of the Chinatown/State Park Station would be constructed within the Los Angeles State Historic Park. Development within the park property is guided by the California Department of Parks and Recreation's Los Angeles State Historic Park General Plan and Los Angeles State Historic Park Interpretive Master Plan, described below. The Los Angeles State Historic Park is owned and managed by the California Department of Parks and Recreation, which is required to protect and improve the site to meet the needs of the statewide population, not just those residents who live nearby.

<u>Los Angeles State Historic Park General Plan</u>

The Los Angeles State Historic Park (LASHP) General Plan, adopted in June 2005, serves as a long-range management tool that provides guidelines for achieving the vision and purposes of the park. According to the LASHP General Plan, the purpose of the Park is "to provide the public with a place to learn and celebrate the ethnically diverse history and cultural heritage of Los Angeles." As articulated by the LASHP General Plan, the goals of the Park include (1) promoting a "touchstone" landscape for reflecting on Los Angeles' natural and cultural heritage; and (2) emphasizing the importance of the historic site to Los Angeles, California, and the world.

The General Plan states that the Park is identified and recorded as an archaeological site and is listed as a designated Historic-Cultural Monument by the City of Los Angeles. The General Plan acknowledges the Park has archaeological sensitivities and, as such, recommends continued study of existing and potential resources as well as the need to constantly update and expand the knowledge of historic activities at the Park. As for the cultural resources associated with the Park, the General Plan states that the Park should "[i]dentify, document, evaluate, and interpret cultural resources at the Park," and "[p]rotect, stabilize, and preserve significant cultural resources within the Park." Guideline 8 of the LASHP General Plan also establishes that protocols be put in place "for periodic assessments of known archaeological and historic resources. This regular inventory and monitoring should consist of updating recordation documentation, site condition assessments, and treatment recommendations." [2]

The intent of the goals and guidelines of the Los Angeles State Historic Park General Plan includes:

- Create the entire park as an interpretive entity for telling and celebrating the comprehensive "Story of Los Angeles".
- Develop the park as a unified organic whole that is composed of interwoven and mutually supportive areas providing a multi-faceted interpretive and recreational experience.

[2] *California Department of Parks and Recreation. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf, accessed April 2022.*

- Integrate the park elements with regional and surrounding community access, education, and planning networks.
- Provide a variety of open space areas (plaza, gathering areas, etc.) that can accommodate a diversity of informal recreational activities, from reflection and relaxation to active participation in individual and group activities for park visitors of all ages and abilities.
- Establish and steward a park that will be a gathering place where people from all social, economic, and cultural backgrounds can meet, interact, and engage in a "civic dialogue" that promotes a vibrant community spirit and where park visitors learn about and celebrate the entirety of Los Angeles' past, present, and future.
- Provide visitor use facilities that offer the opportunity for diverse visitor experiences, maximizing visitor and staff use while minimizing negative effects on viewsheds, cultural or natural resources, or other conflicts.[3]

The Los Angeles State Historic Park General Plan also encourages multi-modal transportation and pedestrian access to the park and emphasizes linkages to public transportation. The Los Angeles State Historic Park General Plan recognizes that linkages with existing and future transportation systems are key planning considerations to allow the park to connect to the regional L.A. River Greenway and the greater urban open space network within the City's historic center. The Los Angeles State Historic Park General Plan emphasizes the importance of partnering with Metro to provide these linkages, including a directive to coordinate with Metro to consider pedestrian bridge possibilities over the Metro L Line (Gold) right of way.

<u>Los Angeles State Historic Park Interpretive Master Plan</u>

The Los Angeles State Historic Park Interpretive Master Plan, completed in August 2006, incorporates the goals and guidelines provided in the Los Angeles State Historic Park General Plan. It provides a conceptual guide for development of interpretive programs and services for the park. Specific interpretive plans are provided with recommendations for interpretive facilities, structures, and sites, ensuring consistency with the vision for park as outlined in the Los Angeles State Historic Park General Plan.[4]

Regional

Southern California Association of Governments

SCAG is the federally designated metropolitan planning organization. The SCAG region encompasses six counties, including Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial. SCAG's mandated responsibilities include developing plans and policies with respect to the region's population growth, transportation programs, air quality, housing, land use, sustainability, and economic development.

---

[3] California State Department of Parks and Recreation, Los Angeles State Historic Park General Plan and Final Environmental Impact Report, June 2005.

[4] California State Department of Parks and Recreation, Los Angeles State Historic Park Interpretive Master Plan, August 23, 2006.

2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

The 2020-2045 RTP/SCS, also known as Connect SoCal, was adopted by the Regional Council on September 3, 2020.[5] Connect SoCal builds upon and expands the land use and transportation strategies from the previous RTP/SCS to increase mobility options and achieve a more sustainable growth pattern. The RTP/SCS serves as a long-range regional transportation planning tool through the year 2045. The core vision of the 2020-2045 RTP/SCS is to build upon and expand land use and transportation strategies to increase mobility options and achieve a more sustainable growth pattern.[6] The plan provides a vision for transportation throughout the region for the next 25 years. It considers the role of transportation in the broader context of economic, environmental, technology, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The goals of Connect SoCal fall into four core categories: economy, mobility, environment, and healthy/complete communities. The plan explicitly lays out goals related to housing, transportation technologies, equity, and resilience in order to adequately reflect the increasing importance of these topics in the region. These goals include the following:

1. Encourage regional economic prosperity and global competitiveness.
2. Improve mobility, accessibility, reliability, and travel safety for people and goods.
3. Enhance the preservation, security, and resilience of the regional transportation system.
4. Increase person and goods movement and travel choices within the transportation system.
5. Reduce greenhouse gas emissions and improve air quality.
6. Support healthy and equitable communities.
7. Adapt to changing climate and support an integrated regional development pattern and transportation network.
8. Leverage new transportation technologies and data-driven solutions that result in more efficient travel.
9. Encourage development of diverse housing types in areas that are supported by multiple transportation options.
10. Promote conservation of natural and agricultural lands and restoration of habitats.

Air Quality Management Plan

The Project is located in the South Coast Air Basin and is subject to the guidelines and regulations of the South Coast Air Quality Management District (SCAQMD). The SCAQMD, which was established in 1977 pursuant to the Lewis-Presley Air Quality Management Act, is principally responsible for protecting public health and welfare through the administration of federal and State

[5] Southern California Association of Governments, Connect SoCal website: https://scag.ca.gov/connect-socal, accessed May 2022.

[6] Southern California Association of Governments, 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, Adopted September 3, 2020, available at: https://scag.ca.gov/read-plan-adopted-final-plan, accessed May 2022.

air quality laws, regulations, and policies. Included in the SCAQMD's tasks are the monitoring of air pollution, the preparation of the Air Quality Management Plan (AQMP) for the South Coast Air Basin, and the promulgation of rules and regulations. The AQMP includes strategies and tactics to be used to attain the national ambient air quality standards and California Ambient Air Quality Standards standards in the South Coast Air Basin, whereas the rules and regulations include procedures and requirements to control the emission of pollutants and to prevent adverse impacts. The AQMP presents strategies for achieving the air quality planning goals set forth in the Federal and California Clean Air Acts (CCAA), including a comprehensive list of pollution control measures aimed at reducing emissions.[7] Additional discussion of the AQMP, and Project consistency with the AQMP, is addressed in Section 3.3, Air Quality, of this Draft EIR.

Local

City of Los Angeles General Plan

California law requires that every city and county prepare and adopt a long-range comprehensive General Plan to guide future development and to identify the community's environmental, social, and economic goals. As stated in Section 65302 of the California Government Code, "The general plan shall consist of a statement of development policies and shall include a diagram or diagrams and text setting forth objectives, principles, standards, and plan proposals."

The *City of Los Angeles General Plan*, adopted in December 1996 and re-adopted in August 2001, addresses community development goals and policies relative to the distribution of land use, both public and private. The City of Los Angeles General Plan is a dynamic document consisting of an organizing Framework Element and eleven elements, which include ten citywide elements (Air Quality; Conservation; Health; Safety; Mobility; Infrastructure Systems; Open Space; Public Facilities and Services; Noise; and Housing) and the Land Use Element, which comprises community plans for each of the City's 35 Community Plan Areas. The Project's consistency with plans, programs, and policies is analyzed in other sections of the Draft EIR, and the following elements are not further discussed in this Land Use Section: Air Quality (Section 3.3), Transportation (Section 3.17), Open Space (Section 3.16), Public Facilities & Services (Section 3.15), Noise (Section 3.13), and Housing (Section 3.14).

Framework Element

The Framework Element is a strategy for long-term growth to guide the update of community plans and citywide elements.[8] It defines citywide policies including: Land Use, Housing, Urban Form and Neighborhood Design, Open Space and Conservation, Economic Development, Transportation, and Infrastructure and Public Services. Specifically, the Urban Form and Neighborhood Design, Open Space and Conservation, and Transportation chapters are relevant to the Project. The Urban Form and Neighborhood Design chapter defines "urban form" as the "structural elements that define the City physically, such as transportation corridors, open space, public facilities, activity centers and focal elements." The Open Space and Conservation chapter focuses on "the conservation of significant resources, provision of outdoor recreational opportunities, minimization of public risks from environmental hazards, and use of open space to enhance community and neighborhood character." The primary goals of the Transportation chapter include providing adequate accessibility to commerce, to work opportunities, and to

---

7 South Coast Air Quality Management District (SCAQMD), Final 2016 Air Quality Management Plan (AQMP), March 2017.

8 City of Los Angeles Department of City Planning. 2001. General Plan. Framework Element. Available at: https://planning.lacity.org/plans-policies/framework-element, accessed May 2022.

essential services, and to maintain acceptable levels of mobility to all those who live, work, travel, or move goods in Los Angeles" through a comprehensive program of physical infrastructure improvements, traffic systems management techniques, and behavioral changes that reduce vehicle trips.

Land Use Element

The Land Use Element is comprised of the 35 Community Plans, which establish neighborhood-specific goals and implementation strategies to achieve the broad objectives laid out in the City of Los Angeles General Plan. Each Community Plan consists of a policy document and a land use map. The policy document lays out the community's goals, policies, and programs, while the land use map identifies where certain uses (such as residential, commercial, and industrial) are permitted. A discussion of each Community Plan Area that the Project components and alignment are located in follows the description of the City of Los Angeles General Plan land use designations surrounding the Project components and Project alignment.

<u>City of Los Angeles General Plan Land Use Designations</u>[9]

Alameda Station: Alameda Station and the suspended above-grade cables from the station to Alameda Tower would be located primarily within and above the public right-of-way (ROW), which does not have a land use designation under the City of Los Angeles General Plan, along Alameda Street. The station's vertical circulation elements on the west would be located on land designated as public ROW adjacent to land designated as Public Facilities, and vertical circulation elements on the east would be located on land designated as Regional Center Commercial under the General Plan. The parcels adjacent to the alignment on the west are designated as Public Facilities and Regional Center Commercial, and on the east are designated as Regional Center Commercial under the City of Los Angeles General Plan.

Alameda Tower and Alpine Tower: Alameda Tower would be located on Alameda Triangle, a portion of City ROW which does not have a land use designation under the City of Los Angeles General Plan. Alpine Tower would be located on a parcel designated as Regional Center Commercial under the City of Los Angeles General Plan. The above-grade cables and cabins between Alameda Tower and Alpine Tower, and from Alpine Tower to Chinatown/State Park Station, would primarily be located above the public ROW. Parcels to the west of this portion of the Project alignment, adjacent to the west side of Alameda Street, primarily have a City of Los Angeles General Plan land use designation of Regional Center Commercial with one parcel designated as Light Manufacturing. Parcels to the east of this portion of the Project alignment, adjacent to the east side of Alameda Street, have a City of Los Angeles General Plan land use designation of Regional Center Commercial. Aerial easements may be required for certain properties on the east side of Alameda Street along the proposed Project between the Alameda Tower and Alpine Tower (including low- to mid-rise commercial buildings and City-owned parcels), as well as the parcel north of the Alpine Tower, designated as Regional Center Commercial (containing a two-story building).

Chinatown/State Park Station: The southern portion of the Chinatown/State Park Station would be located within the public ROW, which does not have a land use designation under the City of Los Angeles General Plan. The northern portion of Chinatown/State Park Station site is located within the boundaries of the Los Angeles State Historic Park property, which is designated as Open Space, but as it is State property, it is not subject to the land use regulations under the City

9 ZIMAS, search engine available at: http://zimas.lacity.org/, accessed May 2022.

of Los Angeles General Plan. The suspended above-grade cables and cabins between Chinatown/State Park Station to Broadway Junction, would be located above and adjacent to Open Space and Light Manufacturing under the City of Los Angeles General Plan land use designations. In addition, an aerial easement for the portion of the proposed Project alignment passing above the currently undeveloped parcels within the City that are designated as Light Manufacturing would be required.

Broadway Junction: Broadway Junction would be constructed on parcels designated as Regional Center Commercial and Medium Residential. The parcels adjacent to the southwest of the Project alignment, including the suspended above-grade cables and cabins, from Broadway Junction, northwest to Stadium Tower, have City of Los Angeles General Plan land use designations of Medium Residential and Public Facilities. The parcels adjacent to the northeast of this segment of the Project alignment are designated as Regional Center Commercial, Medium Residential, and Public Facilities. An aerial easement may be required for the portion of the proposed Project alignment passing above two parcels (containing a single-family residential building and a multifamily residential building) along Savoy Street designated as Medium Residential under the City of Los Angeles General Plan.

Stadium Tower: Stadium Tower would be located on land designated as Open Space under the City of Los Angeles General Plan and is surrounded on the southwest, west, north, and northeast with parcels also designated as Open Space. The parcels to the southeast are designated as Public Facilities under the City of Los Angeles General Plan. The suspended above-grade cables and cabins between Stadium Tower and Dodger Stadium Station would be located above and adjacent to land designated as Open Space.

Dodger Stadium Station: Dodger Stadium Station would be located on land designated as Open Space. The area surrounding the station is also designated as Open Space.

The Project alignment is located within the boundaries of the Central City Community Plan Area, Central City North Community Plan Area, and the Silver Lake-Echo Park-Elysian Valley Community Plan Area. The Community Plan Area boundaries and existing City of Los Angeles General Plan Land Use Designations within the Project Study Area are shown in Figure 3.11-1.

<u>Central City Community Plan</u>

The portion of the Alameda Station located over the west side of Alameda Street and the suspended above-grade cables and cabins from Alameda Station north to Cesar E. Chavez Avenue is within the boundaries of the Central City Community Plan. The Central City Community Plan Area, which contains the birthplace of the City of Los Angeles, is bounded by Sunset Boulevard and Cesar E. Chavez Avenue to the north, Alameda Street to the east, I-10 to the south, and I-110 to the west. This Community Plan Area contains downtown Los Angeles and is characterized by high density commercial and residential uses. Within the vicinity of the Project alignment, the Central City Community Plan Area contains El Pueblo de Los Angeles.

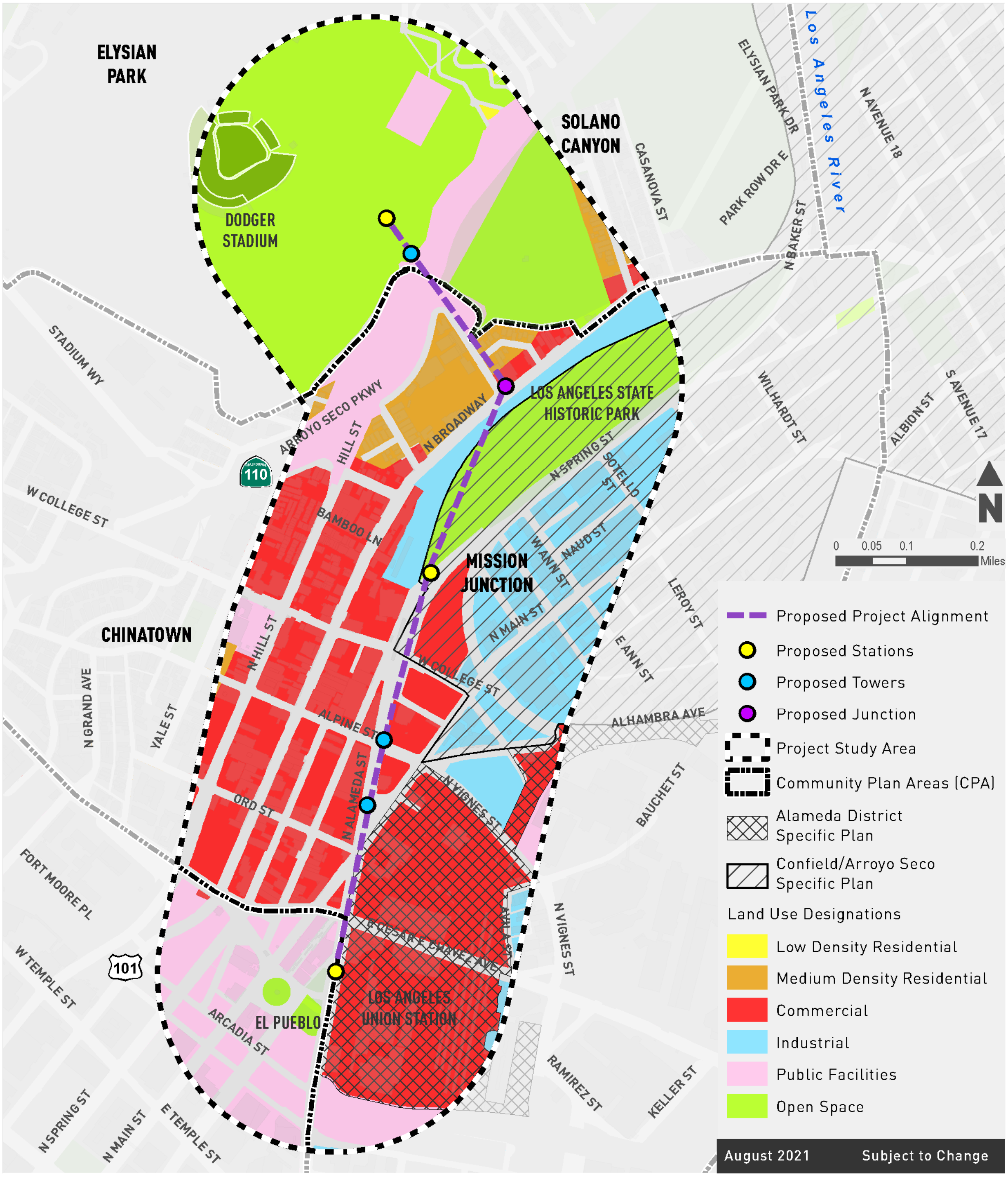


Figure 3.11-1: Existing City of Los Angeles General Plan Land Use Designations and Land Use Plan Boundaries

The Central City Community Plan designates the parcels adjacent to this portion of the proposed Alameda Station for Open Space and Public Facilities Uses, and those parcels are developed with El Pueblo de Los Angeles. The Central City Community Plan indicates that open space should be expanded within the Community Plan Area.[10] The Public Facilities designation is applied to parcels within the Civic Center area, defined as the area bounded by Sunset Boulevard/ Cesar E. Chavez Avenue on the north, Alameda Street on the east, First Street on the south, and SR-110 on the west.[11] Properties within the Civic Center are intended to, among other purposes, provide a mix of uses to be a center of activity and provide a pedestrian-oriented district used by visitors, workers, and residents.[12]

Central City North Community Plan

The central portion of the Project alignment is located within the Central City North Community Plan Area. Project components within this area include:

- The portion of the Alameda Station that would be over the east side of Alameda Street,
- Alameda Tower,
- Alpine Tower,
- Chinatown/State Park Station,
- Broadway Junction, and
- The suspended above-grade cables and cabins following the Project route between Alameda Station starting from Cesar E. Chavez Avenue north to Alameda Tower, Alpine Tower, Chinatown/State Park Station, and Broadway Junction.

The Central City North Community Plan Area is bounded by Stadium Way, Lilac Terrace, and North Broadway to the north, the Los Angeles River to the east, the City of Vernon to the south, and Alameda Street, Cesar E. Chavez Avenue, Sunset Boulevard, and Marview Avenue to the west. This Community Plan Area is characterized by low- to medium-density commercial and residential uses, as well as industrial uses near historic and existing rail lines such as near the Los Angeles State Historic Park and the Metro L Line (Gold). Within the vicinity of the proposed Project alignment, this Community Plan Area includes LAUS, Chinatown, and the Los Angeles State Historic Park. Among the primary purposes of the Central City North Community Plan are to maximize the development opportunities of future transit systems while minimizing any adverse impacts.[13] The Central City North Community Plan contains two Specific Plan areas, including the Alameda District Specific Plan and the Cornfield Arroyo Seco Specific Plan, which further guide development within their respective areas of the Community Plan Area.

The parcels on the east side of Alameda Street, on which the eastern portion of the Alameda Station would be located, are within the boundaries of the Alameda District Specific Plan, described below. The parcels adjacent to the Alameda Tower and the Alpine Tower and portions of the suspended above-grade cables and cabins are located within the Chinatown commercial district of the Community Plan Area, and designated for Regional Commercial uses.[14] However,

[10] City of Los Angeles Department of City Planning, Central City Community Plan, January 2003, available at: https://planning.lacity.org/plans-policies/community-plan-area/central-city, accessed May 2022.
[11] Ibid
[12] Ibid.
[13] City of Los Angeles Department of City Planning, Central City Community Plan, January 2003, available at: https://planning.lacity.org/plans-policies/community-plan-area/central-city, accessed May 2022.
[14] Ibid.

the Alameda Tower would be located entirely within the public ROW on the Alameda Triangle, a City-owned property between Alameda Street, North Main Street, and Alhambra Avenue that contains landscaping and hardscaping. The Chinatown/State Park Station and portion of the suspended above-grade cables and cabins from West College Street to the northern boundary of the Los Angeles State Historic Park would be located within the boundaries of the Cornfield Arroyo Seco Specific Plan area, described below. The Broadway Junction site is located on private property comprised of parcels designated for Regional Commercial and Medium Residential uses under the Community Plan.[15]

Proposed DTLA 2040 Community Plan

The City is currently working on an update to the Downtown Community Plan, known as DTLA 2040, which would consolidate the Central City Community Plan and Central City North Community Plan areas. The proposed DTLA 2040 Community Plan includes updates to land use designations within the proposed community plan area. Because it is unknown when the new community plan would be adopted and its EIR certified, the analysis in this section is based on the current applicable land use and zoning designations.

Silver Lake-Echo Park-Elysian Valley Community Plan

The Stadium Tower and Dodger Stadium Station and the suspended above-grade cables and cabins following the proposed alignment between Stadium Tower and Dodger Stadium Station would be located on private property within the Silver Lake-Echo Park-Elysian Valley Community Plan Area. This Community Plan Area is located north of downtown Los Angeles and is characterized by medium-density older residential neighborhoods, open space areas, and commercial corridors. Within the vicinity of the Project alignment, the Silver Lake-Echo Park-Elysian Valley Community Plan Area includes Dodger Stadium and Elysian Park. The Stadium Tower site and the Dodger Stadium Station site are both designated for Open Space under the Community Plan.[16]

Specific Plan Areas

Alameda District Specific Plan

The Alameda District Specific Plan (ADP) was adopted in 1996 for approximately 70 acres within the Central City North Community Plan Area, comprising the 52-acre LAUS property and the 18-acre United States Postal Service Terminal Annex Property. The Central City North Community Plan designates this area as a Regional Center, and the parcels within it are zoned ADP, to correspond with the Alameda District Specific Plan.[17] The ADP Area consists of three subareas, including the Historic Subarea, Mixed-Use/Office Subarea, and Transit/Office Subarea. The purpose of the ADP is to:

- Provide regulatory controls and incentives for the systematic and incremental execution of that portion of the General Plan which relates to this geographic area and to provide for

[15] Ibid.
[16] City of Los Angeles Department of City Planning, Silver Lake-Echo Park-Elysian Valley Community Plan, August 2004, available at: https://planning.lacity.org/plans-policies/community-plan-area/silver-lake-echo-park-elysian-valley, accessed May 2022.
[17] City of Los Angeles Department of City Planning, General Plan Land Use Map, Central City North Community Plan, available at: https://planning.lacity.org/plans-policies/community-plan-area/central-city-north, accessed May 2022.

public needs, convenience and general welfare as the development of such area necessitates;

- Assure orderly development and appropriate capacity of public facilities for the intensity and design of development by establishing general procedures for development within the Specific Plan area;
- Provide continued and expanded development of the site both as a major transit hub for the region, and as a mixed-use development providing office, hotel, retail, entertainment, tourism, residential and related uses within the Specific Plan Area, in conformance with the goals of objectives of local and regional plans and policies;
- To expand the economic base of the City, by providing additional employment opportunities and revenues to the region.[18]

Cornfield Arroyo Seco Specific Plan

Within the Central City North Community Plan Area, the Cornfield Arroyo Seco Specific Plan (CASP) area generally comprises the parcels south of the Metro L Line (Gold) tracks, south of Spring Street and east of College Street, north of Bolero Lane, and west of the eastern bank of the Los Angeles River. A portion of the Project alignment would travel over the Los Angeles State Historic Park, which is located within the boundaries of the CASP; however, the only project component that would be constructed within the CASP area would be the Chinatown/State Park Station and portion of the suspended above-grade cables and cabins from West College Street to the northern boundary of the Los Angeles State Historic Park. The CASP was adopted in 2013 with the general purpose of facilitating the transformation of the area from vehicle-oriented and primarily industrial uses to a mixed-use pedestrian-oriented community that would accommodate residential, light industrial, and commercial uses.[19] The CASP was developed to meet the several key purposes, including:

- Transform an underserved and neglected vehicular-oriented industrial and public facility area into a cluster of mixed-use, pedestrian-oriented and aesthetically pleasing neighborhoods.
- Increase access to open space.
- Re-connect historical communities.
- Facilitate pedestrian mobility, encourage bicycle use, provide access to a variety of transit options including frequent light rail and bus connections, shared vehicles and bicycles, and taxis.
- Lessen dependence on automobiles, and thereby reduce vehicle emissions, while enhancing the personal health of residents, employees, and visitors.
- Respect historically significant buildings, including massing and scale, while at the same time encouraging innovative architectural design that expresses the identity of contemporary urban Los Angeles.

[18] City of Los Angeles Department of City Planning, Alameda District Specific Plan, Adopted June 1996, available at: https://planning.lacity.org/odocument/11788e44-7659-4e6f-95d6-4b5d5861b1ba/Alameda_District_Specific_Plan.pdf, accessed May 2022.

[19] City of Los Angeles Department of City Planning, Cornfield Arroyo Seco Specific Plan, adopted 2013, available at: https://planning.lacity.org/odocument/9d013e0f-452b-4857-86d5-fcd357b27a4d, accessed May 2022.

- Provide places for people to socialize, including parks, sidewalks, courtyards and plazas that are combined with shops and services.
- Provide adequate public recreational open space within walking distance of residents and employees, integrate public art, and contribute to the civic and cultural life of the City.[20]

In addition, zoning regulations within the CASP are intended to, among other purposes:

- Provide inviting, safe, and accessible public space.
- Increase recreational opportunities for residents, employees, and visitors.
- Provide pedestrian linkages throughout the Plan area.
- Provide adequate lighting to create a park environment where residents feel safe.
- Generate visual interest by creating focal points and meeting places to enhance the area's image.
- Include permanent and temporary seating that is placed with consideration to sun and shade, and other factors contributing to human comfort.
- Increase pedestrian, bicycle, and transit use, and reduce vehicular trips to, through, and within the area.
- Connect the area to its neighboring communities, the City of Los Angeles, and the greater Los Angeles region through a safe, efficient, and accessible circulation network that embraces pedestrians, bicyclists, transit, truck traffic, and automobiles.
- Provide residents, employees, and visitors with a variety of transportation alternatives that result in a more efficient use of transportation resources.
- Build linkages to the neighboring Chinatown, Lincoln Heights, Cypress Park, Elysian and Heritage Square neighborhoods to nearby regional park amenities such as Elysian Park, Debs Park, El Rio de Los Angeles State Park, and to the Arroyo Seco and to Los Angeles Rive Greenways.

Four land use categories are identified in the Specific Plan, including Public Facility, Open Space, Residential Multi-Family, and Hybrid Industrial. The Los Angeles State Historic Park, is designated as Open Space and is located in the Greenway Zoning District under the CASP, which allows for the development of recreation and open space uses.[21]

The parcels to the south and east of the Chinatown/State Park Station across Spring Street are designated as Hybrid Industrial. Adjacent parcels to the west are zoned MR2 (Restricted Light Industrial), parcels to the south across Spring Street are zoned C2 (Commercial), and parcels to the east across Spring Street are zoned CM (Commercial Manufacturing) and designated Light Manufacturing under the General Plan.

The Los Angeles City Planning Department is currently evaluating and amending the CASP in order to strengthen the original vision and intent of the plan. City Planning is looking to make

[20] City of Los Angeles Department of City Planning, Cornfield Arroyo Seco Specific Plan, adopted 2013, available at: https://planning.lacity.org/odocument/9d013e0f-452b-4857-86d5-fcd357b27a4d, accessed May 2022.
[21] City of Los Angeles Department of City Planning, Cornfield Arroyo Seco Specific Plan, adopted 2013, available at: https://planning.lacity.org/odocument/9d013e0f-452b-4857-86d5-fcd357b27a4d, accessed May 2022.

targeted revisions to the plan, including its incentive zoning system, and to identify additional areas that may allow for affordable or mixed income housing development.[22]

Special Districts

Los Angeles River Improvement Overlay District

The Los Angeles River Improvement Overlay (RIO) District is a special use district established by Ordinance Nos. 183144 and 183145[23] to support implementation of the Los Angeles River Revitalization Plan and provides design guidelines related to landscaping; screening/fencing of parking facilities, mechanical equipment, and trash enclosures; exterior site lighting; and administrative review procedures for new development projects within the RIO District. The RIO District Ordinance also provides guidelines for new "complete" streets and includes a mobility strategy to ensure that the needs of pedestrians, bicyclists, transit riders, and vehicle drivers are considered when major projects or street improvements are undertaken. The RIO does not impose any limits on the size, use, height and/or setbacks of a building beyond what is restricted by the prevailing zoning and building codes. The RIO District Ordinance includes all of the neighborhoods within the City that are adjacent to the Los Angeles River. The RIO District's boundaries generally extend for one-half mile on either side of the river, creating an area approximately 32 miles long and one mile wide of the Los Angeles River that flows within the City's boundaries. Additionally, projects located within the Inner Core - areas adjacent to and abutting either side of the Los Angeles River - are also subject to design regulations on landscape buffers, fences, and river access. All of the parcels to the east of the Project alignment from Alameda Station to College Street are within the boundaries of the RIO District, but are not considered part of the Inner Core. The purpose of the RIO District is to:[24]

- Support the goals of the Los Angeles River Revitalization Master Plan;
- Contribute to the environmental and ecological health of the City's watersheds;
- Establish a positive interface between river adjacent property and river parks and/or greenways;
- Promote pedestrian, bicycle and other multi-modal connection between the river and its surrounding neighborhoods;
- Provide native habitat and support local species;
- Provide an aesthetically pleasing environment for pedestrians and bicyclists accessing the river area;
- Provide safe, convenient access to and circulation along the river;
- Promote the river identity of river adjacent communities; and
- Support the Low Impact Development Ordinance, the City's Irrigation Guidelines, and the Standard Urban Stormwater Maintenance Program.

---

22 Cornfield Arroyo Seco Specific Plan (CASP) Update. Los Angeles City Planning. Available at: https://planning.lacity.org/plans-policies/casp-update#about. Accessed May 2022.

23 Los Angeles Department of City Planning. 2015. Zoning Information No. 2358. River Improvement Overlay District: Ordinance Nos. 183144 and 183145. Available at: http://zimas.lacity.org/documents/zoneinfo/ZI2358.pdf, accessed May 2022.

24 LAMC. Section 13.17.

Chinatown Redevelopment Plan

The Chinatown Redevelopment Project, located north of the Downtown Civic Center, covers 303 acres and is generally bounded by the SR-110 on the north, North Broadway and North Main Street on the east, Cesar E. Chavez Avenue and Interstate 5 on the south and Beaudry Avenue on the west. The Redevelopment Plan was adopted by the Los Angeles City Council on January 23, 1980, to eliminate blight, stimulate the development of affordable housing and maintain the area's prominence as the focal point of commerce and culture for the Chinese population of Southern California, and amended on September 19, 2001. Other important redevelopment goals are to encourage historic preservation, expand recreational and institutional uses, enhance the area's image, and promote economic development.[25] The Chinatown Redevelopment Plan expired in January 2021. As the Plan has expired and Project is not anticipated to be constructed until as early as 2024, the Project would not be subject to the development regulations under this plan.[26]

City of Los Angeles Municipal Code

The Los Angeles Municipal Code (LAMC) Chapter 1 (Planning and Zoning Code) identifies a range of zoning classifications throughout the City, identifies the specific permitted uses applicable to each zone designation, identifies special use districts that further restrict zoning, and applies development regulations to each zone. The existing special use districts, zoning designations and the applicable development standards under the LAMC are described for each of the Project component sites and adjacent parcels below. The existing zoning designations are shown in Figure 3.11-2.

Alameda Station

The Alameda Station and the suspended above-grade cables and cabins following the proposed alignment would be located over the existing public ROW on Alameda Street adjacent to the planned LAUS Forecourt on the east and Placita de Dolores on the west, and between Los Angeles Street and Cesar E. Chavez Avenue to the south and north, respectively. The zoning code does not provide zoning designations within the ROW.

The stations' vertical circulation elements (i.e., elevators, escalators, stairs) and queueing areas would be introduced at-grade north of the Placita de Dolores in a proposed new pedestrian plaza on the west in an area currently designated as ROW containing a parking and loading area for El Pueblo. The zoning code does not provide zoning designations within the ROW. The parcels to the west side of Alameda Street adjacent to the Project alignment are zoned OS (Open Space) and PF (Public Facilities).[27] Land uses allowed in the OS Zone include parks and recreation facilities.[28] Land uses allowed in the PF zone include those that implement circulation systems under the General Plan.

---

[25] CRA/LA. 2021. Chinatown Redevelopment Plan. Project Area Overview. Available at: http://www.crala.org/internet-site/projects/chinatown/index.cfm, accessed May 2022.

[26] Los Angeles Department of City Planning. 1980. Chinatown Redevelopment Plan. Available at: http://www.crala.org/internet-site/Projects/Chinatown/upload/chinatownredevelopmentplan.pdf. Accessed August 2022.

[27] ZIMAS. Search engine available at: http://zimas.lacity.org/. Accessed May 2022.

[28] ZIMAS. Search engine available at: http://zimas.lacity.org/. Accessed May 2022.

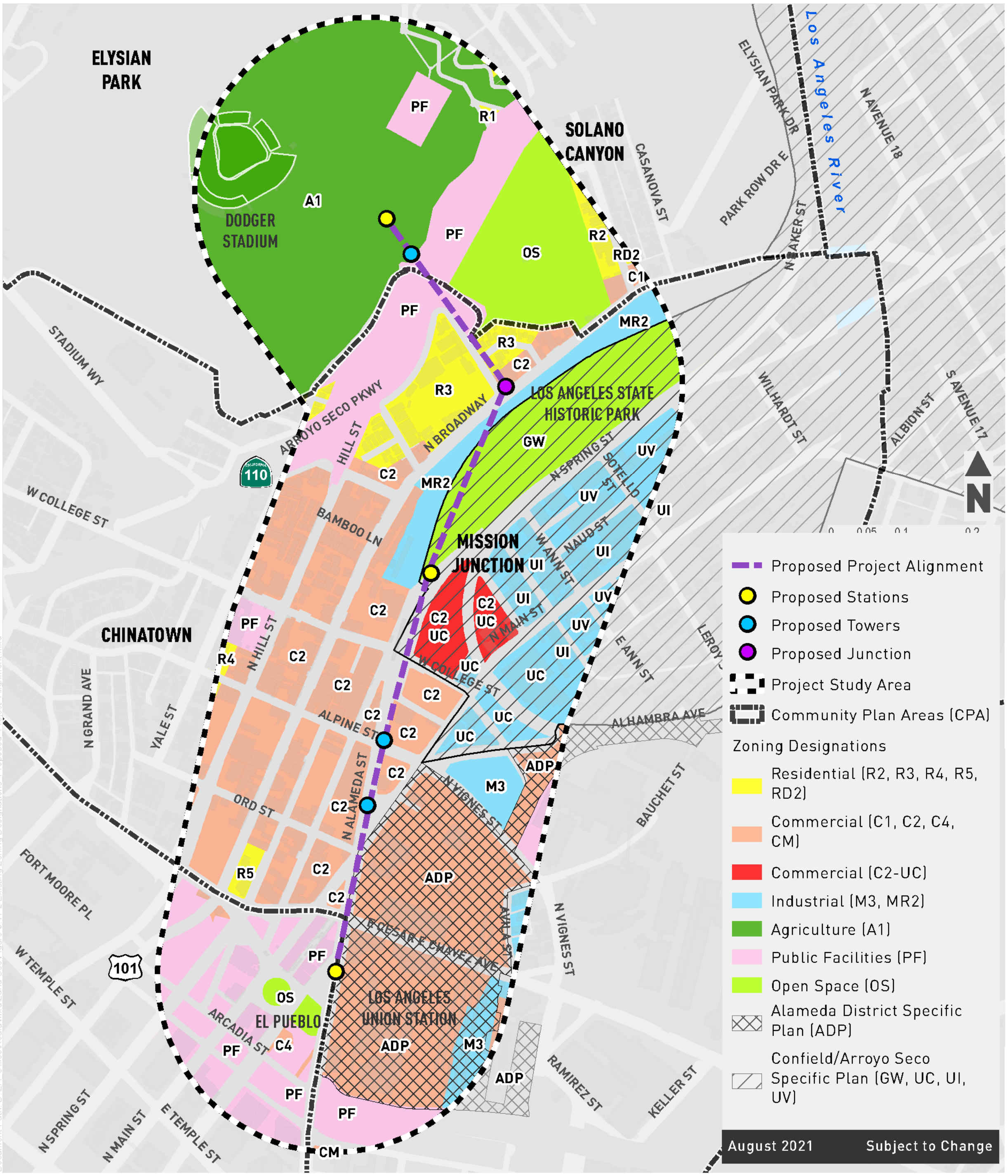


Figure 3.11-2: Existing Zoning Designations

On the east, Alameda Station's vertical circulation elements would be introduced at-grade from the planned LAUS Forecourt. The parcels to the east of Alameda Street, including the LAUS Forecourt, are zoned ADP-RIO (Alameda District Specific Plan-River Improvement Overlay District), which allows for the development of commercial uses under the C2 Zone and transit stations and related facilities and uses.[29] Allowable uses under the C2 Zone also include restaurants, retail shops, and offices, among other similar uses.[30] The RIO District establishes landscaping, design criteria, and administrative review procedures for new development projects but does not impose any limits on the size, use, height and/or setbacks of a building beyond what is restricted by the prevailing zoning and building codes.[31]

The parcels to the east side of Alameda Street adjacent to the Project alignment are also zoned ADP-RIO, from Union Station in the south to Vignes Street in the north.

Alameda Tower

The Alameda Tower would be located entirely within the City ROW on the Alameda Triangle City ROW between Alameda Street, North Main Street, and Alhambra Avenue that contains landscaping and hardscaping. The zoning code does not provide zoning designations within the ROW. All west and east parcels adjacent to the Project alignment along Alameda Street at this location are zoned C2-2 or C2-2-RIO, respectively.[32]

Alpine Tower

The Alpine Tower would be located on a City-owned parcel, currently being used as non-public parking storage for City vehicles, at the northeast corner of Alameda Street and Alpine Street, adjacent to the elevated Metro L Line (Gold). All parcels along Alameda Street at this location are zoned either C2-2 or C2-2-RIO.[33]

Chinatown/State Park Station

The Chinatown/State Park Station would be located adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park. The southern portion of the station would be located on City ROW, while the northern portion of the station would be integrated into the southern boundary of the Los Angeles State Historic Park. The parcel containing the southern portion of the Chinatown/State Park Station site is public ROW, and the zoning code does not provide zoning designations within the ROW. The northern portion of the Chinatown/State Park Station, which is located within the Los Angeles State Historic Park property, is zoned GW (Greenway) under the CASP, which allows for development of open space and recreational facilities.[34] However, as the northern portion of the station is on State property, it is not subject to the land use regulations under the LAMC. The adjacent parcels to the west are zoned MR2

[29] City of Los Angeles Department of City Planning, Alameda District Specific Plan, Adopted June 1996, available at: https://planning.lacity.org/odocument/11788e44-7659-4e6f-95d6-4b5d5861b1ba/Alameda_District_Specific_Plan.pdf. Accessed May 2022.
[30] LAMC Section 12.14
[31] Los Angeles Department of City Planning. 2015. Zoning Information No. 2358. River Improvement Overlay District: Ordinance Nos. 183144 and 183145. Available at: http://zimas.lacity.org/documents/zoneinfo/ZI2358.pdf. Accessed May 2022.
[32] ZIMAS, search engine available at: http://zimas.lacity.org/, accessed May 2022.
[33] Ibid.
[34] City of Los Angeles Department of City Planning, Cornfield Arroyo Seco Specific Plan, adopted 2013, available at: https://planning.lacity.org/odocument/9d013e0f-452b-4857-86d5-fcd357b27a4d, accessed May 2022.

(Restricted Light Industrial); parcels to the south across Spring Street are zoned C2 (Commercial) and parcels to the east across Spring Street are zoned CM (Commercial Manufacturing).

Broadway Junction

The Broadway Junction would be located at the intersection of North Broadway and Bishops Road. The junction would primarily be located on privately-owned property at the northeast corner of the intersection with a portion of the junction and overhead cable infrastructure cantilevered and elevated above the public ROW. The zoning code does not provide zoning designations within the ROW. The parcels on the south side of the site, fronting North Broadway and at 1201 North Broadway, are zoned C2. The parcels on the north side of the site, fronting Savoy Street and at 448 Savoy Street and 442 Savoy Street, are zoned R3 (Multiple Dwelling).[35] Land uses allowed in the R3 Zone include multi-family residences, boarding houses, and childcare facilities.[36]

Stadium Tower

The Stadium Tower would be located on hillside private property north of Stadium Way between the Downtown Gate and SR-110. The Stadium Tower site is currently zoned A1 (Agriculture).[37] The Dodger Stadium property, including the location of the Stadium Tower, is subject to a Conditional Use Permit, which allows the operation of the 56,000-seat-capacity Major League Baseball stadium and various ancillary structures and uses, including “mass transportation service” to the site.[38]

Dodger Stadium Station

The Dodger Stadium Station would be located in the southeast portion of the Dodger Stadium parking lot near the Downtown Gate. The site of the Dodger Stadium Station currently contains a paved surface parking area, drive aisle, and a landscaped berm. The proposed Dodger Stadium Station would be located on an existing parking lot and partially located over the existing vegetative slope. This portion of the Dodger Stadium property is zoned A1.[39] The Dodger Stadium property, including the location of the Dodger Stadium Station, is subject to a Conditional Use Permit, which allows the operation of the 56,000-seat-capacity Major League Baseball stadium and various ancillary structures and uses, including “mass transportation service” to the site.[40]

Dodger Stadium, related improvements to support the Stadium, and the surface parking lots were approved by the City of Los Angeles on August 4, 1960, pursuant to a Conditional Use Permit (the “Dodger Stadium CUP”), permitting the construction, maintenance, and operation of the 56,000-seat-capacity Major League Baseball stadium and various ancillary structures and uses, including “automobile and transportation vehicle parking facilities” and “mass transportation service” to the site.

Condition no. 4 of the Dodger Stadium CUP requires the operators of the Stadium facility to “collaborate with the Metropolitan Transit Authority and other transportation agencies as well as the Traffic Department in devising mass transportation service to the Stadium site which will be

[35] Ibid.
[36] ZIMAS, search engine available at: http://zimas.lacity.org/, accessed May 2022.
[37] Ibid.
[38] City of Los Angeles Department of City Planning, Office of Zoning Administrator, Z.A Case No. 15430, Dodger Baseball Stadium Site – Chavez Ravine Area, August 4, 1960.
[39] ZIMAS, search engine available at: http://zimas.lacity.org/. Accessed May 2022.
[40] City of Los Angeles Department of City Planning, Office of Zoning Administrator, Z.A Case No. 15430, Dodger Baseball Stadium Site – Chavez Ravine Area, August 4, 1960.

sufficiently efficient to encourage patronage thereof and thus reduce the number of private automobiles driven to the Stadium events."

The Dodger Stadium CUP requires "[t]hat automobile parking facilities for a minimum of one (1) automobile for each 3.6 seats provided in the Stadium shall be provided and maintained on the site generally . . .". Condition no. 1 of the Dodger Stadium CUP states that Dodger Stadium "shall have a maximum seating capacity of 56,000 persons." Condition no. 3 of the Dodger Stadium CUP requires "[t]hat automobile parking facilities for a minimum of one (1) automobile for each 3.6 seats provided in the Stadium shall be provided and maintained on site", so a total of 15,556 parking spaces must be provided and maintained on site. There are currently a total of 18,889 parking spaces provided and maintained on site.[41]

In order to characterize the existing land use conditions in the vicinity of the proposed Project, a 0.25-mile buffer around the proposed Project alignment has been established as the Project Study Area.

3.11.1.2 Existing Land Uses

The proposed Project alignment and components would be located within or adjacent to the downtown, El Pueblo, Chinatown, Mission Junction, Elysian Park, and Solano Canyon communities of the City of Los Angeles. The specific conditions at each of the Project component locations are described below. Existing land uses are shown on Figure 3.11-1.

Alameda Station

The Alameda Station and the suspended above-grade cables and cabins following the proposed Project alignment would be located on existing public ROW on Alameda Street adjacent to the planned LAUS Forecourt and Placita de Dolores on the west and east, respectively, and between Los Angeles Street and Cesar E. Chavez Avenue to the south and north, respectively. As shown on Figure 3.11-1, the current land use surrounding the proposed location for this station are categorized as Public Facilities and Commercial. Vertical circulation elements and queueing areas would be introduced at-grade north of the Placita de Dolores in a proposed new pedestrian plaza on the west in an area currently containing a parking and loading area for El Pueblo. On the east, Alameda Station's vertical circulation elements would be introduced at-grade from the planned LAUS Forecourt. At this location, the parcels on the east side of Alameda Street are developed with the LAUS and the Mozaic at Union Station apartments, which is a five-story complex that includes residential apartments. The parcels on the west side of Alameda Street are developed with El Pueblo de Los Angeles. The attractions, museums, and other uses located within El Pueblo include Father Serra Park, Placita de Dolores, Avila Adobe, Olvera Street marketplace, which has low- to mid-rise buildings, Plaza Substation, Old Winery, El Pueblo Gallery, and surface Parking Lot 3.

Alameda Tower

The Alameda Tower would be located entirely within the public ROW on the Alameda Triangle between Alameda Street, North Main Street, and Alhambra Avenue that contains landscaping and hardscaping. As shown on Figure 3.11-1, the current land use surrounding the proposed location for this tower is categorized as Commercial. The parcels on the west side of Alameda Street adjacent to the Alameda Triangle are developed with a compressed natural gas refueling

[41] Studio-MLA Survey (April 2020), submitted by the Los Angeles Dodgers to the City of Los Angeles as part of the 2020 Centerfield Improvements in 2020.

station associated with an adjacent large industrial complex of up to three stories that houses a vehicle fleet management facility, as well as low- to mid-rise commercial buildings. The parcels on the east side of North Main Street adjacent to the Alameda Triangle are designated as Industrial and Commercial uses, and are developed with a four-story office building and a surface parking lot. The parcel on the north side of Alameda Triangle across from Alhambra Avenue contains a one-story commercial building with a surface parking lot. Land use and Zoning Designations are shown on Figures 3.11-1 and 3.11-2, respectively. Aerial easements may be required for the portion of the proposed Project alignment passing above certain properties on the east side of Alameda Street between the Alameda Tower and Alpine Tower.

Alpine Tower

The Alpine Tower site is located on a City-owned property currently being used as a surface parking lot for non-public parking storage for City vehicles at the northeast corner of Alameda Street and Alpine Street, adjacent to the elevated Metro L Line (Gold). The parcel north of the Alpine Tower site is designated as a Commercial land use and contains a two-story commercial office building. Other current surrounding land uses are also categorized as Commercial, as shown on Figure 3.11-1. Aerial easements may be required for the portion of the proposed Project alignment passing above the parcel north of the Alpine Tower. The parcels on the west side of Alameda Street and north of Alpine Street contains a seven-to-ten story apartment building. The parcels on the west side of Alameda Street and south of Alpine Street are designated as a Commercial land use and contain a vehicle fleet management facility. Land use and Zoning Designations are shown on Figures 3.11-1 and 3.11-2, respectively.

Chinatown/State Park Station

The Chinatown/State Park Station would be located adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park. The southern portion of the station would be located on City ROW, while the northern portion of the station would be integrated into the southern boundary of the Los Angeles State Historic Park. At this location, the parcel on the east side of Spring Street south of the Los Angeles State Historic Park contains paved areas adjacent to the Metro L Line (Gold) and is designated a Commercial Land Use. The parcel on the west side of the station contains the Metro L Line (Gold) station and tracks and is a designated Industrial Land Use. The parcel to the east across Spring Street is currently undeveloped, but is approved to be a seven-story mixed-use residential development. An aerial easement would be required for the portion of the proposed Project alignment passing above the parcel adjacent to the Los Angeles State Historic Park along North Broadway. Land use and Zoning Designations are shown on Figures 3.11-1 and 3.11-2, respectively.

Broadway Junction

The Broadway Junction would be located at the intersection of North Broadway and Bishops Road. The Junction would primarily be located on privately-owned property at the northeast corner of the intersection with a portion of the Junction and overhead cable infrastructure cantilevered and elevated above the public ROW. The privately-owned properties comprising the Broadway Junction site currently contain an office building and ancillary uses, which would be vacated and demolished prior to construction of the junction. The parcels on the north side of the proposed junction, across Savoy Street, contain single- and multi-family residential uses. On the south, there is a commercial use. An aerial easement may be required for the portion of the proposed Project alignment passing above a single-family residential building and multifamily residential building along Savoy Street. The parcels on the south side of the proposed junction, across North Broadway, are designated Industrial and Open Space land uses, and contain the Metro L Line (Gold) Station and tracks and Los Angeles State Historic Park. The parcel to the west across Bishops Road is designated Medium Density land use and contains Cathedral High School. Land use and Zoning Designations are shown on Figures 3.11-1 and 3.11-2, respectively.

Stadium Tower

The Stadium Tower would be located on private hillside property north of Stadium Way and west of SR-110. The Stadium Tower site is a vegetated hillside. As shown on Figure 3.11-1, the current land uses surrounding the proposed location for this tower are Open Space and Public Facilities.

Dodger Stadium Station

The Dodger Stadium Station would be located in the southeast portion of the Dodger Stadium property near the Downtown Gate. The site of the Dodger Stadium Station currently contains a paved surface parking area, drive aisle, and a landscaped berm. The proposed Dodger Stadium Station would be located on an existing parking lot and partially located over the existing vegetative slope. As shown on Figure 3.11-1, the current land use surrounding the proposed location for this station is categorized as Open Space. The site of the Dodger Stadium Station currently contains a paved surface parking area, a drive aisle, and a landscaped berm. The area immediately surrounding the Dodger Stadium Station is comprised of surface parking for Dodger Stadium, located further to the west, and a multi-lane access road for the Downtown Gate to the east.

3.11.1.3 Surrounding Setting

The area surrounding the proposed Project alignment is characterized by dense urban development, including a mix of transit, public facilities, commercial, industrial, open space, and single-family and multi-family residential uses. Additionally, the proposed Project area is being developed with various mixed-use developments which include both residential units and commercial office spaces. The approved College Station seven-story mixed-use development project at the intersection of College Street and Spring Street will include up to 725 multi-family residential units and 51,600 square feet of commercial uses. The approved Harmony project at 942 N. Broadway will include a 27-story tower with 178 residential units and two floors of office and retail space with below-grade parking. The under-construction 200 Mesnager project at 200 N. Mesnager Street includes a seven-story building and 278 residential units. The recently constructed Blossom Plaza project at 900 N. Broadway includes a five-story building and 237 residential units with 334 parking spaces. The constructed Llewellyn project at 1101 N. Main Street includes a seven-story building with 318 residential units atop a 526 car parking garage, one block east of Metro L Line’s (Gold) Station. The proposed Buena Vista Project would be located at 1251 North Spring Street and 1030 - 1380 North Broadway and would include a mixed-use development of residential and commercial uses in buildings of varying heights ranging from approximately 56 feet to 347 feet.

3.11.2 Methodology

The determination of consistency with applicable land use policies and ordinances is based upon a review of the previously identified planning documents that regulate land use or guide land use decisions pertaining to the Project Study Area. CEQA Guidelines Section 15126(d) requires that an EIR discuss inconsistencies with applicable land use plans that the decision-makers should address. Separately, Appendix G recommends that a lead agency consider whether the project would cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

A conflict between a project and an applicable plan is not necessarily a significant impact under CEQA unless the inconsistency will result in an adverse physical change to the environment that is a “significant environmental effect” as defined by CEQA Guidelines Section 15382. “An inconsistency between a proposed project and an applicable plan is a legal determination not a physical impact on the environment.”[42] Analysis of conflicts and consistency with applicable plans is included in this section of the Draft EIR.

Under the Planning and Zoning law (Government Code Section 65000 et seq.), strict conformity with all aspects of a plan is not required. Generally, given that land use plans reflect a range of competing interests, a project is considered consistent with the provisions of the identified regional and local land use plans if it meets the general intent of the plans, and would not preclude the attainment of the primary intent of the land use plan or policy. Accordingly, if a project is determined to be inconsistent with specific objectives or policies of a land use plan, but is largely consistent with the land use goals of that plan and would not preclude the attainment of the primary intent of the land use plan, the project would not be considered inconsistent with the plan. In addition, inconsistency with specific objectives or policies of a land use plan does not necessarily mean that the project would result in a significant impact on the physical environment. Rather, to be “consistent,” the project must be compatible with the objectives, policies, general land uses and programs specified in the applicable plan,” meaning that a project must be in “agreement or harmony” with the applicable land use plan to be consistent with that plan.”[43]

The analysis of land use compatibility addresses whether the proposed Project would be compatible with the land use plans and policies applicable to the Project alignment in terms of use, size, intensity, density, scale, or other factors. The compatibility analysis is based on a review of aerial photography, land use and zoning maps, and applicable land use plans. Accordingly, the analysis addresses general land use relationships and the urban form found in the Project Study Area. The Projects’ consistency with plans, programs and policies is analyzed in other sections of the Draft EIR, and the following elements are not further discussed in this Land Use Section: Air Quality (Section 3.3), Transportation (Section 3.17), Open Space (Section 3.16), Public Facilities & Services (Section 3.15), Noise (Section 3.13), and Housing (Section 3.14).

Thresholds of Significance

For the purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on land use and planning if it would:

- Physically divide an established community; or
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

[42] *Continuing Education of the Bar, Practice Under the California Environmental Quality Act, Section 12.34.*
[43] *Sequoyah Hills Homeowners Association c. City of Oakland* (1993) 23 Cal.App.4th 704, 719.

3.11.3 Environmental Impacts

LUP-1*:* *Would the Project physically divide an established community?*

Construction Impacts

Less Than Significant Impact. Construction of the proposed Project would require full road closures during construction hours along portions of Alameda Street, North Broadway, and Bishops Road, and partial lane closures on Alameda Street, Alpine Street and Spring Street. Established communities would not be physically divided during construction, and closures would be temporary, only occurring during the construction phase. Additionally, in some locations, closures would only occur during construction hours and some travel lanes would be restored during non-construction hours. Though these temporary closures during construction would disrupt vehicular, pedestrian, and bicycle access within and between communities, there would be a variety of options available for connections and access within the Project area, with Alameda Street, Alhambra Avenue, Alpine Street, Spring Street, and Broadway remaining partially open during different phases of construction. In addition, other options including the planned Alameda Esplanade bike path and the provision of pedestrian detours during certain phases of construction would allow for continued pedestrian access within the Project area. These communities will remain accessible from other surrounding streets and these closures would not physically divide these communities.

As stated above these closures would temporarily disrupt vehicular, bicycle, and pedestrian access to through traffic and cross streets at these locations within established communities. These communities will remain accessible from other surrounding streets, pedestrian detours would be provided, and these closures would not physically divide these communities.

The following sections detail anticipated construction period work areas, and temporary traffic handling measures such as temporary lane configuration changes. This information is intended to identify a likely construction scenario and its potential for impacts, but the ultimate design, construction process, and traffic handling would be subject to design review and approval by the City of Los Angeles and other reviewing agencies. As described in Section 3.17, Transportation, prior to the issuance of a building permit for the proposed Project, a detailed Construction Traffic Management Plan (CTMP), including street closure information, detour plans, haul routes, and a staging plan, shall be prepared and submitted to the City for review and approval. The CTMP shall formalize how construction will be carried out and identify specific actions that will be required to reduce effects on the surrounding community.

As described in Section 2.8 of the Project Description, anticipated closures would include lane closures in which lanes would be closed 24-hours a day during certain phases of construction, or alternating closures during certain phases of construction, in which closures would occur during construction hours for approximately 10 hours a day, and roads would reopen during non-construction hours for approximately 14 hours a day. For alternating closures, during non-construction hours, steel plates would be placed over construction sites to the extent feasible in order to allow for vehicular and pedestrian circulation. Accordingly, the potential construction work areas and traffic handling could vary from the scenarios identified for the purposes of analysis in this Draft EIR. However, impacts are anticipated to be less than significant.

An evaluation of the proposed Project's impact on the division of an established community is provided in the following discussion.

Alameda Station

Construction of the Alameda Station and the suspended above-grade cables and cabins following the proposed Project alignment would require full lane closures during construction hours on Alameda Street between Los Angeles Street and Cesar E. Chavez Avenue. These closures would temporarily disrupt vehicular, bicycle, and pedestrian access to LAUS and El Pueblo de Los Angeles from Alameda Street; however, access to LAUS and El Pueblo would otherwise be maintained at all times. These closures would also temporarily affect access to and between the El Pueblo community to the west, the Downtown community to the south, and the Chinatown community to the north. These communities will remain accessible from other surrounding streets, and these closures would not physically divide these communities.

There are two potential options for construction of Alameda Station – the Temporary Deck Option and the No Deck Option – depending on whether or not Metro's existing approximately 60-space parking lot in front of the Union Station Terminal and the future location of the planned LAUS Forecourt could be utilized for construction staging and location of the crane to be used during Alameda Station's construction. Both the Temporary Deck Option and No Deck Option are analyzed for construction of the Alameda Station.

Temporary Deck Option

Foundations and Columns (Full-Time Conditions): Under the Temporary Deck option, during the approximately 16-week foundations and columns phase of construction, the northbound through-right lane and one southbound through lane would remain open on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street.

The two northbound through lanes on Alameda Street would be partially shortened until reopening near the intersection of Cesar E. Chavez Avenue and Alameda Street to allow for northbound through traffic. No left turns would be allowed onto Cesar E. Chavez Avenue from Alameda Street during this phase, as construction would require the full-time closure of the northbound left turn lane. Construction during this phase would also require the full-time closure of one southbound through lane, as well as the northbound curbside drop-off zone, which would be used as a temporary northbound through lane.

The planned two-way Alameda Esplanade bike path along the eastern edge of Alameda Street along with Alameda Street's eastern and western sidewalks would remain open during this phase of construction, as well as the crosswalks at Los Angeles Street and Cesar E. Chavez Avenue, allowing for continued pedestrian access to LAUS and El Pueblo from Alameda Street.

The westbound left turn lane on Cesar E. Chavez Avenue would be closed full-time during Alameda Station's foundations and columns phase, but all other lanes (the eastbound left turn lane, two eastbound through lanes, the eastbound right turn lane, two westbound through lanes, and the westbound through-right lane) would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Deck Shoring, Cribbing, and Erection (Full-Time Conditions): Under the Temporary Deck Option, Alameda Station construction would include the installation and use of a temporary deck spanning over Alameda Street during the structural steel and gondola equipment erection phase.

The construction of the temporary deck would require that all lanes along Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street (the northbound left turn lane, two northbound through lanes, the northbound through-right lane / northbound curbside drop off zone, and two southbound through lanes) remain closed full-time for approximately two weeks.

Restricted local access to El Pueblo along with a service/loading area for El Pueblo would be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue. Emergency access to El Pueblo would also be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue.

Both the eastern and western sidewalks and the planned two-way Alameda Esplanade bike path along the eastern edge of Alameda Street would remain open during this phase of construction. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would also remain open, allowing for continued pedestrian access to LAUS and El Pueblo from Alameda Street. Pedestrian traffic on the eastern sidewalk would be controlled while specific construction activities are taking place during this construction phase to ensure safety. Bicycle traffic on the planned two-way Alameda Esplanade bike path would be controlled while specific construction activities are taking place during this construction phase to ensure safety.

The westbound left turn lane and eastbound right turn lane of Cesar E. Chavez Avenue would be closed full-time during the approximately two-week deck construction period, and all other lanes (the eastbound left turn lane, two eastbound through lanes, two westbound through lanes, and the westbound through-right lane) of Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection (Full-Time Conditions): Under the Temporary Deck Option, during the approximately 28-week structural steel and gondola equipment erection phase of construction, one northbound through lane, the northbound through-right lane, and two southbound through lanes would remain open on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street. The westernmost northbound through lane on Alameda Street would be partially shortened until reopening near the intersection of Cesar E. Chavez Avenue and Alameda Street to allow for through traffic. The northbound left turn pocket on Alameda Street would also be shortened, but not closed, allowing for left turns onto Cesar E. Chavez Avenue from Alameda Street. No full lane closures would be required.

A pedestrian detour would be required for a portion of the western sidewalk along Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street via existing sidewalks along the western edge of the Placita de Dolores. Pedestrians on the west side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. Pedestrians on the east side would primarily utilize a covered pedestrian sidewalk on the roadway along the eastern edge of Alameda Street. However, to ensure safety while certain, specific construction activities are taking place, pedestrians on the east side would be routed along the sidewalk within LAUS property and on a temporary sidewalk along the northern edge of the planned LAUS Forecourt. This temporary sidewalk may also be used to access LAUS. With the exception of the certain, specific construction activities, the planned two-way Alameda Esplanade bike path along Alameda Street would remain open. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would also remain open, allowing for continued pedestrian access to LAUS and El Pueblo.

All lanes along Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Deck Removal (Full-Time Conditions): The temporary deck would be removed following completion of the structural steel and gondola equipment erection phase of construction. Removal of the deck would require that all lanes along this portion of Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street (the northbound left turn lane, two northbound through lanes, the northbound through-right lane / northbound curbside drop off lane, and two southbound through lanes) remain closed full-time for approximately three weeks.

Restricted local access to El Pueblo along with a service/loading area for El Pueblo would be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue. Emergency access to El Pueblo would also be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue.

A pedestrian detour would be required for a portion of the western sidewalk along Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street. Pedestrians on the west side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. Pedestrian traffic on the eastern sidewalk would be controlled while certain construction activities are taking place during this construction phase to ensure safety. During these certain, specific construction activities, pedestrians on the east side would be routed along the sidewalk within LAUS property and on a temporary sidewalk along the northern edge of the planned LAUS Forecourt. This temporary sidewalk may also be used to access LAUS. With the exception of during these certain, specific construction activities, the planned two-way Alameda Esplanade bike path and the eastern sidewalk along Alameda Street would remain open. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would also remain open, allowing for continued access to LAUS and El Pueblo.

The westbound left turn lane and eastbound right turn lane of Cesar E. Chavez Avenue would be closed full-time during the approximately three-week deck removal phase, and all other lanes (the eastbound left turn lane, two eastbound through lanes, two westbound through lanes, and the westbound through-right lane) of Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access

Vertical Circulation, Hardscape and Landscape, Interior Work (Full-Time Conditions): Under the Temporary Deck Option, during the approximately 27-week vertical circulation, hardscape and landscape, and interior work phase of construction, no lanes would be closed on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street, with the exception of periodic closures for asphalt / re-striping on 10 non-consecutive working days. The northbound curbside drop off zone along Alameda Street would be closed full-time during this phase of construction.

A portion of the western sidewalk would require a pedestrian detour on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street via existing sidewalks along the western edge of the Placita de Dolores. Pedestrians on the west side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. However, the planned two-way Alameda Esplanade bike path and the eastern sidewalk along Alameda Street would remain open, as well as the crosswalks at Los Angeles Street and Cesar E. Chavez Avenue, allowing for continued access to LAUS and El Pueblo.

All lanes on Cesar E. Chavez Avenue would remain open through the entirety of this phase. All sidewalks on Cesar E. Chavez Avenue would remain open for pedestrian access.

No Deck Option

Foundations and Columns (Full-Time Conditions): Under the No Deck Option, during the approximately 16-week foundation and columns phase of construction, the northbound through-right lane would remain open on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street. The two northbound through lanes on Alameda Street as well as the northbound left turn lane would be partially shortened until reopening near the intersection of Cesar E. Chavez Avenue and Alameda Street to allow for northbound traffic. Construction during this phase would also require the full-time closure of the two southbound through lanes and the northbound curbside drop off lane.

Restricted local access to El Pueblo along with a service/loading area for El Pueblo would be provided on Alameda Street near its intersection with Los Angeles Street. Emergency access to El Pueblo would also be provided on Alameda Street near its intersection with Los Angeles Street.

The planned two-way Alameda Esplanade bike path along the eastern edge of Alameda Street along with Alameda Street's eastern and western sidewalks would remain open during this phase of construction, as well as the crosswalks at Los Angeles Street and Cesar E. Chavez Avenue, allowing for continued access to LAUS and El Pueblo from Alameda Street.

The westbound left turn lane and the eastbound right turn lane on Cesar E. Chavez Avenue would be closed full-time during Alameda Station's foundations and columns phase, but all other lanes (the eastbound left turn lane, two eastbound through lanes, two westbound through lanes, and the westbound through-right lane) of Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection

Construction Hours. During construction hours under the No Deck Option, the approximately 30-week structural steel and gondola equipment erection phase of construction would require the closure of all lanes on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street (one northbound left turn lane, two northbound through lanes, one northbound through-right lane/ northbound curbside drop off zone, and two southbound through lanes) as well as the planned two-way Alameda Esplanade bike path.

Restricted local access to El Pueblo along with a service/loading area for El Pueblo would be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue. Emergency access to El Pueblo would also be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue.

During construction hours of this phase of construction, partial closures of Alameda Street's western sidewalk would be required. Pedestrian detours would be required along the portion of the western sidewalk along the Placita de Dolores. Pedestrians on the west side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. Partial closures to the eastern sidewalk and a portion of the planned two-way Alameda Esplanade bike path would also be required. Pedestrian traffic on the eastern sidewalk would be controlled while certain construction activities are taking place during this construction phase to ensure safety. During these certain, specific construction activities, pedestrians on the east side would be routed along the sidewalk within LAUS property and on a temporary sidewalk along the northern edge of the planned LAUS Forecourt. This temporary sidewalk may also be used to access LAUS. A portion of the planned two-way Alameda Esplanade bike path would also be closed during construction hours, requiring bicyclists to utilize the same pedestrian detour outlined for the east side of Alameda Street. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would remain open, however. Accordingly, access to Union Station and El Pueblo would be maintained.

The westbound left turn lane and the eastbound right turn lane on Cesar E. Chavez Avenue would be closed during construction hours, but all other lanes (the eastbound left turn lane, two eastbound through lanes, two westbound through lanes, and the westbound through-right lane) of Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Non-Construction Hours. During non-construction hours of the structural steel and gondola equipment erection phase of construction under the No Deck Option, one northbound through lane, the northbound through-right lane, and one southbound through lane would remain open on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street. The northbound left turn lane and one northbound through lane would be shortened, but not closed, until reopening near the intersection of Cesar E. Chavez Avenue during non-construction hours. One southbound through lane, the eastern curbside drop off zone, and the planned Alameda Esplanade bike path would remain closed during non-construction hours due to construction staging.

A partial pedestrian detour would be required during non-construction hours along the portion of the western sidewalk along the Placita de Dolores due to the western sidewalk's partial closure. Pedestrians on the west side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. A partial pedestrian detour would also be required due to the closure of a portion of the eastern sidewalk along the planned LAUS Forecourt. Pedestrians on the east side would be routed along the sidewalk within LAUS property before crossing on a temporary sidewalk along the northern edge of the planned LAUS Forecourt to return to Alameda Street. This temporary sidewalk may also be used to access LAUS. A portion of the planned two-way Alameda Esplanade bike path would also be closed during non-construction hours, requiring bicyclists to utilize the same pedestrian detour outlined for the east side of Alameda Street. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would remain open, however. Accordingly, access to Union Station and El Pueblo would be maintained.

All lanes on Cesar E. Chavez Avenue would remain open during non-construction hours. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Vertical Circulation, Hardscape and Landscape, Interior Work (Full-Time Conditions): Under the No Deck Option, during the approximately 27-week vertical circulation, hardscape and landscape, and interior work phase of construction, no lanes would be closed on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street, with the exception of periodic closures for asphalt / re-striping on 10 non-consecutive working days. The northbound curbside drop off zone along Alameda Street would be closed full-time during this phase of construction.

A partial pedestrian detour would be required during this phase of construction along the portion of the western sidewalk along the Placita de Dolores. Pedestrians on the west side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. A partial pedestrian detour would also be required due to the closure of a portion of the eastern sidewalk along the planned LAUS Forecourt. Pedestrians on the east side would be routed along the sidewalk within LAUS property and on a temporary sidewalk along the northern edge of the planned LAUS Forecourt. This temporary sidewalk may also be used to access LAUS. A portion of the planned two-way Alameda Esplanade bike path would also be closed, requiring bicyclists to utilize the same pedestrian detour outlined for the east side of Alameda Street. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would remain open, however. Accordingly, access to Union Station and El Pueblo would be maintained.

All lanes on Cesar E. Chavez Avenue would remain open through the entirety of this phase. All sidewalks on Cesar E. Chavez Avenue would remain open for pedestrian access.

Therefore, during construction of the Alameda Station and the suspended above-grade cables and cabins following the proposed Project alignment, temporary disruption to access would occur between the El Pueblo, Downtown, and Chinatown communities. However, throughout construction, these communities, including LAUS, will remain accessible from other surrounding streets and pedestrian detours would be provided such that these closures would not physically divide these communities.

Alameda Tower

During select phases of construction of the Alameda Tower lane closures during construction hours are required on Alameda Street between Main Street and Alhambra Street while retaining access for adjacent properties, and partial lane closures on Alhambra Street.

Foundations and Columns (Full-Time Conditions): During the approximately 16-week foundations and columns phase of construction, the northbound left turn lane, one northbound through lane, and three southbound through lanes on Alameda Street between Main Street and Alhambra Avenue would remain open. Construction of this phase would require the full-time closure to one northbound through lane on Alameda Street between Main Street and Alhambra Avenue, as well as the parking lane on the east side of Alameda Street.

The western sidewalk on Alameda Street would remain open for pedestrian access during this phase, and the eastern sidewalk along the Alameda Triangle on Alameda Street between Main Street and Alhambra Avenue would be closed.

The westbound left turn lane would be closed full-time on Alhambra Avenue while the shared westbound left/westbound right turn lane would remain open. The sidewalk on Alhambra Avenue would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection: The structural steel and gondola equipment erection phase of construction would last approximately 26 weeks.

Weeks 1-3 Full-Time Conditions. During the first three weeks of the structural steel and gondola equipment erection phase, conditions would be the same as described for the foundations and columns phase above.

Weeks 4-26 Construction Hours. During construction hours of weeks 4 through 26 of the structural steel and gondola equipment erection phase of construction, no lanes on Alameda Street between Main Street and Alhambra Avenue would be open, except for the westernmost southbound through lane which would remain open for local and emergency access during construction hours to allow continued access to businesses along this portion of Alameda Street. All other travel lanes on Alameda Street between Main Street and Alhambra Avenue (the northbound left turn lane, two northbound through lanes, and three southbound through lanes), and the parking lane on the east side of Alameda Street would be closed.

The western sidewalk would remain open for pedestrian access during construction hours. The eastern sidewalk along the Alameda Triangle on Alameda Street between Main Street and Alhambra Avenue would be closed during construction hours.

Closures along other portions of Alameda Street would be required to facilitate the construction road closures on Alameda Street between Main Street and Alhambra Avenue.[44]

The westbound left turn lane on Alhambra Avenue would require full-time closure, while the shared westbound left/westbound right turn lane would remain open. The sidewalk on Alhambra Avenue would remain open for pedestrian access.

Weeks 4-26 Non-Construction Hours. During non-construction hours of weeks 4 through 26 of the structural steel and gondola equipment erection phase of construction, three southbound through lanes would be open. The parking lane on the east side of Alameda Street, the northbound left turn lane, and two northbound through lanes on Alameda Street between Main Street and Alhambra Street would remain closed during non-construction hours.

The western sidewalk would remain open for pedestrian access during non-construction hours, but the eastern sidewalk would remain closed along the Alameda Triangle on Alameda Street between Main Street and Alhambra Avenue.

Closures along other portions of Alameda Street would be required to facilitate the construction road closures on Alameda Street between Main Street and Alhambra Avenue.[45]

All lanes to the north of the intersection of Alameda Street and Alhambra Avenue would remain open during non-construction hours.

The westbound left turn lane on Alhambra Avenue would require full-time closure, while the shared westbound left/westbound right turn lane would remain open. The sidewalk on Alhambra Avenue would remain open for pedestrian access.

Hardscape and Landscape, Interior Work (Full-Time Conditions): The approximately 14-week hardscape and landscape, interior work phase of construction would require no lane closures nor the closure of the parking lane on the east side of Alameda Street between Main

[44] All northbound through travel in this section of Alameda Street would be rerouted to Main Street or to Ord Street. One existing northbound through lane would be used as a right turn only lane from Alameda Street onto Main Street, and the existing right turn lane onto Main Street would be maintained. The existing northbound left turn pocket from Alameda Street onto Ord Street would be closed, and all northbound left turns would occur from the westernmost existing through lane. All southbound lanes on Alameda Street between Bauchet Street and Main Street would remain open along with both eastern and western sidewalks.
All northbound lanes on Alameda Street between Alhambra Avenue and Alpine Street would remain open along with both eastern and western sidewalks. Two southbound lanes on Alameda Street between Alhambra Avenue and Alpine Street would be closed during construction hours, while the westernmost southbound through lane would remain open for local and emergency access to allow continued access to businesses along this section of Alameda Street.
All northbound lanes on Alameda Street between Alpine Street and College Street would remain open along with both eastern and western sidewalks. Two southbound through lanes in this section of Alameda Street would be tapered towards closure at the Alameda Street and Alpine Street intersection, and the southbound through right lane would be restricted to right turn only. The southbound left turn lanes/center striped median on Alameda Street and College Street would remain open.
The westbound left turn lane on Alpine Street would be closed during construction hours, while the rest of the lanes on Alpine Street would remain open. Both sidewalks on Alpine Street would remain open for pedestrian access.

[45] All northbound through travel in this section of Alameda Street would be rerouted to the right onto Main Street or to the left onto Ord Street. One existing northbound through lane would be used as a right turn only lane from Alameda Street onto Main Street, and the existing right turn lane onto Main Street would be maintained. The existing northbound left turn pocket from Alameda Street onto Ord Street would be closed, and all northbound left turns would occur from the westernmost existing through lane. All southbound lanes on Alameda Street between Bauchet Street and Main Street would remain open along with both eastern and western sidewalks.

Street and Alhambra Avenue, with the exception of periodic closures for asphalt / re-striping on 10 non-consecutive working days on the northbound left turn lane, two northbound through lanes, and the parking lane on the east side of Alameda Street, as well as the northbound left turn pocket directly to the south of the intersection of Alameda Street and Main Street.

This phase would require the full-time closure of the eastern sidewalk along the Alameda Triangle on Alameda Street between Main Street and Alhambra Avenue. The western sidewalk would remain open for pedestrian access.

No lane closures on Alhambra Avenue are required during this phase, with the exception of periodic closures for asphalt / re-striping on 10 non-consecutive working days on the westbound left turn lane on Alhambra Avenue. The sidewalk on Alhambra Avenue would remain open for pedestrian access.

Construction of the Alameda Tower would require lane closures during construction hours on Alameda Street between Main Street and Alhambra Street while retaining access for adjacent properties, and partial lane closures on Alhambra Street. These closures would temporarily disrupt vehicular, bicycle, and pedestrian access to the Chinatown community. However, throughout construction, and as described above, Chinatown will remain accessible from other surrounding streets and these closures would not physically divide this community.

Alpine Tower

Construction of the Alpine Tower would require partial lane closures during construction hours on Alameda Street and Alpine Street.

Foundations and Columns (Full-Time Conditions): During the approximately 15-week foundations and columns phase of construction, to the north of the intersection of Alameda Street and Alpine Street, one northbound through lane, the southbound left turn lane, two southbound through lanes, and the southbound through-right lane would remain open on Alameda Street. This phase of construction would require full-time closure of one northbound through lane and a portion of the northbound parking lane on Alameda Street to the north of its intersection with Alpine Street.

Additional road closures on Alameda Street would be required to facilitate the construction road closures near of the intersection of Alameda Street and Alpine Street.[46]

The western sidewalk on Alameda Street would remain open for pedestrian access, but a portion of the eastern sidewalk on Alameda Street to the north of its intersection with Alpine Street would be closed during this phase.

On Alpine Street between Main Street and Alameda Street, two westbound through lanes, the westbound left turn lane, and two eastbound through lanes would remain open. The northernmost westbound through lane would be reconfigured to be a through-right turn lane to allow for a right turn onto Alameda Street because construction of this phase would require the closure of Alpine Street's westbound right turn lane onto Alameda Street.

The southern sidewalk on Alpine Street would remain open for pedestrian access. The northern sidewalk on Alpine Street between Alameda Street and Main Street would be closed during this

[46] To the south of the intersection of Alameda Street and Alpine Street, the northbound right turn lane would be closed and the eastern northbound through lane would be used as a right turn only lane from Alameda Street onto Alpine Street.

phase. To the west of the intersection of Alpine Street and Alameda Street, all lanes and sidewalks would remain open on Alpine Street.

Structural Steel and Gondola Equipment Erection: The structural steel and gondola equipment erection phase for the Alpine Tower would last approximately 28 weeks.

Weeks 1-3 Full-Time Conditions. During the first three weeks of the structural steel and gondola equipment erection phase, conditions would be the same as described for the foundations and columns phase above.

Weeks 4-28 Construction Hours. During construction hours of weeks 4 through 28 of the structural steel and gondola equipment erection phase of construction, to the north of the intersection of Alameda Street and Alpine Street, two southbound through lanes and the southbound through-right lane would remain open on Alameda Street. The easternmost southbound through lane would be reconfigured to be a through-left turn lane because Alameda Street's southbound left turn lane would be closed during construction hours. During construction hours, two northbound through lanes and the northbound parking lane would also be closed.

Additional road closures on Alameda Street would be required to facilitate the construction road closures near the intersection of Alameda Street and Alpine Street.[47]

The western sidewalk would remain open on Alameda Street for pedestrian access both north and south of the intersection of Alameda Street and Alpine Street. A portion of the eastern sidewalk on Alameda Street to the north of its intersection with Alpine Street would be closed during construction hours. The eastern sidewalk south of the intersection would remain open during construction hours.

On Alpine Street between Main Street and Alameda Street, the two eastbound through lanes would remain open during construction hours. The westbound right turn lane, two westbound through lanes, and the westbound left turn lane would be closed during construction hours.

The southern sidewalk on Alpine Street between Main Street and Alameda Street would remain open for pedestrian access during construction hours. The northern sidewalk on Alpine Street would be closed during construction hours.

Additional road closures on Alpine Street would be required to facilitate the construction road closures near of the intersection of Alameda Street and Alpine Street.[48]

Weeks 4-28 Non-Construction Hours. During non-construction hours for weeks 4 through 28 of this phase of construction, to the north of the intersection of Alameda Street and Alpine Street, the southbound left turn lane, two southbound through lanes, and the southbound through-right lane would remain open. The northbound parking lane and two northbound through lanes would be closed.

[47] To the south of the intersection of Alameda Street and Alpine Street, the western northbound through lane and the northbound right turn lane would be closed, and the eastern northbound through lane would be used as a right turn only lane from Alameda Street onto Alpine Street.

[48] To the west of the intersection of Alpine Street and Alameda Street, two westbound through lanes, one eastbound through lane, and one eastbound through-right lane would remain open on Alpine Street, while the eastbound left turn lane would be closed during construction hours. The northern and southern sidewalks on this section of Alpine Street would remain open for pedestrian access.

The western sidewalk on Alameda Street both north and south of its intersection with Alpine Street would remain open for pedestrian access. The eastern sidewalk north of the intersection would be closed during non-construction hours. The eastern sidewalk south of the intersection would remain open during non-construction hours.

On Alpine Street between Main Street and Alameda Street, the two eastbound through lanes would remain open during non-construction hours. The westbound right turn lane, two westbound through lanes, and the westbound left turn lane would remain closed during non-construction hours.

Additional road closures on Alpine Street would be required to facilitate the construction road closures near of the intersection of Alameda Street and Alpine Street.[49]

The southern sidewalk on Alpine Street would remain open for pedestrian access during construction hours. The northern sidewalk on Alpine Street between Alameda Street and Main Street would be closed during non-construction hours.

Hardscape and Landscape, Interior Work (Full-Time Conditions): During the approximately 12-week hardscape and landscape, interior work phase of construction, all travel lanes would remain open during this phase of construction with the exception of periodic closures for asphalt/ re-striping on 10 non-consecutive working days. Construction of this phase would require full-time closures of a portion of the eastern sidewalk on Alameda Street to the north of its intersection with Alpine Street and the northern sidewalk on Alpine Street between Alameda Street and Main Street; however, the western sidewalk on Alameda Street and the southern sidewalk on Alpine Street would remain open for pedestrian access full-time during this phase.

Construction of the Alpine Tower would require partial lane closures during construction hours on Alameda Street and Alpine Street. These closures would temporarily disrupt vehicular, bicycle, and pedestrian access to the Chinatown community. However, throughout construction, Chinatown will remain accessible from other surrounding streets and these closures would not physically divide this community.

Chinatown/State Park Station

Construction of the Chinatown/State Park Station would require partial lane closures on Spring Street near the southern end of the Los Angeles State Historic Park, while still maintaining local and emergency access for adjacent properties as well as pedestrian access along Spring Street.

Construction activity at the Chinatown/ State Historic Park is estimated to occur over a 19-month period. The temporary construction area would require a maximum area of 69,000 square feet or 1.59 acres, including, as detailed below, partial lane closures on Spring Street. The portion of the construction area in the Los Angeles State Historic Park is along Spring Street within the southernmost point of the park. While a portion of the western sidewalk along Spring Street would be temporarily closed during construction, a covered pedestrian sidewalk on the roadway along the western side of Spring Street would be provided to maintain pedestrian access.

[49] To the west of the intersection of Alpine Street and Alameda Street, two westbound through lanes, one eastbound through lane, and one eastbound through-right lane would remain open on Alpine Street, while the eastbound left turn lane would be closed during non-construction hours. The northern and southern sidewalks on this section of Alpine Street would remain open for pedestrian access.

Foundations and Columns (Full-Time Conditions): During the approximately 21-week foundations and columns phase of construction, both northbound through lanes and the northbound parking lane would remain open on Spring Street near the southern end of the Los Angeles State Historic Park. The westernmost northbound lane would be operated as a center reversible lane which would serve the peak travel direction, i.e., southbound travel during the weekday morning commute periods, and northbound travel during the weekday evening commute periods. The two-way left turn lane would also remain open but would be reconfigured to be used as a southbound through lane because construction of this phase would require the full-time closure of the two southbound through lanes. The southbound parking lane on Spring Street near the southern end of the Los Angeles State Historic Park would also be closed during this phase of construction.

While construction would occur along existing access points to nearby properties, local and emergency access to these properties would be maintained during this phase of construction.

While the western sidewalk would be closed during this phase of construction, one southbound through lane will be reconfigured to be used as a rerouted covered pedestrian path on the roadway along the western edge of Spring Street. The eastern sidewalk along Spring Street would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection (Full-Time Conditions): During the approximately 28-week structural steel and gondola equipment phase of construction, one northbound through lane would remain open on Spring Street near the southern end of the Los Angeles State Historic Park, which would be operated as a center reversible lane to serve the peak travel direction, i.e., southbound travel during the weekday morning commute periods, and northbound travel during the weekday evening commute periods. The northbound parking lane would be reconfigured to be used as a northbound through lane during this phase of construction. The two-way left turn lane and portions of one northbound through lane would be reconfigured to be used as a southbound through lane because construction of this phase would require full-time closure of the two southbound through lanes and the southbound parking lane.

While construction would occur along existing access points to nearby properties, local and emergency access to these properties would be maintained.

The eastern sidewalk along Spring Street would remain open for pedestrian access. While a portion of the western sidewalk would be closed, a covered pedestrian sidewalk on the roadway along the western side of Spring Street would be provided to maintain pedestrian access.

Vertical Circulation, Hardscape and Landscape, Interior Work (Full-Time Conditions): During the approximately 40-week vertical circulation, hardscape and landscape, and interior work phase of construction, all travel lanes on Spring Street would remain open during this phase of construction with the exception of periodic closures on one southbound through lane and the southbound parking lane for asphalt / re-striping on 10 non-consecutive working days.

While this phase of construction would require full-time closure of a portion of the western sidewalk on Spring Street near the southern end of the Los Angeles State Historic Park, a rerouted covered pedestrian sidewalk on the roadway within the existing southbound parking lane along the western side of Spring Street would be provided to maintain pedestrian access. The southbound parking lane would be closed during this phase of construction to allow for this covered pedestrian sidewalk. However, the rerouted pedestrian access would be closed during the 10 non-consecutive days of asphalt / restriping, occurring on the existing southbound parking lane. The eastern sidewalk on Spring Street would remain open for pedestrian access at all times.

Construction of the Chinatown/State Park Station would require partial lane closures on Spring Street near the southern end of the Los Angeles State Historic Park. These closures would temporarily disrupt vehicular, bicycle, and pedestrian access to the Chinatown community, as well as the Mission Junction community to the northwest. However, throughout construction, these communities will remain accessible from other surrounding streets and pedestrian detours would be provided such that these closures would not physically divide these communities.

Broadway Junction

During certain, limited phases of construction of the Broadway Junction, temporary lane closures would be required on North Broadway between Cottage Home Street and Savoy Street, and Bishops Road between North Broadway and Savoy Street, while maintaining local and emergency access for adjacent properties as well as pedestrian access along Broadway.

Foundations and Columns (Full-Time Conditions): During the approximately 28-week foundations and columns phase of construction, one northbound through lane, one southbound through lane, and the southbound through-right lane would remain open on North Broadway. The other northbound through lane would also remain open and would be reconfigured to be a through-left turn lane, as this phase of construction requires the closure of the northbound left turn lane onto Bishops Road. Construction of this phase would also require the full-time closure of the southbound parking lane on North Broadway.

A portion of the eastern sidewalk on North Broadway close to its intersection with Bishops Road would be closed during this phase of construction, however, a protected pedestrian sidewalk along the east side of North Broadway would be provided to maintain pedestrian access. While a portion of the western sidewalk on North Broadway would be closed, pedestrian detours would be provided along Savoy Street.

All Bishops Road travel lanes would remain open during this phase of construction, while the eastbound parking lane and the westbound parking shoulder would be partially closed. The Bishops Road southern sidewalk would remain open for pedestrian access.

Deck Shoring, Cribbing, and Erection (Full-Time Conditions): Following completion of the foundations and columns phase, a temporary deck would be constructed over portions of North Broadway and Bishops Road in order to minimize the closures of North Broadway and Bishops Road that would otherwise be required to close for the duration of the Broadway Junction's structural steel and gondola equipment phase. Installation of the temporary deck would take approximately two weeks and would require the full-time closure of all travel and parking lanes (the northbound left/center left turn lane, two northbound through lanes, the southbound through lane, the southbound through-right lane, and the northbound and southbound parallel parking lanes) on North Broadway between Cottage Home Street and Savoy Street, and all travel and parking lanes and shoulders on Bishops Road (the shared eastbound left/eastbound right turn lane, the westbound through lane, and the eastbound parallel parking lane and westbound parking shoulder) between North Broadway and Savoy Street.

Restricted local and emergency access would be provided to allow access to properties along North Broadway from southbound travel along North Broadway. Restricted local and emergency access would be provided for the properties along North Broadway from Cottage Home Street up until the area of closure located just south of the intersection of North Broadway and Bishops Road. Restricted local access would be provided to allow access to Cathedral High School's driveways. Emergency access would also be provided to Cathedral High School.

A protected pedestrian sidewalk along the east side of North Broadway would be provided to maintain pedestrian access. While a portion of the western sidewalk on North Broadway would be closed, pedestrian detours would be provided along Savoy Street.

The sidewalk along Bishops Road would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection (Full-Time Conditions): During the approximately 38-week structural steel and gondola equipment phase of construction, one northbound through lane, the southbound through lane and the southbound through-right lane would remain open on North Broadway. The other northbound through lane would also remain open and would be reconfigured to be a through-left turn lane, as this phase of construction requires the closure of the northbound left turn lane onto Bishops Road. Construction of this phase would also require the full-time closure of the southbound parking lane on North Broadway.

A portion of the eastern sidewalk on North Broadway close to its intersection with Bishops Road would be closed during this phase of construction, however, a protected pedestrian sidewalk along the east side of North Broadway will be provided to maintain pedestrian access. While a portion of the western sidewalk on North Broadway would be closed, pedestrian detours would be provided along Savoy Street.

All Bishops Road travel lanes would remain open during this phase of construction. The eastbound parking lane and the westbound parking shoulder would be partially closed. The Bishops Road sidewalk would remain open for pedestrian access.

Deck Removal (Full-Time Conditions): The temporary deck would be removed following completion of the structural steel and gondola equipment erection phase of construction. Removal of the deck would require the full-time closure of all travel and parking lanes on North Broadway (the northbound left/center left turn lane, two northbound through lanes, the southbound through lane, the southbound through-right lane, and the northbound and southbound parallel parking lanes) between Cottage Home Street and Savoy Street, and all travel and parking lanes and shoulders on Bishops Road (the shared eastbound left/eastbound right turn lane, the westbound through lane, and the eastbound parallel parking lane and westbound parking shoulder) between North Broadway and Savoy Street during the approximately three-week deck removal phase.

Restricted local and emergency access would be provided to allow access to properties along North Broadway from southbound travel along North Broadway throughout construction of the Broadway Junction. During certain, limited phases of construction, temporary lane closures would be required on North Broadway between Cottage Home Street and Savoy Street, and Bishops Road between North Broadway and Savoy Street, while maintaining local and emergency access for adjacent properties as well as pedestrian access along Broadway. Restricted local and emergency access would be provided for the properties along North Broadway from Cottage Home Street up until the area of closure located just south of the intersection of North Broadway and Bishops Road. Restricted local access would be provided to allow access to Cathedral High School's driveways. Emergency access would also be provided to Cathedral High School.

A protected pedestrian sidewalk along the east side of North Broadway will be provided to maintain pedestrian access. While a portion of the western sidewalk on North Broadway would be closed, pedestrian detours would be provided along Savoy Street.

The sidewalk along Bishops Road would remain open during this phase of construction.

Vertical Circulation, Hardscape and Landscape, Interior Work (Full-Time Conditions): During the approximately 29-week vertical circulation, hardscape and landscape, and interior work phase of construction, all travel lanes on North Broadway and Bishops Road would remain open, with the exception of periodic closures for asphalt / re-striping on 10 non-consecutive working days. All sidewalks would remain open, with the exception of periodic closures of the western sidewalk on North Broadway for asphalt / re-striping on 10 non-consecutive working days.

These closures of North Broadway and Bishops Road would temporarily disrupt access during the deck erection and deck removal phases of construction within the Chinatown community, as well as access to and between the Elysian Park community to the north, the Solano Canyon community to the northeast, and Chinatown to the southwest. Access would otherwise be maintained during the other phases of Broadway Junction's construction. These communities will also remain accessible from other surrounding streets and pedestrian detours would be provided such that these closures would not physically divide these communities.

Stadium Tower

The Stadium Tower would be constructed on private property and would not require any road closures. Therefore, construction of this Project component would not disrupt access between or within nearby communities.

Dodger Stadium Station

The Dodger Stadium Station would be constructed on private property and would not require any road closures. Therefore, construction of this Project component would not disrupt access between or within nearby communities.

Construction Impact Summary

As noted, the closures would be temporary and would only occur during the construction phase. Additionally, in some locations, closures would only occur during construction hours and some travel lanes would be restored during non-construction hours. Though these temporary closures during construction would disrupt vehicular, pedestrian, and bicycle access within and between communities, there would be a variety of options available for connections and access within the Project area, with Alameda Street, Alhambra Avenue, Alpine Street, Spring Street, and Broadway remaining partially open during different phases of construction. In addition, other options including the planned Alameda Esplanade bike path and the provision of pedestrian detours during certain phases of construction would allow for continued pedestrian access within the Project area. These communities will remain accessible from other surrounding streets, pedestrian detours would be provided, and these closures would not physically divide these communities. Construction impacts would therefore be less than significant.

As discussed in Section 3.17, Transportation, a Construction Traffic Management Plan would be prepared as part of the proposed Project in coordination with LADOT is included as Mitigation Measure TRA-B in order to mitigate transportation impacts. The Construction Traffic Management Plan (see Mitigation Measure TRA-B) would include street closure information, detour plans, haul routes, and a staging plan with review and approval from the City. In summary, construction of the proposed Project would not physically divide an established community because these would be temporary activities managed so that access within the community would be maintained.

Operational Impacts

No Impact. The proposed Project would provide first/last mile transit and pedestrian access within and between communities surrounding the proposed Project alignment. To do so, implementation of the proposed Project would require permanent lane reconfigurations on Alameda Street to accommodate the columns at the Alameda Station resulting in modifications to the northbound turn pocket on Alameda Street at the Alameda Station. Additionally, as shown in Figure 2-22 in Chapter 2, Project Description, the sidewalk adjacent to the Alameda Tower would be widened to facilitate pedestrian access, removing a portion of the existing parking lane at that location; however, travel lanes would remain in their existing configurations and would not impede adjacent vehicular and pedestrian circulation. To implement the above modifications, permanent travel lane or sidewalk closures would not be required and, upon completion of construction activities, all existing travel lanes along the Project alignment would continue to provide access to surrounding communities. In addition, the required aerial easements for the proposed Project alignment would not physically divide an established community because the aerial easement would not impede vehicular and/or pedestrian circulation by virtue of its aerial nature.

As discussed in Chapter 2, Project Description, one of the objectives of the proposed Project is to enhance community connectivity by providing first/last mile transit and pedestrian access and enhancements to areas that have historically been underserved, including Chinatown, Mission Junction, the Los Angeles State Historic Park, Elysian Park, Echo Park, and Solano Canyon. In support of this objective, the proposed Project would provide new access points within and between communities and locations along and near the ART alignment, including El Pueblo, LAUS, Chinatown, Mission Junction, Elysian Park, and Solano Canyon, resulting in increased community connectivity over existing conditions, in addition to providing a transit connection to the regional transit system accessible at LAUS. Additionally, the proposed Project would include a number of pedestrian enhancements and a mobility hub that would provide new multi-modal connection options. For instance, Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements at this location could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. Additionally, the Project Sponsor will request a program with the Los Angeles Dodgers on the potential for the Dodger Stadium Station to include a mobility hub where passengers would be able to access first and last mile multi-modal options to access Elysian Park and other nearby neighborhoods, including Solano Canyon. Consideration as to the mobility hub include securing Dodger Stadium and the surrounding surface parking, which are operated as an MLB stadium, Dodger Stadium Station would also include a pedestrian connection to Dodger Stadium, including hardscape and landscape improvements and potential seating.

As such, operation of the proposed Project would serve to enhance community connectivity and therefore would not physically divide an established community, and no impact would occur.

LUP-2: *Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

Less Than Significant Impact with Mitigation. The proposed Project alignment is subject to the policies, regulations, goals, and/or objectives of the Los Angeles State Historic Park General Plan and Los Angeles State Historic Park Interpretive Master Plan at the State level, SCAG's RTP/SCS at the regional level, the Dodger Stadium Conditional Use Permit, and the City of Los Angeles General Plan, including the Community Plans, Alameda District Specific Plan, Cornfield Arroyo Seco Specific Plan, City of Los Angeles Municipal Code and RIO District Ordinance at the local level. An evaluation of the proposed Project's consistency with these applicable land use plans, policies, and regulations is provided in Tables 3.11-1 through 3.11-6. State Parks has determined that the proposed Project would be inconsistent with the Los Angeles State Historic Park General Plan because the identified land uses in the General Plan's Preferred Park Concept Elements did not contemplate a transit station like the proposed Project's Chinatown/State Park Station. State Parks considers this inconsistency a potentially significant impact. Therefore, Mitigation Measure LUP-A would be implemented to require the proposed Project to obtain an amendment to the Los Angeles State Historic Park General Plan ("LASHP General Plan Amendment"). The LASHP General Plan Amendment proposes to amend the Preferred Park Concept Elements to include a "Transit" land use to allow for the proposed Project's use, as well as to address the state historic park classification as defined in Public Resources Code 5019.59, which permits facilities for the comfort and enjoyment of the visitors, such as access. No other inconsistencies with those policies were identified during the analysis.

Los Angeles State Historic Park General Plan

The northern portion of the Chinatown/State Park Station would be constructed within the park property (refer to Figure 2-13 in Chapter 2, Project Description), and the suspended above-grade cables and cabins would travel over the park's western edge as the alignment travels north from the Chinatown/State Park Station towards the Broadway Junction at the intersection of North Broadway and Bishops Road. The Chinatown/State Park Station would have a footprint of 2,195 square feet in the park, and the station canopy would have an overhang of 9,320 square feet over the park. The proposed Project's required aerial clearance width over the Los Angeles State Historic Park would be 53 feet 2 inches wide with an area of approximately 59,470 square feet, plus an Additional Separation Buffer.

The Los Angeles State Historic Park General Plan identifies four types of land uses in its Preferred Park Concept Elements: Cultural Activities, Recreation Open Space, Garden Open Space, and Natural Open Space. These land uses do not contemplate a transit station like the Chinatown/State Park Station. Thus, pursuant to Public Resources Code 5002.2, the proposed Project would require a LASHP General Plan Amendment. The LASHP General Plan Amendment proposes to amend the Preferred Park Concept Elements to include a "Transit" land use to allow for the proposed Project's use, as well as to address the state historic park classification as defined in Public Resources Code 5019.59, which permits facilities for the comfort and enjoyment of the visitors, such as access. The General Plan Amendment is subject to the review and approval by the State Park Commission, which retains its independent authority related to the proposed Project per Public Resources Code 21174.

An analysis of the proposed Project's consistency with applicable Los Angeles State Historic Park General Plan Goals and Guidelines is discussed in Table 3.11-1. As discussed in the table, the Chinatown/State Park Station would be consistent with the goals and guidelines of the Los Angeles State Historic Park General Plan, including those that focus on recreation, aesthetics, interpretation, and access and circulation and thus would not conflict with its goals, policies, and objectives that were adopted for the purpose of avoiding or mitigating an environmental effect. However, as described above, pursuant to Public Resources Code 5002.2, the proposed Project would require the Los Angeles State Historic Park General Plan Amendment to amend the Preferred Park Concept Elements to include a "Transit" land use to allow for the proposed

Project's use, as well as to address the state historic park classification as defined in Public Resources Code 5019.59, which permits facilities for the comfort and enjoyment of the visitors, such as access. The General Plan Amendment is subject to the review and approval by the State Park Commission, which retains its independent authority related to the proposed Project per Public Resources Code 21174.

Table 3.11-1: Project Consistency with Applicable Los Angeles State Historic Park General Plan Policies

Policy	Consistency Discussion
Recreation Goal: Provide recreational areas in the Park for visitors to improve their health and wellness in harmony with the physical surroundings that are compatible with the natural and historic nature of the Park. • **Guideline 1:** Provide a flexible system of open space opportunities that serve a broad cross-section of the City's residents and statewide visitors. • **Guideline 2:** Integrate potential recreational uses with other operational facilities to ensure that the planning, design and construction preserve and emphasize key elements of the natural and cultural environment. • **Guideline 3:** Integrate recreational programs with the Park's interpretive programs. • **Guideline 4:** Provide appropriate recreation opportunities in coordination with others in the regional recreation network (Rio de Los Angeles SP, Elysian Park, L.A. River Greenway, city parks, schools, etc.).	The proposed Project would provide recreation opportunities in coordination with the regional recreation network by providing a connection from the Los Angeles State Historic Park to other local transit lines along the Project alignment and the regional transit system accessible at LAUS. The Chinatown/State Park Station would provide transit access to the Los Angeles State Historic Park and to nearby neighborhoods and land uses, including Chinatown, Elysian Park, Solano Canyon, and the Mission Junction neighborhood which includes the William Mead Homes public housing complex, and the Los Angeles River. Additionally, the Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. By providing expanded transit access to parks, including the Los Angeles State Historic Park, Elysian Park, and the Los Angeles River, the proposed Project would provide additional opportunities for recreational use for a broad cross-section of visitors and the surrounding neighborhoods. Further, Los Angeles State Historic Park does not include any structured sports facilities or fields. Instead, it is focused on passive uses, as well as special events including large scale music events involving multiple stages throughout the park. The proposed Project would not interfere with the passive uses currently enjoyed at the Los Angeles State Historic Park. The proposed Project's aerial clearance would allow the continued use of the park, with certain limitations. As such, the proposed Project would be consistent with this goal.
Aesthetic Goal: Protect and enhance scenic viewsheds and features and preserve the visitor's experience of the surrounding landscape by minimizing adverse impacts to aesthetic resources. • **Guideline 1:** Landscaping, structures, and other facilities should be sited to be sensitive to scenic views from and through the Park. Facilities should be sited to minimize the impact on views from key viewpoints and to protect and/or emphasize positive scenic views (e.g. views toward the downtown skyline, Broadway Bridge, Elysian Park). • **Guideline 2:** State Parks should work with adjoining jurisdictions regarding land use and development within the Park viewshed that might affect the site and its aesthetic resources. For example, State Parks should coordinate with the City of Los Angeles with	As detailed in Chapter 3.1 Aesthetics and further in the *Visual Impact Assessment for the Los Angeles Aerial Rapid Transit Project* prepared for the proposed Project, the proposed Project would protect and enhance scenic viewsheds and features and preserve the visitor's experience of the surrounding landscape by minimizing impacts to aesthetic resources. The Project's design would incorporate appropriate urban design elements at the neighborhood level, preserve natural viewsheds of hillside areas, as well as protect additional open space and aesthetics resources consistent with policies from the Los Angeles State Historic Park General Plan The Project's design and building materials would complement the architectural themes of the neighborhood and would complement the visual character of the existing buildings in the area. The Chinatown/State Parks Station's location would not block any designated scenic vistas, alter scenic resources, or block panoramic views. Additionally, a potential impact to visual quality and character is minimized for this station because the visual changes of the proposed Project are minimized by the location of the Chinatown/State Park Station, which is south of the majority of the approximately

Table 3.11-1: Project Consistency with Applicable Los Angeles State Historic Park General Plan Policies

Policy	Consistency Discussion
the planning and development of the proposed North Spring Street improvements**.**	32-acre park space. The adjacent neighborhoods have a mix of architectural styles and building materials and colors, including modern style buildings, traditional Chinese architecture within the adjacent Chinatown community, and open space areas. The project components would consist of a modern architectural design, which would complement the existing modern style buildings in this area. In addition, the neutral light-tone gray of the Project components would be consistent with modern structures in the surrounding urban environment. The new amenity building intended for use by LA ART riders and park visitors alike are designed to reflect the scale and materiality of the existing visitor amenity buildings located within the Los Angeles State Historic Park. The proposed Project includes entitlements and approvals, such as design approvals, plan approvals, creation of a Specific Plan, and other discretionary approvals and ministerial permits to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards throughout the Project alignment. Required permits and approvals are listed in Section 2.11, Project Description. The development standards would recognize the Project's unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system. The design standards included in the proposed Project's entitlements and approvals would enhance the visual identity and character of the proposed Project and its surrounding communities, and would ensure visual compatibility with adjacent development, as well as the Project area's overall community character. As such, the operation of the proposed Project would not substantially degrade the existing visual character or quality of public views along the Project alignment.
Aesthetic Goal: Integrate the Park's vision into the design of park facilities and programs. • **Guideline 3:** Create design guidelines that establish an architectural vocabulary that can be used for facilities throughout the Park. The intent is to establish a cohesive design theme through the use of similar styles and/or materials. The design of pedestrian bridges, fencing, lighting, trails, signage, and other park infrastructure should be consistent with the overall design guidelines and with the Park's vision and educational, recreational, and environmental objectives. • **Guideline 4:** Establish access points into the Park and develop design standards for these "gateway" areas that will create a sense of arrival and establish an initial identity and sense of place for the Park. Design standards and guidelines for access points should distinguish primary and secondary gateways. • **Guideline 5:** Create a variety of visitor experiences by providing visitors with positive	The proposed Project would serve as an access point to the Los Angeles State Historic Park as the northern portion of the Chinatown/State Park Station would be integrated into the southern boundary of the Los Angeles State Historic Park. The Chinatown/State Park Station would include a passenger boarding platform, mezzanine, elevators, stairs, as well as park amenities, including concessions, restrooms, and a breezeway connecting the concessions and restrooms. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. By providing a new transit option to connect to the Los Angeles State Historic Park and pedestrian access enhancements, the proposed Project would establish a new access point to the Los Angeles State Historic Park with design elements consistent with the Los Angeles State Historic Park. The proposed Project includes entitlements and approvals, such as design approvals, plan approvals, creation of a Specific Plan, and other discretionary approvals and ministerial permits to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards throughout the

Table 3.11-1: Project Consistency with Applicable Los Angeles State Historic Park General Plan Policies

Policy	Consistency Discussion
natural fragrances and sounds, such as the scent of landscape plantings and the sounds of birds and water. Consider buffering traffic and transit line noise with appropriate materials and techniques (for example, the sound of cascading water masking unwanted traffic noise).	Project alignment. Required permits and approvals are listed in Section 2.11, Project Description. The development standards would recognize the Project's unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system. The design standards included in the proposed Project's entitlements and approvals would enhance the visual identity and character of the proposed Project and its surrounding communities, and would ensure visual compatibility with adjacent development, as well as the Project area's overall community character. As such, the proposed Project would be consistent with this goal.
Concessions Goal: Consider appropriate concessions to expand and enhance visitor services. Possible concessions may include retail sales, refreshments, and cultural arts and crafts. • **Guideline 1:** Develop a Concessions Plan that recommends potential concession opportunities in the Park. These concession opportunities should enhance the recreational and/or educational experience at the Park and be compatible with the Park's vision, purpose, classification and guidance for aesthetics and resource values.	The Project proposes park amenities at Chinatown/State Park Station that would include approximately 740 square feet of concessions, 770 square feet of restrooms, and a 220 square foot covered breezeway connecting the concessions and restrooms. The proposed concessions space would be considered a benefit for visitors as it would service those using the proposed hardscape, landscape, shade structure, and seating improvements proposed by the Project, as well as visitors to the Los Angeles State Historic Park. As such, the proposed Project would be consistent with the goal of enhancing visitor services with planned concessions.
Park Facilities Goal: Strive toward distinctive and high-quality facilities that represent the integrity of California State Parks. Design and maintenance of park facilities should embody forward-thinking design theories and produce meaningful places and spaces worthy of preservation by future generations and accessible to all. • **Guideline 1**: Provide visitor use facilities that offer the opportunity for diverse visitor experiences. Facilities will be placed to maximize visitor and staff use while minimizing negative effects on viewsheds, cultural or natural resources, or user conflicts. • **Guideline 4:** Develop visitor use facilities to accommodate changing visitor uses and accessibility needs, population demographics, and increases in visitation.	The proposed Project would develop visitor use facilities at the Chinatown/State Park Station that would accommodate changing visitor uses, accessibility needs, and increases in visitation. The length and sizing of the arrival/departure platforms for the Chinatown/State Park Station would be designed to be compliant with the accessibility requirements of the Americans with Disabilities Act (ADA). In addition, the Chinatown/State Park Station would include a passenger boarding platform, mezzanine, elevators, stairs, as well as park amenities, including concessions, restrooms, and a breezeway connecting the concessions and restrooms. The potential pedestrian enhancements at Chinatown/State Park Station would provide an ADA-compliant walking path with shade and seating for pedestrians (including seniors) connecting Metro's L Line (Gold) station to the Chinatown/State Park Station. In addition, a pedestrian plaza is proposed at the base of the Chinatown/State Park Station, providing a potential gathering space supported by proposed new restrooms, concessions, and seating improvements in the Los Angeles State Historic Park. As such, the proposed Project would be consistent with this goal.
Education and Interpretation Goal: Assist the Department in meeting its goal of increased diversity by reducing barriers, strengthening partnerships, and providing interpretive facilities and programs that encourage public participation. • **Interpretation 13:** Develop and strengthen partnerships and relationships with local park	The Chinatown/State Park Station, as a first/last mile transit connection, would provide a link to and from the public institutions at El Pueblo de Los Angeles and LAUS and to nearby neighborhoods and land uses, including Chinatown, Elysian Park, Solano Canyon, and the Mission Junction neighborhood.

Table 3.11-1: Project Consistency with Applicable Los Angeles State Historic Park General Plan Policies

Policy	Consistency Discussion
departments, museums, cultural institutions and other public institutions to encourage collaboration to develop interpretive facilities and programs that meet the needs of the area's residents and those of other Californians, and that complement or enhance existing facilities and programs in the Los Angeles area.	Additionally, there will be opportunities at the Chinatown/State Park Station to incorporate interpretive programming enhancements, such as exhibits, displays, and public art. As such, the proposed Project is would be consistent with implementation of the Education and Interpretation Goal.
Access and Circulation Goal: Establish a pattern of circulation and access for all visitors, to include integrated and efficient multi-modal transportation, that allows clear choices for visitor arrival, departure, and travel throughout the Park, while creating a sense of place. • **Guideline 1:** Create a sense of entry and arrival at the Park. Provide easily accessible orientation and information that will permit visitors to choose from a range of available park experiences. • **Guideline 2:** Minimize on-site parking and vehicular circulation within the park to allow for maximum open space and visitor-serving activity areas. Seek and encourage public parking in adjacent and surrounding areas, including North Spring Street. • **Guideline 3:** Explore opportunities to link pedestrian and cycling trails within the Park with neighborhood and regional transportation systems, including regional trails. • **Guideline 4:** Explore opportunities to provide convenient and safe pedestrian and cycling access throughout the Park, with connections from communities along North Broadway. Coordinate with the Metropolitan Transit Authority (MTA) to consider pedestrian bridge possibilities over the Gold Line right of way.	The proposed Project would provide a connection from the Los Angeles State Historic Park to other local transit lines along the Project alignment and the regional transit system accessible at LAUS. Specifically, the Chinatown/State Park Station would provide transit access to the Los Angeles State Historic Park and to nearby neighborhoods and land uses, including Chinatown, Elysian Park, Solano Canyon, and the Mission Junction neighborhood, which includes the William Mead Homes public housing complex, and the Los Angeles River. The Chinatown/State Park Station would also include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements at the Chinatown/State Park Station could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge, which would facilitate connections to communities along North Broadway. This intermediate station would provide a more direct access to the Park than the existing Metro L Line (Gold) station in Chinatown for Park users, as well as for event attendees on the days that the Los Angeles State Historic Park hosts events, providing more of a sense of entry and arrival at the Park. The provision of passenger stations would reduce the need for some visitors to drive to and park their vehicles at various cultural, commercial, entertainment, and open space/recreation destinations along the Project alignment. As such, by providing an additional transit connection to the Los Angeles State Historic Park, a mobility hub, and pedestrian access enhancements, the proposed Project would be consistent with this goal.

Source: California State Department of Parks and Recreation, Los Angeles State Historic Park General Plan and Final Environmental Impact Report, June 2005.

As noted above, State Parks considers there to be an inconsistency between the proposed Project and the Los Angeles State Historic Park General Plan and therefore a potentially significant impact because the Los Angeles State Historic Park General Plan does not identify transit as a use for the Park. Mitigation Measure LUP-A would be implemented to require the proposed Project to obtain a LASHP General Plan Amendment. The LASHP General Plan Amendment proposes to amend the Preferred Park Concept Elements to include a "Transit" land use to allow for the proposed Project's use, as well as to address the state historic park classification as defined in Public Resources Code 5019.59, which permits facilities for the comfort and enjoyment of the visitors, such as access. With implementation of Mitigation Measure

LUP-A, impacts related to inconsistencies with the Los Angeles State Historic Park General Plan would be reduced to a less than significant level. Therefore, impacts would be less than significant with mitigation.

Los Angeles State Historic Park Interpretive Master Plan

The Los Angeles State Historic Park Interpretive Master Plan provides suggestions and recommendations for interpretive facilities, programs, and services for the park based on the goals and guidelines of the Los Angeles State Historic Park General Plan. The Los Angeles State Historic Park Interpretive Master Plan is based extensively on direction provided in the Los Angeles State Historic Park General Plan. The Interpretive Master Plan shares the same goals and guidelines regarding Educational and Interpretive Goals as the Los Angeles State Historic Park General Plan. As the Interpretive Master Plan was created under the scope of the Los Angeles State Historic Park General Plan, the Project's consistency with the Los Angeles State Historic Park General Plan (as outlined in Table 3.11-1) would also apply to the Project's consistency with the Interpretive Master Plan. As such, the impact related to consistency with this plan would be less than significant.

Dodger Stadium Conditional Use Permit

The proposed Project is consistent with the Dodger Stadium CUP, which provides for appurtenant and ancillary facilities and uses to the MLB stadium and contemplates that space would be provided on the Dodger Stadium property for "mass transportation devices." Moreover, the CUP accounted for the reduction in the number of private automobiles drive to stadium events. Within two hours prior to the start of a game or event at Dodger Stadium, up to 10,000 people could be transported to the stadium via the proposed Project. Given the capacity of this system, approximately 20 percent of the fans could take aerial transit connected to Metro's regional transit system. Access to Dodger games would be more conveniently met and Dodger Stadium would be on par with other professional/major league sport venues in the Los Angeles area in regard to public transit while reducing emissions from on-road.

The Dodger Stadium CUP requires "[t]hat automobile parking facilities for a minimum of one (1) automobile for each 3.6 seats provided in the Stadium shall be provided and maintained on the site generally . . .". Condition no. 1 of the Dodger Stadium CUP states that Dodger Stadium "shall have a maximum seating capacity of 56,000 persons." Condition no. 3 of the Dodger Stadium CUP requires "[t]hat automobile parking facilities for a minimum of one (1) automobile for each 3.6 seats provided in the Stadium shall be provided and maintained on site", so a total of 15,556 parking spaces must be provided and maintained on site. There are currently a total of 18,889 parking spaces provided and maintained on site. The proposed Project would permanently remove 194 parking spaces for the Dodger Stadium Station, including a pedestrian connection to Dodger Stadium, including hardscape and landscape improvements, located in the southeast portion of the Dodger Stadium Property near the Downtown Gate. Consistent with the Dodger Stadium CUP, a total of 18,695 parking spaces would remain on site, exceeding the required parking spaces under the CUP. While additional parking spaces would be temporarily utilized at Dodger Stadium for Project construction, the number of parking spaces would at all times exceed the 15,556 total parking spaces that must be provided and maintained on site pursuant to the CUP. The proposed Project is consistent with the requirements of the Dodger Stadium CUP.

2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

The 2020-2045 RTP/SCS serves as a long-range regional transportation planning tool used to build upon and expand land use and transportation strategies to increase mobility options and achieve a more sustainable growth pattern.[50] The proposed Project would introduce a unique new mode of transit for travelers between LAUS and Dodger Stadium. Implementation of the proposed Project would create new, as well as improve, existing connections not only to communities along the Project alignment, but also to other area transit lines and stations, including the regional transit lines served by LAUS, the Chinatown Metro L Line (Gold) Station, and several regional and local bus lines serving the Project Study Area. Additionally, the proposed Project would reduce air quality emissions by reducing vehicle trips, as discussed in Section 3.3, Air Quality. As such, the proposed Project would be consistent with several goals under the RTP/SCS, which are expanded upon in Table 3.11-2. As such, the proposed Project would not conflict with the applicable goals of the 2020-2045 RTP/SCS and impacts to consistency with this plan would be less than significant.

Table 3.11-2: Project Consistency with Applicable 2020-2045 RTP/SCS Goals

Goal	Consistency Discussion
Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.	The proposed Project would improve mobility, accessibility, reliability, and travel safety for people and goods by reducing passenger vehicle miles traveled and by providing a new mode of public transportation in the form of a high-capacity aerial rapid transit connecting the regional transit system at LAUS, Dodger Stadium, the Los Angeles State Historic Park, Elysian Park, and surrounding communities. The proposed Project would expand mobility options for transit riders through a direct connection between LAUS and Dodger Stadium, a regional event center. The ART system has the ability to overcome grade and elevation issues between LAUS and Dodger Stadium and provide safe, environmentally friendly, and high-capacity transit connectivity in the Project area. ART is a proven, safe, sustainable, high-capacity, and highly efficient form of transportation that would function as both a reliable rapid transit system and first/last mile connector. This proposed Project provides new transit connections to and between currently underserved neighborhoods and uses along the proposed alignment, including the Los Angeles State Historic Park, Chinatown, Elysian Park, Solano Canyon, and the Mission Junction neighborhood which includes the William Mead Homes public housing complex, and the Los Angeles River. The Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements at Chinatown/State Park Station would include pedestrian improvements, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. Additionally, the Project Sponsor will request a program with the Los Angeles Dodgers on the potential for the Dodger Stadium Station to include a mobility hub where passengers would be able to access first and last mile multi-modal options to access Elysian Park and other nearby neighborhoods, including Solano Canyon. Consideration as to the mobility hub include securing Dodger Stadium and the surrounding surface parking, which are operated as an MLB stadium. Dodger Stadium Station would also include a pedestrian connection to Dodger Stadium, including hardscape and landscape improvements and potential seating. Dodger Stadium draws large regional crowds, with approximately 100 baseball games and other events each year. The vast majority of visitors drive their personal vehicles to

50 SCAG. September 2020. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy Adopted Final Connect SoCal. Available at: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, accessed May 2022.

Table 3.11-2: Project Consistency with Applicable 2020-2045 RTP/SCS Goals

Goal	Consistency Discussion
	access the venue. These vehicles create congestion on the surface streets leading up to and around the Stadium, including Sunset Boulevard/Cesar E. Chavez from LAUS and throughout the surrounding communities. As such, the proposed Project would enhance safety of neighborhoods adjacent to Dodger Stadium by reducing the number of vehicles in the area. The proposed Project would also reduce transportation related pollution and greenhouse gas emissions as a result of reduced vehicular congestion in and around Dodger Stadium, on neighborhood streets, arterial roadways, and freeways during game and special event days. Therefore, the proposed Project would be consistent with this goal.
Goal 3: Enhance the preservation, security, and resilience of the regional transportation system.	Although this goal is not applicable to an individual transportation project, by creating an additional transit option that links to the existing Union Station, the proposed Project helps to build the resilience of the regional transportation system. The proposed Project would increase connectivity of people to the region's public transportation hub at LAUS and the Dodger Stadium property. The ART system has the ability to overcome grade and elevation issues between LAUS and Dodger Stadium. ART is a proven, safe, sustainable, high-capacity, and highly efficient form of transportation that would function as both a reliable high-capacity rapid transit system and first/last mile connector. As such, the proposed Project would introduce a unique new mode of transit for travelers between LAUS and Dodger Stadium. Implementation of the proposed Project would create new and improve existing connections not only to communities along the Project alignment, but also to other area transit lines and stations, including the regional transit lines served by LAUS, the Chinatown Metro L Line (Gold) station, and several regional and local bus lines serving the Project Study Area. Therefore, the proposed Project would be consistent with this goal.
Goal 4: Increase person and goods movement and travel choices within the transportation system.	The proposed Project would increase person and goods movement and travel choices within the transportation system by providing an aerial rapid transit option in Downtown Los Angeles that would facilitate travel between Dodger Stadium, the surrounding communities, and the regional transit system accessible at LAUS. The proposed Project would improve the Dodger Stadium visitor experience by providing efficient, high-capacity, and faster alternative access to Dodger Stadium and identify comparable, affordable, and accessible fare opportunities for community and Los Angeles State Historic Park and Elysian Park access. The Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. Additionally, the Project Sponsor will request a program with the Los Angeles Dodgers on the potential for the Dodger Stadium Station to include a mobility hub where passengers would be able to access first and last mile multi-modal options to access Elysian Park and other nearby neighborhoods, including Solano Canyon. Consideration as to the mobility hub include securing Dodger Stadium and the surrounding surface parking, which are operated as an MLB stadium. Dodger Stadium Station would also include a pedestrian connection to Dodger Stadium, including hardscape and landscape improvements and potential seating. This new transit mode and route would offer additional choices and flexibility for travelers to and within downtown. The proposed Project and the new transit connections that would be created would provide convenient alternatives to automobile travel. The provision of passenger stations would reduce the need for some visitors to drive to and park their vehicles at various cultural, commercial, entertainment, and open space/recreation destinations along the Project alignment. Therefore, the proposed Project would be consistent with this goal.
Goal 6: Support healthy and equitable communities.	Although this goal is not applicable to an individual transportation project, the proposed Project would support healthy and equitable communities by providing a potential mobility hub at the Dodger Stadium property where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program to provide connectivity to Elysian Park and the surrounding communities

Table 3.11-2: Project Consistency with Applicable 2020-2045 RTP/SCS Goals

Goal	Consistency Discussion
	as well as a potential mobility hub at the Chinatown/State Park Station. Pedestrian access enhancements at the Chinatown/State Park Station would include pedestrian improvements between Metro's L Line (Gold), including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. Additionally, the proposed Project would enhance safety of neighborhoods adjacent to Dodger Stadium by reducing the number of vehicles in the area. The proposed project would also reduce transportation related pollution and greenhouse gas emissions as a result of reduced vehicular congestion in and around Dodger Stadium, on neighborhood streets, arterial roadways, and freeways during game and special event days. Lastly, the proposed Project would identify comparable, affordable, and accessible fare opportunities for community and Los Angeles State Historic Park and Elysian Park access. Therefore, the proposed Project would be consistent with this goal.
Goal 7: Adapt to changing climate and support an integrated regional development pattern and transportation network.	Although this goal is not applicable to an individual transportation project, the Project will facilitate adapting to a changing climate and supporting an integrated regional development pattern and transportation network by reducing emissions from on-road vehicles through offering an alternative mode of transportation. The proposed Project would facilitate integration of travel between Dodger Stadium, the surrounding communities, and the regional transit system accessible at LAUS. ART technology is quiet, and the proposed Project would reduce VMT and congestion, leading to reduced GHG emissions and improved air quality. Implementation of the proposed Project would create new and improve existing connections to not only communities along the Project alignment, but also to other area transit lines and stations, including the regional transit lines served by LAUS, the Chinatown Metro L Line (Gold) station, and several regional and local bus lines serving the Project Study Area. Additionally, the proposed Project would improve the Dodger Stadium visitor experience by providing efficient, high-capacity, and faster alternative access to Dodger Stadium. Within two hours prior to the start of a game or event at Dodger Stadium, up to 10,000 people could be transported to the stadium via the proposed Project. Access to Dodger games would be more conveniently met and Dodger Stadium would be on par with other professional/major league sport venues in the Los Angeles area in regard to public transit while reducing emissions from on-road. Therefore, the proposed Project would be consistent with this goal.
Goal 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	As a breakthrough and innovative technology for the region, the proposed Project would leverage new transportation technologies and data-driven solutions that result in more efficient travel. The proposed Project would advance future alternative transportation systems and technology in the Los Angeles area while providing a template for other innovative aerial projects elsewhere in the state and the country. The ART system has the ability to overcome grade and elevation issues between LAUS and Dodger Stadium and provide safe, environmentally friendly, and high-capacity transit connectivity in the Project area. The proposed Project would employ a Tricable Detachable Gondola system (also known as "3S"), which allows for higher-capacity cabins to safely and efficiently transport passengers. The proposed Project would provide a sustainable form of transit by operating the ART system with the use of zero emission electricity with battery storage backup in order to reduce GHG emissions and improve air quality. Therefore, the proposed Project would be consistent with this goal.

Source: SCAG. September 2020. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy Adopted Final Connect SoCal, available at: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176. Accessed May 2022.

City of Los Angeles General Plan

The City of Los Angeles General Plan addresses community development goals and policies relative to the distribution of land use through its organizing Framework Element and eleven elements. An analysis of the proposed Project's consistency with applicable Los Angeles General Plan policies from the Framework and Land Use Element is discussed below. The following elements are discussed in their respective sections of the Draft EIR and not further discussed in the Land Use Section: Air Quality (Section 3.3), Transportation (Section 3.17), Open Space (Section 3.16), Public Facilities & Services (Section 3.15), Noise (Section 3.13), and Housing (Section 3.14).

Framework Element

The Framework Element defines citywide policies and guides long-term growth. Several goals and objectives align with the construction and operation of the Project, including those that focus on urban form and neighborhood design, open space and conservation, and transportation. Table 3.11-3 provides a detailed list of the applicable City of Los Angeles General Plan policies within the Framework Element met by the proposed Project.

Land Use Designation Consistency

Alameda Station

Alameda Station, including vertical circulation elements, would be located within portions of the Central City and Central City North Community Plan Areas. Alameda Station would be constructed within the ROW. The City of Los Angeles General Plan, Central City Community Plan, and Central City North Community Plan do not provide land use designations within the ROW.[51]

The vertical circulation elements on the west of the Alameda Station would be introduced within the ROW north of the Placita de Dolores, on the west side of Alameda Street, in a proposed new pedestrian plaza in an area currently containing a parking and loading area for El Pueblo. The City of Los Angeles General Plan and Central City Community Plan do not provide land use designations within the ROW. Although the Alameda Station's western vertical circulation elements and pedestrian plaza would be located within the existing ROW parking and loading area, the parcels within El Pueblo just north of this location are designated Public Facilities. Public Facilities is a designation applied to parcels within the Central City Community Plan Civic Center area that are intended to provide a mix of uses to be a center of activity and provide a pedestrian-oriented district used by visitors, workers, and residents.[52] The proposed Project's pedestrian plaza is therefore a use consistent with the Public Facilities designation.

[51] City of Los Angeles Department of City Planning. December 2000. Central City North Community Plan. Available at: https://planning.lacity.org/odocument/e06434a6-341a-48ed-97dc-8f6a85780951/Central_City_North_Community_Plan.pdf, accessed May 2022.
[52] Ibid.

Table 3.11-3: Project Consistency with Applicable City of Los Angeles General Plan Policies

Policy	Consistency Discussion
Framework Element	
Urban Form and Neighborhood Design	
Policy 5.1.2: Implement demonstration projects that establish proactive measures to improve neighborhood and community design and coordinate these activities with the Los Angeles Neighborhood Initiative demonstration projects, Los Angeles County Metropolitan Transportation Authority station area activities, and other City, non-profit and private efforts.	The proposed Project would include a design goal to establish proactive measures to improve neighborhood and community design and coordinate these activities with the Los Angeles Neighborhood Initiative demonstration projects, Metro's LAUS Forecourt and Esplanade Improvements Project, and the Connect US Action Plan. The proposed Project is a transit project that would originate at LAUS, which provides local and regional access via multiple modes of transport and service providers, such as Metro, Metrolink, Amtrak, and municipal and private bus operators, all of which converge at the station. The proposed Project's design goal is to develop a common architectural design that unifies the overall aerial gondola system, while allowing for each major component to contribute to the respective localized urban condition. Of equal importance is the desire to minimize the perceived scale and mass of the stations and non-passenger junction. The proposed architectural design, therefore, takes advantage of a simple barrel vault form to provide the minimum enclosure needed to protect the ropeway equipment and provide shade and weather protection to passengers on the boarding platform. This barrel form would utilize a contemporary hollow structural steel section structure and metal panel assembly to allow the introduction of custom perforation patterns that take cues from the immediate neighborhood culture, while also providing a visual lightness to the form. The canopy of the non-passenger junction has the potential to diverge from this assembly, utilizing a clipped system of narrow metal tubes to create a pattern evocative of layered bamboo canes, while still achieving a transparency that brings lightness to the form. Rather than proposing a single uniform color palette for the entire system, colors for the material finishes at each station and junction will be selected to be complementary to each of their respective sites and surrounding urban fabric. Each station could also provide an opportunity for site specific artwork that is reflective of the unique neighborhood culture, and could be commissioned from local artists. Additionally, each of the towers would be designed so that their bases would not impede adjacent vehicular and pedestrian circulation, while supporting the ropeway and cabins that are primarily aligned above the public ROW. The resulting tower structure gently swoops from the base up to connect to the ropeway. A light-toned gray high performance coating will accentuate the faceted steel panels that comprise the tower's swooping form. The neutral light-tone gray is intended to conform with the surrounding urban environment and will not provide a highly metallic or mirrored finish to minimize glare. Therefore, the proposed Project would be consistent with this policy to improve neighborhood design.
Objective 5.8: Reinforce or encourage the establishment of a strong pedestrian orientation in designated neighborhood districts, community centers, and pedestrian-oriented subareas within regional centers, so that these districts and centers can serve as a focus of activity for the surrounding community and a focus for investment in the community.	The proposed Project would reinforce or encourage the establishment of strong pedestrian orientation in the surrounding communities, by facilitating multi-modal access to and from the stations with pedestrian network improvements. The proposed Project would also enhance community connectivity to areas that have historically been underserved, and provide pedestrian enhancements so that the areas surrounding the stations can serve as a focus of activity for the surrounding community and a focus of investment in the community. Specifically, the proposed Project would provide a new pedestrian plaza at El Pueblo on the west side of Alameda Station, encouraging

Table 3.11-3: Project Consistency with Applicable City of Los Angeles General Plan Policies

Policy	Consistency Discussion
	visitors to El Pueblo. In addition, the Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. The proposed visitor-serving improvements to the Los Angeles State Historic Park entrance also include a plaza at the base of the Chinatown/State Park Station that could be used for Park events. The Dodger Stadium Station would provide pedestrian network improvements around the station, including repaving pedestrian paths through the Dodger Stadium parking lot to channelize and provide a safe connection for pedestrians traveling between the station and the stadium. Additionally, the Project Sponsor will request a program with the Los Angeles Dodgers on the potential for the Dodger Stadium Station to include a mobility hub where passengers would be able to access first and last mile multi-modal options to access Elysian Park and other nearby neighborhoods, including Solano Canyon. Consideration as to the mobility hub include securing Dodger Stadium and the surrounding surface parking, which are operated as an MLB stadium.
Open Space and Conservation	
Objective 6.2: Maximize the use of the City's existing open space network and recreational facilities by enhancing those facilities and providing connections, particularly from targeted growth areas, to the existing regional and community open space system.	The proposed Project would help maximize the use of the City's existing open space network and recreational facilities by providing infrastructure through an ART system within urbanized downtown Los Angeles. The proposed Project would increase connectivity in the Project Study Area, providing direct linkages for existing residents and communities to parks and recreational facilities, including Los Angeles Plaza Park, Placita de Dolores, and the adjacent Olvera Street; Los Angeles State Historic Park; Dodger Stadium; and Elysian Park. By providing direct linkages for existing residents, the proposed Project would have the beneficial effect of increasing transit accessibility to open space and recreational facilities for potential visitors of the parks through a connection to the Metro and regional transit system. Therefore, the proposed Project would be consistent with this objective.
Transportation	
Neighborhood Transportation: Expand neighborhood transportation services and programs to enhance neighborhood accessibility, including such systems as DASH, taxis, transit, paratransit, voucher programs, incentives for recreational trips, and "Smart Shuttles" and jitneys. **Policy 38:** Initiate a series of district and center demonstration projects which employ pro-active measures for both attracting development to the centers and improving the physical and social environments of the centers and surrounding neighborhoods. These	The proposed Project would improve the physical and social environments of the surrounding neighborhoods and expand neighborhood transportation services to enhance accessibility by providing a high-capacity ART system connecting the regional transit system at LAUS, Dodger Stadium, the Los Angeles State Historic Park, Elysian Park, and surrounding communities. The proposed Project would provide new connections to and between currently underserved neighborhoods and uses along the proposed alignment, including Chinatown, Mission Junction, the Los Angeles State Historic Park, Elysian Park, Echo Park, and Solano Canyon. In addition to providing new transit connections through a high-capacity ART system, the proposed Project would include a mobility hub at the Chinatown/State Park Station where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. The Project Sponsor will also request a program with the Los Angeles

Table 3.11-3: Project Consistency with Applicable City of Los Angeles General Plan Policies

Policy	Consistency Discussion
demonstration projects could involve public improvements, transit services, financial incentives and other economic development measures.	Dodgers on the potential for the Dodger Stadium Station to include a mobility hub where passengers would be able to access first and last mile multi-modal options to access Elysian Park and other nearby neighborhoods, including Solano Canyon. Considerations as to the mobility hub include securing Dodger Stadium and the surrounding surface parking, which are operated as an MLB stadium. Additionally, the proposed Project would identify comparable, affordable, and accessible fare opportunities for community and Los Angeles State Historic Park and Elysian Park access. Therefore, the proposed Project would be consistent with this goal of expanding neighborhood transportation services.
Land Use Element	
Central City Community Plan	
Objective 4-2: To maximize the use of the City's existing and envisioned open space network and recreation facilities by providing connections to the open space system.	The proposed Project would provide infrastructure through an ART system within urbanized downtown Los Angeles, and would increase connectivity in the Project Study Area. The proposed Project would provide direct linkages for existing residents and communities to maximize the use of the City's existing and envisioned open space network and recreational facilities, including Los Angeles Plaza Park, Placita de Dolores, and the adjacent Olvera Street; Los Angeles State Historic Park; Dodger Stadium; and Elysian Park. By providing direct linkages for existing residents, the proposed Project would have the beneficial effect of increasing transit accessibility to open space for potential visitors of the parks through a connection to the Metro and regional transit system. Specifically, within the Central City Community Plan Area, the proposed Project would provide a connection to and from open spaces within El Pueblo de Los Angeles, including Los Angeles Plaza Park, via Alameda Station. The station would include a pedestrian plaza and installation of landscaping and hardscape, and would also include vertical circulation elements (i.e., elevators, escalators, stairs) for pedestrian access which would be introduced at-grade on the west side of Alameda Street within the Central City Community Plan Area. In addition, the proposed Project would connect the El Pueblo area with other open spaces uses along the Project alignment, including the Los Angeles State Historic Park and Elysian Park. Therefore, the proposed Project would be consistent with this objective.
Policy 4.2-1: To foster physical and visual links between a variety of open spaces and public spaces downtown.	The proposed Project, as a first/last mile transit connection, would provide a link to and from the open and public spaces at El Pueblo de Los Angeles and LAUS to other such open spaces along the alignment, including the Los Angeles State Historic Park, Elysian Park, and other pedestrian-oriented areas of Chinatown. Additionally, the cabins would be suspended more than 100 feet above the ground, providing riders with new views and visual links to open and public spaces along the alignment. Therefore, the proposed Project would be consistent with this policy.
Objective 4-3: To encourage increased use of existing park and recreational spaces.	The proposed Project would encourage increased use of existing park and recreational spaces by providing infrastructure through an ART system within urbanized downtown Los Angeles that would increase connectivity via direct linkages for existing residents and communities to those facilities along the alignment, including Los Angeles Plaza Park, Placita de Dolores, and the adjacent Olvera Street; Los Angeles State Historic Park; Dodger Stadium; and Elysian Park. By providing

Table 3.11-3: Project Consistency with Applicable City of Los Angeles General Plan Policies

Policy	Consistency Discussion
	direct linkages for existing residents, the proposed Project would have the beneficial effect of increasing transit accessibility to open space for potential visitors of the parks through a connection to the Metro and regional transit system, although the proposed Project would not result in demand beyond what is already contemplated. Specifically, within the Central City Community Plan Area, the proposed Project would provide a connection to and from open spaces within El Pueblo de Los Angeles, including Los Angeles Plaza Park, via Alameda Station. The station would include a pedestrian plaza and installation of landscaping and hardscape. Therefore, the proposed Project would be consistent with this objective.
Objective 4-4: To encourage traditional and non-traditional sources of open space by recognizing and capitalizing on linkages with transit, parking, historic resources, cultural facilities, and social services programs.	The proposed Project would encourage traditional and non-traditional sources of open space by recognizing and capitalizing on linkages with transit, parking, historic resources, cultural facilities, and social services programs. Within the Central City Community Plan Area, the proposed Project would provide links to and from the El Pueblo de Los Angeles Historic District and the LAUS transit hub via Alameda Station, capitalizing on opportunities to connect the area around the Alameda Station to other local and regional transit opportunities, historic resources, and cultural facilities along the Project alignment, including Chinatown and the Los Angeles State Historic Park, as well as Dodger Stadium. Therefore, the proposed Project would be consistent with this objective.
Policy 10-1.4: Ensure that the downtown circulation system serves the existing art and cultural facilities with ease of accessibility and connections.	The proposed Project would provide a connection to and from El Pueblo and LAUS Station, which would ensure that the downtown circulation system serves the existing art and cultural facilities with ease of accessibility and connections. El Pueblo is listed in the National Register of Historic Places and California Register of Historical Resources, and is a City-designated Historic-Cultural Monument. El Pueblo currently serves as a living museum, attracting over 2 million visitors per year to its many historic features, including Olvera Street, which is a pedestrian-oriented marketplace containing restaurants, craft shops, and other retail businesses reflecting the Mexican heritage of the City. This area attracts visitors from throughout the region, as well as tourists from around the world. With Metro's existing and planned expansion of its transit system, coupled with other providers such as Metrolink, Amtrak, and other municipal bus operators whose services all converge at LAUS, the proposed Project provides the opportunity for anyone in the Los Angeles County region to access El Pueblo. It also connects any passenger of the ART system to Dodger Stadium, a regional event center. In addition, each station could also provide an opportunity for site specific artwork that is reflective of the unique neighborhood culture, and could be commissioned from local artists. Therefore, the proposed Project would be consistent with this policy.
Objective 11-1: To keep downtown as the focal point of the regional mobility system accommodating internal access and mobility needs as well.	The proposed Project would keep downtown as the focal point of the regional mobility system within the City of Los Angeles, through its location within the downtown, El Pueblo, Chinatown, Mission Junction, and Elysian Park communities. The proposed Project would improve mobility and accessibility for the region by providing high capacity aerial rapid transit connecting to the regional transit system at LAUS and downtown, as well as to Dodger Stadium, the Los Angeles State Historic Park, Elysian Park, and surrounding communities. Therefore, the proposed Project would be consistent with this objective.

Table 3.11-3: Project Consistency with Applicable City of Los Angeles General Plan Policies

Policy	Consistency Discussion
Policy 11-2.13: Reinforce the integration and accessibility of the neighborhoods surrounding downtown, with the downtown core, through enhanced levels of service.	The proposed Project would enhance the level of service and accessibility of the neighborhoods surrounding downtown by providing an aerial rapid transit option from LAUS for visitors to Dodger Stadium. The proposed Project would also provide access between Dodger Stadium, the surrounding communities, and the regional transit system accessible at LAUS, reinforcing the integration of the area. Dodger Stadium draws large regional crowds, with approximately 100 baseball games and other events each year. The vast majority of visitors drive their personal vehicles to access the venue. These vehicles create congestion on the surface streets leading up to and around the Stadium, including Sunset Boulevard/Cesar E. Chavez from LAUS and throughout the surrounding communities. In addition to traffic delays in and around local streets, congestion occurs on the nearby freeways, including SR-110, I-5, and US 101. As the region's population grows and resulting travel needs continue to increase, the local and regional roadway system is likely to experience greater congestion. The proposed Project would create a high-quality and high-capacity rapid transit connection between LAUS and Dodger Stadium, the proposed Project would provide a more viable choice in making a trip to a Dodger game or event at the stadium. Given the capacity of this system, approximately 20 percent of the fans could take aerial transit connected to Metro's regional transit system. As discussed in Section 3.17, Transportation, the proposed Project would result in an overall reduction in VMT, reducing congestion and resulting in a beneficial effect on the environment. Project operations would reduce vehicle trips on the roadway network by facilitating improved transit connections to Dodger Stadium. Therefore, the proposed Project would be consistent with this policy.
Objective 11-3: To provide an internal circulation system with a focus of connecting specific pairs of activity centers to a system that provides greater geographic coverage of downtown, thus giving the downtown traveler more choices and more flexibility.	The proposed Project would provide a proven, safe, zero emission, sustainable, high-capacity, and highly efficient form of transportation that would function as both a reliable rapid transit system and first/last mile connector between the activity centers at LAUS, El Pueblo and Dodger Stadium. LAUS is the region's transportation hub, and Dodger Stadium is a regional event center and one of the region's most visited venues; however, there are no permanent transit connections to Dodger Stadium. There is a need for improved transit options that link with the growing Metro network to meet existing travel demands and access to Dodger Stadium. The overall purpose of the proposed Project is to provide a direct transit connection between LAUS and the Dodger Stadium property via an aerial gondola system, and improve connectivity for the surrounding communities by linking to the Los Angeles State Historic Park, Elysian Park, and the region's rapidly growing regional transit system at LAUS. The proposed Project would also provide new connections to and between currently underserved neighborhoods and uses along the proposed alignment, including Chinatown, Mission Junction, the Los Angeles State Historic Park, Elysian Park, Echo Park, and Solano Canyon. Therefore, the proposed Project would be consistent with this objective.
Objective 11-4: To take advantage of the district's easy access to two mass transit rail lines, the freeway system, and major boulevards that connect downtown to the region.	The overall purpose of the proposed Project is to provide a direct transit connection between LAUS and the Dodger Stadium property via an aerial gondola system, and improve connectivity for the surrounding communities by linking to the Los Angeles State Historic Park, Elysian Park, and the region's rapidly growing regional transit system at LAUS. LAUS is southern California's regional transportation hub. LAUS provides local and regional access via multiple modes of transport and

Table 3.11-3: Project Consistency with Applicable City of Los Angeles General Plan Policies

Policy	Consistency Discussion
	service providers, such as Metro, Metrolink, Amtrak, and municipal and private bus operators, all of which converge at the station. LAUS connects multiple counties, including Los Angeles, Orange, Riverside, San Bernardino, Ventura and San Diego, via an extensive regional and commuter rail and bus system. Additionally, LAUS connects riders across the Country via Amtrak. Therefore, the proposed Project would be consistent with this objective.
Central City North Community Plan	
Policy 2-2.2: New development needs to add to and enhance the existing pedestrian street activity.	The proposed Project would enhance existing pedestrian street activity and community connectivity by providing first/last mile transit and pedestrian access to areas that have historically been underserved, including the Los Angeles State Historic Park and Elysian Park. At the Alameda Station within the Central City North Community Plan Area, vertical circulation elements (i.e. elevators, escalators, stairs) for pedestrian access would be introduced at-grade from the planned LAUS Forecourt. At the Chinatown/State Park Station, a mobility hub would be provided for passengers to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. The Chinatown/State Park Station would also include the installation of landscaping and hardscaping and amenities within the existing park boundary, including approximately 740 square feet of concessions, 770 square feet of restrooms, and a 220 square foot covered breezeway connecting the concessions and restrooms. The proposed visitor-serving improvements to the Los Angeles State Historic Park entrance would also include a plaza at the base of the Chinatown/State Park Station that could be used for Park events. These amenities would enhance the existing pedestrian street activity within Los Angeles State Historic Park. The Chinatown/State Park Station would also provide passenger access to Chinatown, the Los Angeles State Historic Park, and to nearby neighborhoods and land uses, including the Mission Junction neighborhood, which includes the William Mead Homes public housing complex. Each of the towers would be designed so that their bases would not impede adjacent pedestrian circulation. Therefore, the proposed Project would be consistent with this policy.
Goal 10: Develop a public transit system that improves mobility with convenient alternatives to automobile travel.	The proposed Project would provide an aerial rapid transit alternative to automobile travel for visitors to Dodger Stadium, while also providing access between Dodger Stadium, the surrounding communities, and the regional transit system accessible at LAUS, thereby improving mobility with convenient alternatives to automobile travel. Dodger Stadium draws large regional crowds, with approximately 100 baseball games and other events each year. The vast majority of visitors drive their personal vehicles to access the venue. These vehicles create congestion on the surface streets leading up to and around the Stadium, including Sunset Boulevard/Cesar E. Chavez from LAUS and throughout the surrounding communities. In addition to traffic delays in and around local streets, congestion occurs on the nearby freeways, including SR-110, I-5, and US 101. As the region's population grows and resulting travel needs continue to increase, the local and regional roadway system is likely to experience greater congestion. Dodger

Table 3.11-3: Project Consistency with Applicable City of Los Angeles General Plan Policies

Policy	Consistency Discussion
	Stadium is one of the region's most visited venues; however, there are no permanent transit connections to the venue. The proposed Project would create a high-quality and high capacity rapid transit connection between LAUS and Dodger Stadium, the proposed Project would provide a more viable choice in making a trip to a Dodger game or event at the stadium. Given the capacity of this system, approximately 20 percent of the fans could take aerial transit connected to Metro's regional transit system. In addition, at the Chinatown/State Park Station, a mobility hub would be provided for passengers to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. Therefore, the proposed Project would be consistent with this goal of providing alternatives to automobile travel.
Goal 12: Encourage alternative modes of transportation to the use of single occupant vehicles in order to reduce vehicular trips.	The proposed Project would encourage alternative modes of transportation to the use of single occupant vehicles in order to reduce vehicle by providing a new transit mode and route between LAUS and Dodger Stadium. The proposed Project would create new connections to public transit lines and stations in the Project area, including the regional transit lines served by LAUS, the Chinatown Metro L Line (Gold) Station, and several regional and local bus lines serving the Project Study Area. The proposed Project and the new transit connections that would be created would provide alternatives to single occupant vehicles to reduce vehicular trips. In addition, the proposed Project would provide a mobility hub at the Chinatown/State Park Station, allowing passengers to access a suite of first and last mile multi-modal options, such as a bike share program, that could provide alternatives to single occupant vehicles to reduce vehicular trips. The Project Sponsor will also request a program with the Los Angeles Dodgers on the potential for the Dodger Stadium Station to include a mobility hub where passengers would be able to access first and last mile multi-modal options to access Elysian Park and other nearby neighborhoods, including Solano Canyon. Consideration as to the mobility hub include securing Dodger Stadium and the surrounding surface parking, which are operated as an MLB stadium. The gondola system would provide a safe, zero emission, environmentally friendly, high-capacity, form of transportation that would improve rider experience. Cabins would feature a ventilation system and sealed windows for viewing purposes, offering panoramic views of the City unlike any other vantage point. When complete, the travel time from LAUS to Dodger Stadium would be approximately 7 minutes during peak operations (games/events at Dodger Stadium), with the capacity to transport approximately 20 percent of game/event attendees. As such, this more viable option would reduce vehicle trips on the roadway network by facilitating improved transit connections to Dodger Stadium. Therefore, the proposed Project would be consistent with this goal.

Table 3.11-3: Project Consistency with Applicable City of Los Angeles General Plan Policies

Policy	Consistency Discussion
Silver Lake-Echo Park-Elysian Valley Community Plan	
Objective 5-2: Provide/insure access to new recreational resources and open space developed throughout the [Community] Plan Area, including trails and facilities along the Los Angeles River, and new parks.	The proposed Project would provide/insure access to parks by potentially including a mobility hub at the Dodger Stadium Station in coordination with the Los Angeles Dodgers, where passengers would be able to access a suite of first- and last-mile multi-modal options, and connections to Elysian Park and adjacent neighborhoods, such as Solano Canyon. Consideration as to the mobility hub include securing Dodger Stadium and the surrounding surface parking, which are operated as an MLB stadium. The potential mobility hub and connections to Elysian Park and adjacent neighborhoods would have the beneficial effect of increasing transit accessibility and non-motorized transportation options to Elysian Park as users of the proposed ART system would be able to access the park from the terminus at Dodger Stadium Station. Therefore, the proposed Project would be consistent with this goal.
Goal 10: Develop a public transportation system that improves mobility with convenient alternatives to automobile travel.	The proposed Project would link the Dodger Stadium property, the surrounding communities, Elysian Park, and the Los Angeles State Historic Park, to the region's rapidly growing regional transit system at LAUS, thereby improving mobility with convenient alternatives to automobile travel. The Project Sponsor will request a program with the Los Angeles Dodgers on the potential for the Dodger Stadium Station to include a mobility hub where passengers would be able to access first and last mile multi-modal options to access Elysian Park and other nearby neighborhoods, including Solano Canyon. Consideration as to the mobility hub include securing Dodger Stadium and the surrounding surface parking, which are operated as an MLB stadium. As discussed previously, Dodger Stadium draws large regional crowds, with approximately 100 baseball games and other events each year and is one of the region's most visited venues; however, there are no permanent transit connections to Dodger Stadium. The vast majority of visitors drive their personal vehicles to access the venue. These vehicles create congestion on the surface streets leading up to and around the Stadium, including Sunset Boulevard/Cesar E. Chavez from LAUS and throughout the surrounding communities. When complete, the travel time from LAUS to Dodger Stadium would be approximately 7 minutes during peak operations (games/events at Dodger Stadium), with the capacity to transport approximately 20 percent of game/event attendees. The potential mobility hub and connections to Elysian Park and adjacent neighborhoods would also have the beneficial effect of increasing transit accessibility and non-motorized transportation options to Elysian Park as users of the proposed ART system would be able to access the park from the terminus at Dodger Stadium Station. Therefore, the proposed Project would be consistent with this goal of providing convenient alternatives to automobile travel.
Goal 11: Encourage alternative modes of transportation to the use of single occupant vehicles in order to reduce vehicular trips.	The proposed Project would provide an aerial rapid transit option for visitors to Dodger Stadium, while also providing access between Dodger Stadium, the surrounding communities, and the regional transit system accessible at LAUS, thereby encouraging alternative modes of transportation to the use of single occupant vehicles in order to reduce vehicular trips. The proposed Project would create a high-quality and high-capacity rapid transit connection between LAUS and Dodger Stadium, the proposed Project would provide a more viable choice in making a trip to a Dodger game or event at the stadium. Given the capacity of this system, approximately 20 percent of the fans could take

Table 3.11-3: Project Consistency with Applicable City of Los Angeles General Plan Policies

Policy	Consistency Discussion
	aerial transit connected to Metro's regional transit system. Additionally, the Project Sponsor will request a program with the Los Angeles Dodgers on the potential for the Dodger Stadium Station to include a mobility hub where passengers would be able to access first and last mile multi-modal options to access Elysian Park and other nearby neighborhoods, including Solano Canyon. Consideration as to the mobility hub include securing Dodger Stadium and the surrounding surface parking, which are operated as an MLB stadium. As discussed in Section 3.17, Transportation, the proposed Project would result in an overall reduction in VMT, resulting in a beneficial effect on the environment. Project operations would reduce vehicle trips on the roadway network by facilitating improved transit connections to Dodger Stadium. Therefore, the proposed Project would be consistent with this goal.

Sources: City of Los Angeles Department of City Planning. January 2003. *Central City Community Plan*. Available at: https://planning.lacity.org/plans-policies/community-plan-area/central-city, accessed May 2022.; City of Los Angeles Department of City Planning. December 2000. *Central City North Community Plan*. Available at: https://planning.lacity.org/odocument/e06434a6-341a-48ed-97dc-8f6a85780951/Central_City_North_Community_Plan.pdf, accessed May 2022; City of Los Angeles Department of City Planning. August 2004. *Silver Lake-Echo Park-Elysian Valley Community Plan*. Available at: https://planning.lacity.org/odocument/e87507ac-8c40-49a0-aa1c-21df963f2298/Silver_Lake-Echo_Park-Elysian_Valley_Community_Plan.pdf, accessed May 2022.

The vertical circulation elements on the east of Alameda Station, located on the east side of Alameda Street and within the LAUS Forecourt, would be located on parcels designated as Regional Center Commercial uses under the Central City North Community Plan. Regional Center Commercial uses attract people from a broad geographic area and require infrastructure and development appropriate to reflect that greater scale. Surrounding land uses are also designated for Regional Center Commercial and are developed with the LAUS and the Mozaic at Union Station apartments. The vertical circulation elements of the Alameda Station on the east would be located within the boundaries of the ADP, which provides additional regulatory controls and incentives for executing the portion of the City of Los Angeles General Plan relating to the geographic area. An analysis of the proposed Project's consistency with the ADP is described below.

Because the queueing areas for the Alameda Station would be located north of the Placita de Dolores on the west and within the LAUS Forecourt on the east, Alameda Station would provide opportunities to bring more people to these locations through the addition of queuing areas and a pedestrian plaza, consistent with the surrounding Public Facilities and Regional Center Commercial designations which are intended to facilitate public meeting spaces. Both the Placita de Dolores and the LAUS Forecourt locations are pedestrian-oriented areas heavily used by visitors, workers, and residents in the Project area. In addition, the proposed improvements to the LAUS Forecourt under the LAUS Forecourt and Esplanade Improvements Project would improve pedestrian accessibility and connectivity to transit options, including the proposed Project.[53] The proposed Project's consistency with applicable City of Los Angeles General Plan and Community Plan policies and guidelines are discussed in Table 3.11-3.

[53] Los Angeles County Metropolitan Transportation Authority, August 17, 2017. LAUS Forecourt and Esplanade Improvements Project, Draft Environmental Impact Report. Available at: https://www.metro.net/projects/la-union-station-forecourt-and-esplanade-improvements/, accessed May 2022.

There is no designation for ROW; therefore, a consistency evaluation is not applicable for the station itself and its western vertical circulation elements. Nevertheless, these elements would be generally consistent with the surrounding designations and uses, including the region's transportation hub at LAUS. Where the proposed Project elements are located within the Regional Center Commercial designation, the proposed Project would be consistent and proposing an allowed use because it provides an area intended for public gathering. Therefore, the Alameda Station would be consistent with the existing City of Los Angeles General Plan land use designation at the site and development in the surrounding area as it would introduce a compatible transit use and an area intended for public gathering within a pedestrian-oriented area and advance policies put forth in the Central City and Central City North Community Plans regarding accessibility and open space. The impact would be less than significant.

Alameda Tower

Alameda Tower would be located within the Central City North Community Plan. The tower would be constructed on the Alameda Triangle, on City ROW. The City of Los Angeles General Plan and Community Plan do not provide land use designations within the ROW.[54] Surrounding parcels, are designated for Regional Commercial uses under the Central City North Community Plan.[55] The Alameda Triangle currently contains landscaping and hardscaping, while the parcels on the west side of Alameda Street are developed with a compressed natural gas refueling station associated with an adjacent large industrial complex of up to three stories that houses a vehicle fleet management facility as well as low- to mid-rise commercial buildings. The parcels on the east side of North Main Street adjacent to the Alameda Triangle are developed with a four-story office building and a surface parking lot (all designated as Regional Commercial). The parcel on the north side of Alameda Triangle across from Alhambra Avenue contains a one-story commercial building with a surface parking lot (designated as Regional Commercial). While the Alameda Tower is within the ROW, it is compatible with surrounding uses because it is a component of a proposed transit use that would improve pedestrian connectivity in the area, and is a similar use to the nearby Metro L Line (Gold).

While there are no specific height regulations for Commercial development under the Central City North Community Plan, design policies require individual structures are built to a pedestrian scale, offering variation and visual interest. Further, urban design policies and landscaping guidelines for Commercial land uses, including pedestrian-oriented parcels, provide recommendations for street trees, street furniture, hardscape materials, and shielded lighting in order to maintain community character, ease transitioning between residential uses, and provide opportunities for pedestrian connectivity as it relates to economic stimulus and vitality in Commercial areas.[56]

As the tower would be constructed within the ROW, it would neither violate height regulations nor be incompatible with the surrounding scale; rather, it would include a neutral light-tone gray color scheme designed for consistency with the surrounding urban environment. Implementation of the Alameda Tower would require the removal and replacement of landscaping and hardscaping, and although located on public ROW, would be consistent with the Central City North Community

---

[54] City of Los Angeles Department of City Planning. December 2000. Central City North Community Plan. Available at: https://planning.lacity.org/odocument/e06434a6-341a-48ed-97dc-8f6a85780951/Central_City_North_Community_Plan.pdf, accessed May 2022.

[55] City of Los Angeles Department of City Planning, General Plan Land Use Map, Central City North Community Plan, available at: https://planning.lacity.org/plans-policies/community-plan-area/central-city-north, accessed May 2022.

[56] City of Los Angeles Department of City Planning. December 2000. Central City North Community Plan. Available at: https://planning.lacity.org/odocument/e06434a6-341a-48ed-97dc-8f6a85780951/Central_City_North_Community_Plan.pdf, accessed May 2022.

Plan's street tree and streetscape guidelines. Lighting for security and pedestrian access would be low-level and primarily integrated within the architectural features. Exterior lighting would be shielded or directed toward the areas to be lit to limit spillover onto adjacent properties.

Given the above, the proposed Project would not interfere with any applicable land use plans, policies, and regulations or be incompatible with surrounding uses. The proposed Project would be compatible with the Regional Center designation, because as noted above, it is a component of a transit system within a pedestrian oriented area, intended for public gathering. Additionally, the proposed Project would meet several of the goals of the Central City North Community Plan for Regional Commercial uses regarding pedestrian connectivity between surrounding communities. The proposed Project's consistency with applicable City of Los Angeles General Plan policies and guidelines are discussed in Table 3.11-3. Further, the Alameda Triangle would remain similar to existing conditions following Project buildout, with the exception of a new curb extension introduced along the eastern edge of Alameda Street in the vicinity of the tower to provide for pedestrian circulation around the tower. The existing pavers located at the Alameda Triangle would be reused and integrated into those updates to the Alameda Triangle. Therefore, the Alameda Tower would be consistent with the existing City of Los Angeles General Plan land use designation at the site and development in the surrounding area. The impact would be less than significant.

Alpine Tower

Alpine Tower would be located within the Central City North Community Plan Area. The Alpine Tower site is designated for Regional Commercial uses under the Community Plan.[57] The Alpine Tower site is located on a City-owned property currently being used as a surface parking lot for non-public parking storage for City vehicles, at the northeast corner of Alameda Street and Alpine Street, adjacent to the elevated Metro L Line (Gold). Surrounding land uses are also designated for Regional Commercial.[58] The parcel north of the Alpine Tower site contains a two-story building. The parcel on the west side of Alameda Street and north of Alpine Street contains an apartment building. The parcel on the west side of Alameda Street and south of Alpine Street contains an LA County vehicle fleet management facility.

The Alpine Tower is a transit support component that would be compatible with adjacent transit uses, which include the columns supporting the elevated Metro L Line (Gold) tracks and the overhead catenary system. While there are no specific height regulations for Regional Commercial development under the Central City North Community Plan, design policies require individual structures are built to a pedestrian scale, offering variation and visual interest.[59] As such, the height of the tower, overhead cables, and cabins would not violate any height regulations; rather, this Project component would provide aesthetic distinction with its light-toned, swooping design.

Additionally, the proposed Project would meet several of the goals of the Central City North Community Plan regarding pedestrian connectivity between surrounding communities.[60] The proposed Project's consistency with applicable City of Los Angeles General Plan policies and guidelines for Regional Commercial uses are discussed in Table 3.11-3. Therefore, the Alpine

---

[57] City of Los Angeles Department of City Planning. December 2000. Central City North Community Plan. Available at: https://planning.lacity.org/odocument/e06434a6-341a-48ed-97dc-8f6a85780951/Central_City_North_Community_Plan.pdf, accessed May 2022.

[58] Ibid

[59] Ibid

[60] Ibid

Tower would be consistent with the existing City of Los Angeles General Plan land use designation at the site and development in the surrounding area.

The Regional Commercial designation allows for the development of commercial uses, such as transit stations and related facilities, restaurants, retail shops, and offices. In addition, the Regional Commercial designation encourages a strong and competitive commercial sector, which best serves the needs of the community through strengthening the economic base and additional opportunities for new commercial development and services. Transit facilities and supporting components, such as the proposed Project, would improve access to businesses in the area. Therefore, the proposed Project would be consistent with Regional Commercial uses. The impact would be less than significant.

Chinatown/State Park Station

Chinatown/State Park Station would be located within the Central City North Community Plan Area, within the CASP. The CASP provides additional regulatory controls and incentives for executing the portion of the City of Los Angeles General Plan relating to the geographic area. An analysis of the proposed Project's consistency with the CASP is included below. The northern portion of Chinatown/State Park Station site is located within the boundaries of the Los Angeles State Historic Park property, which is not subject to the land use regulations under the City of Los Angeles General Plan. An analysis of the proposed Project's consistency with the Los Angeles State Historic Park General Plan and Los Angeles State Historic Park Interpretive Master Plan has been described above. The analysis concluded that implementation of the Chinatown/State Historic Park Station would be consistent with the applicable goals and guidelines of Los Angeles State Historic Park General Plan and Los Angeles State Historic Park Interpretive Master Plan. The southern portion of the station would be located within City ROW. The City of Los Angeles General Plan and Community Plan do not provide land use designations within the ROW. Adjacent parcels on the east side of Spring Street are designated Hybrid Industrial and are currently undeveloped but approved to be a seven-story mixed-use development. Adjacent parcels on the west side of Spring Street are designated Light Industrial and are developed with the Metro L Line (Gold).[61] The Chinatown/State Park Station would be a passenger station that would be compatible with adjacent transit uses, which include the columns supporting the elevated Metro L Line (Gold) tracks and Metro L Line (Gold) Station, as well as the overhead catenary system. Therefore, while the Chinatown/State Park Station does not have or is not subject to a City of Los Angeles General Plan land use designation, the Chinatown/State Park Station would be consistent with the existing City of Los Angeles General Plan land use designation for the development in the surrounding area. The impact would be less than significant.

Broadway Junction

Broadway Junction would be located within the Central City North Community Plan Area. The Broadway Junction site is located on private property comprised of parcels designated for Regional Commercial and Medium Residential uses under the Community Plan.[62] These parcels are currently developed with a one-story office and ancillary uses. The Community Plan limits uses to those under corresponding zones within the LAMC, which generally include uses that would be compatible with surrounding commercial and/or residential uses. Although the proposed Project would not be consistent with the existing residential designation as it does not fall under any of the permitted uses, the existing commercial zoning does permit transit-related uses such

[61] Ibid
[62] Ibid.

as bus stations, scenic railways, and train stations. Additionally, as discussed in Chapter 2, Project Description, Subsection 2.11, Required Permits and Approvals, the Project Sponsor is seeking to create a Specific Plan pursuant to LAMC Section 11.5.7 to allow for the proposed Project to be fully consistent with the surrounding zoning, as the proposed Project is generally consistent with the surrounding area, including the nearby Metro L Line (Gold) track. There are no specific height regulations for Regional Commercial or Medium Residential development under the Community Plan; rather, design policies require individual structures are built to a pedestrian scale, offering variation and visual interest. Further, urban design policies and landscaping guidelines for Commercial land uses, including pedestrian-oriented parcels, provide recommendations for street trees, street furniture, hardscape materials, and shielded lighting in order to maintain community character, ease transitioning between residential uses, and provide opportunities for pedestrian connectivity as it relates to economic stimulus and vitality in Commercial areas.[63]

Surrounding land use designations under the Community Plan include Medium Residential to the west, developed as Cathedral High School, Medium Residential to north, developed with residential uses, Regional Commercial to the east, developed with parking and a commercial business, and Light Industrial to the south, developed with the Metro L Line (Gold) tracks.[64] Similar to other Project components, Broadway Junction is consistent with the City of Los Angeles General Plan's height regulations; this Project component would provide aesthetic distinction within the community, with its light-toned, rounded and modern design. It would not introduce new commercial or residential uses that would be subject to additional design regulations applicable to such uses. Additionally, the junction as a component of the proposed Project as a whole would contribute to pedestrian connectivity and accessibility between uses, within the community, and between surrounding neighborhoods.[65] The proposed Project's consistency with applicable City of Los Angeles General Plan policies and guidelines are discussed in Table 3.11-3. As such, the proposed Project would be consistent with land use designations at the Broadway Junction location and would not be incompatible with surrounding land uses. The impact would be less than significant.

Stadium Tower

Stadium Tower would be located within the Silver Lake-Echo Park-Elysian Valley Community Plan Area. The Stadium Tower site is designated for Open Space under the Community Plan, which identifies the property as the site of Dodger Stadium.[66] The Community Plan states that Open Space may function as rights-of-way for utilities and transportation facilities. The Community Plan does not provide design regulations for development on Open Space parcels, so long as new development is not discontinuing the current use. Stadium Tower would be constructed on currently undeveloped, minimally maintained land within the Dodger Stadium property. The proposed Project would develop the cable-supporting tower as part of the ART system intended to provide connectivity and access for residents and users of the Community Plan Area and surrounding communities, between LAUS and Dodger Stadium, including Elysian Park. Surrounding parcels are designated for Open Space, as well as Public Facilities to the southeast, which is developed with the SR-110.[67] Stadium Tower would be compatible with this

---

63 Ibid.
64 Ibid.
65 Ibid.
66 City of Los Angeles Department of City Planning, Silver Lake-Echo Park-Elysian Valley Community Plan, August 2004, available at: https://planning.lacity.org/plans-policies/community-plan-area/silver-lake-echo-park-elysian-valley, accessed May 2022.
67 Ibid

similar transportation use. The proposed Project would be consistent with existing land use designations. Additionally, there are no policies, goals, or objectives contained within the Community Plan that would be impacted by the proposed Project. Rather, the proposed Project would comply with and contribute to attaining applicable policies and goals for the Community Plan, as detailed in Table 3.11-3. Therefore, the Stadium Tower would be consistent with the existing City of Los Angeles General Plan land use designation at the site and development in the surrounding area. The impact would be less than significant.

Dodger Stadium Station

Dodger Stadium Station would be located within the Silver Lake-Echo Park-Elysian Valley Community Plan Area. The Dodger Stadium Station site is designated for Open Space under the Community Plan, which identifies the property as the site of Dodger Stadium.[68] The Community Plan states that Open Space may function as rights-of-way for utilities and transportation facilities. The Community Plan does not provide design regulations for development on Open Space parcels, so long as new development is not discontinuing the current use. There are no policies, goals, or objectives contained within the Community Plan that would be impacted by the proposed Project. Rather, the proposed Project would comply with and contribute to attaining applicable policies and goals for the Community Plan, as detailed in Table 3.11-3. In addition, the Dodger Stadium Station is consistent with the existing City of Los Angeles General Plan land use designation at the site and development in the surrounding area. Therefore, the Dodger Stadium Station would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact. The impact would be less than significant.

Consistency with City of Los Angeles General Plan Policies

An analysis of the proposed Project's consistency with applicable City of Los Angeles General Plan policies is discussed in Table 3.11-3.

The proposed Project would not conflict with the applicable City of Los Angeles General Plan policies. Therefore, the proposed Project would result in less than significant impacts to consistency with the City of Los Angeles General Plan.

Specific Plan Areas

Alameda District Specific Plan

The vertical circulation elements on the east of the Alameda Station, on the east side of Alameda Street, would be located within the Historic Subarea of the ADP Area, which is currently developed with LAUS. Additionally, a portion of the Alameda Station's canopy would be located in the ADP Historic Subarea and would comply with the height restrictions and uses of the ADP Historic Subarea. No habitable structures to which design regulations under the ADP apply would be constructed within the ADP Area. The only portion of the Alameda Station that would be constructed within the ADP Area are the vertical circulation elements (i.e. escalators and stairs) that would be introduced at-grade in the northernmost area of the planned LAUS Forecourt. The escalators would take riders entering the ART system from the queueing area in the proposed LAUS Forecourt up to the passenger loading platform of the Alameda Station, and riders exiting the ART system from the passenger loading platform down to the proposed LAUS Forecourt.

[68] Ibid

While only this portion of the Alameda Station is within the ADP Area, the entire station and suspended cables moving north along the proposed Project alignment would be adjacent to the LAUS property located within the ADP Area, thus providing a compatible transit use next to LAUS, the transit center for the regional system. North of Alameda Station, the suspended above-grade cables and cabins following the proposed Project alignment would be located over the existing public ROW on Alameda Street, and as such, are not located in the ADP Area. Parcels to the east of the Project alignment, along the east side of Alameda Street from Arcadia Street until Ord Street, are also in the Historic Subarea and Mixed Use/Office Subarea of the ADP. These parcels are developed as Mozaic Apartments and the Post Office Terminal Annex property, containing residential apartments and government and commercial offices, respectively.[69]

The height limit for structures within the Historic Subarea vary; the height limit for structures within the portion in which the vertical circulation elements for the Alameda Station would be located and where the station canopy would cover is 80 feet.[70] As previously discussed, the vertical circulation elements would be introduced at-grade with the LAUS Forecourt. The passenger loading platform of the Alameda Station would be approximately 31 feet above Alameda Street. The canopy, at its highest point, would have a height of 78 feet. Similar to LAUS, the Alameda Station would provide transit uses within the Historic Subarea. As such, the vertical circulation elements and portion of the canopy within the ADP would comply with the height restrictions and uses of the ADP Historic Subarea. The segment of the Project alignment north of Alameda Station that is adjacent to additional parcels on the east within the ADP's Historic Subarea and Mixed Use/Office Subarea, until Ord Street, would be within the ROW and would not conflict with current or planned uses or development regulations for the Post Office Terminal Annex Property. Table 3.11-4 further demonstrates how the proposed Project would be consistent with the applicable objectives of the ADP. The portion of the proposed Project located within the ADP area would be consistent with the ADP. Therefore, the proposed Project would result in a less than significant impact to consistency with the ADP.

Table 3.11-4: Project Consistency with Applicable ADP Objectives[71]

Objective	Consistency Discussion
Objective C: Provide continued and expanded development of the site both as a major transit hub for the region, and as a mixed-use development providing office, hotel, retail, entertainment, tourism, residential and related uses within the Specific Plan area, in conformance with the goals and objectives of local and regional plans and policies.	The proposed Project would expand mobility and accessibility for transit riders in the region by providing high capacity aerial rapid transit connecting the regional transit system at LAUS, Dodger Stadium, the Los Angeles State Historic Park, Elysian Park, and surrounding communities. Implementation of the proposed Project would create new and improve existing connections not only to communities along the Project alignment, but also to other area transit lines and stations, including the regional transit lines served by LAUS, and several regional and local bus lines serving the Project Study Area. Therefore, the proposed Project would be consistent with this objective.

69 City of Los Angeles Department of City Planning, Alameda District Specific Plan, Adopted June 1996, available at: https://planning.lacity.org/odocument/11788e44-7659-4e6f-95d6-4b5d5861b1ba/Alameda_District_Specific_Plan.pdf, accessed May 2022.

70 City of Los Angeles Department of City Planning, Alameda District Specific Plan, Adopted June 1996, available at: https://planning.lacity.org/odocument/11788e44-7659-4e6f-95d6-4b5d5861b1ba/Alameda_District_Specific_Plan.pdf, accessed May 2022.

71 City of Los Angeles Department of City Planning, Alameda District Specific Plan, Adopted June 1996, available at: https://planning.lacity.org/odocument/11788e44-7659-4e6f-95d6-4b5d5861b1ba/Alameda_District_Specific_Plan.pdf, accessed May 2022.

Cornfield Arroyo Seco Specific Plan

The Chinatown/State Park Station and portion of the suspended above-grade cables and cabins from West College Street to the northern boundary of the Los Angeles State Historic Park would be located within the boundaries of the CASP, which designates the park as Open Space.[72] Although the northern portion of the Chinatown/State Park Station would be integrated into existing State-owned park land, and, thus, is not subject to local requirements, permits, or approvals for development on this property, the Chinatown/State Park Station would still be consistent with the CASP, which allows for mobility hub amenity and transit hub amenity uses on land designated for Open Space. Additionally, the provision of a station at this location would be consistent with the overall intent of the CASP as a point of local and regional connectivity by alternative means of transportation including increased transit, pedestrian, and bicycle use, reducing vehicle trips through and within the area, all while providing an area of increasingly accessible open space.[73] The Chinatown/State Park Station and portion of the suspended above-grade cables and cabins within the CASP would provide a new transit stop to bring residents and visitors to the existing open space and recreational opportunities within the park, keeping consistent with the plan's objectives. The Chinatown/State Park Station would include a mobility hub, where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program, consistent with the CASP's zoning regulations.

Additionally, the Project Sponsor is seeking to create a Specific Plan pursuant to LAMC Section 11.5.7 to provide for consistent application of Project design standards, limitations, and operational measures. Approval of the amendment to LAMC Sections 21.32.S(2) and 13.22 would allow for the proposed Project to be fully consistent with the surrounding zoning, as the proposed Project is already generally consistent with the surrounding area of the Los Angeles State Historic Park and Metro's L Line (Gold) as a first/last mile transit project. Furthermore, pursuant to LAMC section 11.5.7.F, the proposed Project is seeking an exception from the CASP to allow for the Chinatown/State Park Station. Table 3.11-5 further demonstrates how the proposed Project would be consistent with applicable objectives of the CASP and its zoning.

Table 3.11-5: Project Consistency with Applicable CASP Objectives[74]

Objective	Consistency Discussion
CASP Purpose 2: Transform an underserved and neglected vehicular-oriented industrial and public facility area into a cluster of mixed-use, pedestrian-oriented and aesthetically pleasing neighborhoods.	The proposed Project would provide new transit and pedestrian connections to and between currently underserved neighborhoods and uses along the proposed alignment, including Chinatown, Mission Junction, the Los Angeles State Historic Park, Elysian Park, Echo Park, and Solano Canyon. As such, the proposed Project would enhance community connectivity by providing first/last mile transit and pedestrian access to areas that have historically been underserved, including the Los Angeles State Historic Park and Elysian Park. Pedestrian access enhancements at the Chinatown/State Park Station would include pedestrian improvements between Metro's L Line (Gold), including hardscape and landscape improvements, shade structures, and potential seating. In addition, amenities within the existing park boundary, including approximately 740 square feet of concessions, 770 square feet of restrooms, and a 220 square foot covered breezeway connecting the concessions and restrooms. The proposed visitor-serving improvements to the Los Angeles State Historic Park entrance would also include a plaza at the base of the Chinatown/State

[72] City of Los Angeles Department of City Planning. 2013. Cornfield Arroyo Seco Specific Plan. Available at: https://planning.lacity.org/odocument/9d013e0f-452b-4857-86d5-fcd357b27a4d, accessed May 2022.
[73] City of Los Angeles Department of City Planning. 2013. Cornfield Arroyo Seco Specific Plan. Available at: https://planning.lacity.org/odocument/9d013e0f-452b-4857-86d5-fcd357b27a4d, accessed May 2022.
[74] City of Los Angeles Department of City Planning. 2013. Cornfield Arroyo Seco Specific Plan. Available at: https://planning.lacity.org/odocument/9d013e0f-452b-4857-86d5-fcd357b27a4d, accessed May 2022.

Table 3.11-5: Project Consistency with Applicable CASP Objectives[74]

Objective	Consistency Discussion
	Park Station that could be used for Park events. These amenities would enhance the existing pedestrian activity within Los Angeles State Historic Park. Furthermore, the Chinatown/State Park Station would include mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. The Chinatown/State Park Station would be designed such that perceived scale and mass would be minimized, utilizing custom perforation patterns that take cues from the immediate neighborhood culture, while also providing a visual lightness to the form. Color and material finishes would be selected to be complementary to the surrounding urban fabric. The proposed station could also provide an opportunity for site specific artwork that is reflective of the unique neighborhood culture and could be commissioned from local artists. Therefore, the proposed Project would be consistent with this purpose.
CASP Purpose 3: Increase access to open space.	The proposed Project would provide infrastructure through an ART system within urbanized downtown Los Angeles, and would increase connectivity in the Project Study Area, providing direct linkages for existing residents and communities to parks and recreational facilities, including Los Angeles Plaza Park, Placita de Dolores, and the adjacent Olvera Street; Los Angeles State Historic Park; Dodger Stadium; and Elysian Park. By providing direct linkages for existing residents, the proposed Project would have the beneficial effect of increasing transit accessibility to open space for potential visitors of the parks through a connection to the Metro and regional transit system. Specifically, within the CASP area, the proposed Project would provide a connection to and from open spaces within the Los Angeles State Historic Park, as well as access to trails and facilities along the Los Angeles River located north of the park, via the Chinatown/State Park Station. This intermediate station would provide a more direct access to the park than the existing Metro L Line (Gold) station in Chinatown, as well as for event attendees on the days that the Los Angeles State Historic Park hosts events. In 2019, there were 15 special event days at the park, ranging from craft fairs drawing 6,000 to 8,000 people per event to evening concerts drawing 12,000 to 20,000 people per event. It estimated that an average of 1,120 event attendees (2,240 trips for round-trip) would ride the proposed Project to attend an event at the State Historic Park, thus increasing access to open space compared to existing conditions. While the proposed Project may increase usage of the Los Angeles State Historic Park and attendance from existing conditions, as it would provide transit access to the park from both LAUS and Dodger Stadium, the proposed Project would not result in demand beyond what is already contemplated for the park. Additionally, at the Chinatown/State Park Station, a mobility hub would be provided for passengers to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. The Chinatown/State Park Station would also include the installation of landscaping and hardscaping. Therefore, the proposed Project would be consistent with this purpose.
CASP Purpose 9: Facilitate pedestrian mobility, encourage bicycle use, provide access to a variety of transit options including frequent light rail and bus connections, shared vehicles and bicycles, and taxis.	The overall purpose of the proposed Project is to provide a direct transit connection between LAUS and the Dodger Stadium property via an aerial gondola system, and improve connectivity for the surrounding communities by linking to the Los Angeles State Historic Park, Elysian Park, and the region's rapidly growing regional transit system at LAUS. LAUS is southern California's regional transportation hub. LAUS provides local and regional access via multiple modes of transport and service providers, such as Metro, Metrolink, Amtrak, and municipal and private bus operators, all of which converge at the station. LAUS connects multiple counties, including Los Angeles, Orange, Riverside, San Bernardino, Ventura and San Diego, via an extensive regional and commuter rail and bus system. Additionally, LAUS connects riders across the Country via Amtrak. At the Chinatown/State Park Station, a mobility hub would be provided for passengers to access a suite of first and last mile multi-modal options, such as a bike share

Table 3.11-5: Project Consistency with Applicable CASP Objectives[74]

Objective	Consistency Discussion
	program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. Therefore, the proposed Project would be consistent with this purpose.
CASP Purpose 10: Lessen dependence on automobiles, and thereby reduce vehicle emissions, while enhancing the personal health of residents, employees, and visitors.	The proposed Project would lessen dependence on automobiles and thereby reduce vehicle emissions by providing a sustainable, high-capacity zero emission ART option for visitors to Dodger Stadium, while also providing access between Dodger Stadium, the surrounding communities, and the regional transit system accessible at LAUS. ART technology is quiet, and the proposed Project would reduce VMT and congestion, leading to reduced GHG emissions and improved air quality. Given the capacity of the system, approximately 20 percent of the fans could take aerial transit connected to Metro's regional transit system. In 2019, there were 15 special event days at Los Angeles State Historic Park, ranging from craft fairs drawing 6,000 to 8,000 people per event to evening concerts drawing 12,000 to 20,000 people per event. It is estimated that the Chinatown/State Park Station would provide direct access to events at Los Angeles State Historic Park events for an average of 1,120 event attendees, thereby further lessening dependence on automobiles and reducing vehicle emissions. Implementation of the proposed Project would create new and improve existing connections not only to communities along the Project alignment, but also to other area transit lines and stations, including the regional transit lines served by LAUS, the Chinatown Metro L Line (Gold) station, and several regional and local bus lines serving the Project Study Area. Therefore, proposed Project would be consistent with this purpose.
CASP Purpose 12: Respect historically significant buildings, including massing and scale, while at the same time encouraging innovative architectural design that expresses the identity of contemporary urban Los Angeles.	The proposed Project would result in less than significant impacts to historic resources, and would not result in the demolition of a historic resource. The proposed Project would respect historically significant buildings, including massing and scale, while encouraging innovative architectural design by bringing a world class aerial transit system to Los Angeles area that would be designed taking into consideration the surrounding context and communities. The Chinatown/State Park Station would be designed such that perceived scale and mass would be minimized, utilizing custom perforation patterns that take cues from the immediate neighborhood culture, while also providing a visual lightness to the form. Color and material finishes would be selected to be complementary to the surrounding urban fabric. The proposed station could also provide an opportunity for site specific artwork that is reflective of the unique neighborhood culture and could be commissioned from local artists. Therefore, the proposed Project would be consistent with this purpose.
CASP Purpose 15: Provide adequate public recreational open space within walking distance of residents and employees, integrate public art, and contribute to the civic and cultural life of the City.	The overall purpose of the proposed Project is to provide a direct transit connection between LAUS and the Dodger Stadium property via an aerial gondola system, and improve connectivity for the surrounding communities by linking to the Los Angeles State Historic Park, Elysian Park, and the region's rapidly growing regional transit system at LAUS. The proposed Chinatown/State Park Station within the CASP area would provide direct access to the southern entrance of Los Angeles State Historic Park. This intermediate station would provide a more direct access to the park than the existing Metro L Line (Gold) station in Chinatown for Park users, as well as for event attendees on the days that the Los Angeles State Historic Park hosts events. In 2019, there were 15 special event days at the park, ranging from craft fairs drawing 6,000 to 8,000 people per event to evening concerts drawing 12,000 to 20,000 people per event. It estimated that an average of 1,120 event attendees (2,240 trips for round-trip) would ride the proposed Project to attend an event at the State Historic Park, thus increasing access to public art and contributing to the civic and cultural life of the City. Additionally, the station would provide signage to support wayfinding and would provide a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements would include pedestrian improvements between Metro's L Line (Gold) Station, including hardscape and landscape improvements, shade

Table 3.11-5: Project Consistency with Applicable CASP Objectives[74]

Objective	Consistency Discussion
	structures, and potential seating. The Chinatown/State Park Station would be designed such that perceived scale and mass would be minimized, utilizing custom perforation patterns that take cues from the immediate neighborhood culture, while also providing a visual lightness to the form. Color and material finishes would be selected to be complementary to the surrounding urban fabric. The proposed station could also provide an opportunity for site specific artwork that is reflective of the unique neighborhood culture and could be commissioned from local artists. Additionally, implementation of the proposed Project would enhance community connectivity by providing first/last mile transit and pedestrian access to areas that have historically been underserved, including the Los Angeles State Historic Park and Elysian Park. Therefore, the proposed Project would be consistent with this purpose.
REGULATIONS	
Open Space Zoning Regulation 1: Provide inviting, safe, and accessible public open space.	The proposed Project would improve mobility and accessibility for the region by providing high capacity aerial rapid transit connecting the regional transit system at LAUS, Dodger Stadium, the Los Angeles State Historic Park, Elysian Park, and surrounding communities. At the Chinatown/State Park Station, a mobility hub would be provided for passengers to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. The Chinatown/State Park Station would also include the installation of landscaping and hardscaping. The Chinatown/State Park Station would be designed such that perceived scale and mass would be minimized, utilizing custom perforation patterns that take cues from the immediate neighborhood culture, while also providing a visual lightness to the form. Color and material finishes would be selected to be complementary to the surrounding urban fabric. The proposed station could also provide an opportunity for site specific artwork that is reflective of the unique neighborhood culture and could be commissioned from local artists. Project lighting would include low-level lighting for security and wayfinding purposes adjacent to and within the stations, junction, and towers, within cabins, at the vertical circulation, and areas for ticketing, fare checking, and queueing. In addition, low-level lighting to accent signage, architectural features, landscaping, adjacent pedestrian plazas, and a mobility hub would be installed at the stations, junction, and towers. Lighting would also be provided underneath the elevated stations and junction. Lighting for the pedestrian access enhancements, including the pedestrian improvements between Metros L Line (Gold) Station and the Chinatown/State Park Station would include new pole lights for security and wayfinding purposes, as well as low-level lighting to accent signage and landscaping. In addition, directional and pedestrian signage would be placed adjacent to and throughout the proposed Project as necessary to facilitate access and safety, including along the pedestrian improvements between Metros L Line (Gold) Station. and the Chinatown/State Park Station Therefore, the proposed Project would be consistent with this zoning regulation.
Open Space Zoning Regulation 2: Increase recreational opportunities for residents, employees, and visitors.	The proposed Project would provide recreation opportunities for residents, employees, and visitors in coordination with the regional recreation network through a connection from the Los Angeles State Historic Park to other local transit lines along the Project alignment and the regional transit system accessible at LAUS. While the proposed Project may increase usage of the Los Angeles State Historic Park and attendance from existing conditions, as it would provide transit access to the park from both LAUS and Dodger Stadium, the proposed Project would not result in demand beyond what is already contemplated for the park. The Chinatown/State Park Station would also provide access to the Los Angeles State Historic Park and to nearby neighborhoods and land uses, including Chinatown, Elysian Park, Solano Canyon, and the Mission Junction neighborhood. which includes the William Mead Homes public housing complex, as well as to trails and facilities along the Los Angeles River located north of

Table 3.11-5: Project Consistency with Applicable CASP Objectives[74]

Objective	Consistency Discussion
	the park. Additionally, the Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. The proposed Project would provide additional opportunities for recreational use for visitors and surrounding neighborhoods through the expanded transit system. Therefore, the proposed Project would be consistent with this zoning regulation.
Open Space Zoning Regulation 3: Provide pedestrian linkages throughout the Plan area.	The proposed Project would improve mobility and accessibility for the region by providing high capacity aerial rapid transit connecting the regional transit system at LAUS, Dodger Stadium, the Los Angeles State Historic Park, Elysian Park, and surrounding communities, as well as pedestrian enhancements and linkages. While the proposed Project may increase usage of the Los Angeles State Historic Park and attendance from existing conditions as it would provide transit access to the park from both LAUS and Dodger Stadium, the proposed Project would not result in demand beyond what is already contemplated for the park. At the Chinatown/State Park Station, a mobility hub would also be provided for passengers to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. The Chinatown/State Park Station would also include the installation of landscaping and hardscaping. Therefore, the proposed Project would be consistent with this zoning regulation.
Open Space Zoning Regulation 7: Provide adequate lighting to create a park environment where residents feel safe.	The proposed Project would provide adequate lighting to facilitate a park environment where residents feel safe. Project lighting would include low-level lighting for security and wayfinding purposes adjacent to and within the stations, junction, and towers, within cabins, at the vertical circulation, and areas for ticketing, fare checking, and queueing. In addition, low-level lighting to accent signage, architectural features, landscaping, adjacent pedestrian plazas, and a mobility hub would be installed at the stations, junction, and towers. Lighting would also be provided underneath the elevated stations and junction. Lighting for the pedestrian access enhancements, including the pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park would include new pole lights for security and wayfinding purposes, as well as low-level lighting to accent signage and landscaping. Lighting would be low-level and primarily integrated within the architectural features. Exterior lighting would be shielded or directed toward the areas to be lit to limit spillover onto adjacent properties and off-site uses and would meet all applicable LAMC lighting standards. Therefore, the proposed Project would be consistent with this zoning regulation.
Open Space Zoning Regulation 8: Generate visual interest by creating focal points and meeting places to enhance the area's image.	The proposed Project would bring a world class aerial system to the Los Angeles area. The Chinatown/State Park Station would be designed such that perceived scale and mass would be minimized, utilizing custom perforation patterns that take cues from the immediate neighborhood culture, while also providing a visual lightness to the form. Color and material finishes would be selected to be complementary to the surrounding urban fabric. The proposed station could also provide an opportunity for site specific artwork that is reflective of the unique neighborhood culture and could be commissioned from local artists. The site of the proposed Chinatown/State Park Station was chosen to facilitate pedestrian wayfinding to the proposed Project and increase transit access to the Chinatown core. In addition, a pedestrian plaza is proposed at the base of the Chinatown/State Park Station, providing a potential gathering space supported by proposed new restrooms, concessions, and seating improvements in the Los Angeles State Historic Park. Therefore, the proposed Project would be consistent with this zoning regulation.
Open Space Zoning Regulation 10: Include permanent and temporary	The proposed Chinatown/State Park Station would include pedestrian access enhancements that would include pedestrian improvements between Metro's L Line (Gold) Station, and the Chinatown/State Park Station, including hardscape and

Table 3.11-5: Project Consistency with Applicable CASP Objectives[74]

Objective	Consistency Discussion
seating that is placed with consideration to sun and shade, and other factors contributing to human comfort.	landscape improvements, shade structures, and potential seating, to provide additionally accessibility and safety features around the Chinatown/State Park Station. Additionally, the Chinatown/State Park Station would also include Park amenities, including approximately 740 square feet of concessions and seating for the concessions, 770 square feet of restrooms, and a 220 square foot covered breezeway connecting the concessions and restrooms. Therefore, as the Chinatown/State Park Station includes factors contributing to human comfort, the proposed Project would be consistent with this zoning regulation.
Open Space Zoning Regulation 11: Support the goals of the Los Angeles River Revitalization Master Plan.	See the RIO District Ordinance section below, including Objective 1 under Table 3.11-6: Project Consistency with Applicable RIO District Objectives. The proposed Project would be consistent with this zoning regulation.

The portion of the Chinatown/State Park Station located within the park boundary would be on State-owned land and, thus, is not subject to local requirements, permits, or approvals. The southern portion of the station would be located on City ROW, and therefore would be subject to the land use policies, regulations, goals, and objectives set forth in the City of Los Angeles General Plan, as described above, and the LAMC, as described below. Therefore, no impact related to consistency with the CASP would occur.

Special Districts

Los Angeles River Improvement Overlay District

The area east of the Alameda Station and the Project alignment to College Street, including the Alameda Tower and Alpine Tower, are located within the RIO District (see Figure 3.11-3). Similar to the ADP, the eastern portion of the Alameda Station and the vertical circulation elements, on the east side of Alameda Street, would be located within the RIO District, which is currently developed with the LAUS. Additionally, a portion of the station's canopy would be located within the RIO District at this location. For this segment of the Project alignment, the suspended above-grade cables and cabins following the proposed Project alignment, as well as Alameda Tower, would be located within the public ROW. Parcels to the east of the Project alignment within the RIO District are developed with parking, residential, retail, and restaurant uses. Alpine Tower would be constructed on a City-owned parcel that is currently a surface parking lot within the RIO District. None of the aforementioned parcels are located adjacent to or abutting the Los Angeles River, and do not provide access to the river, and are therefore not within the RIO Inner Core.

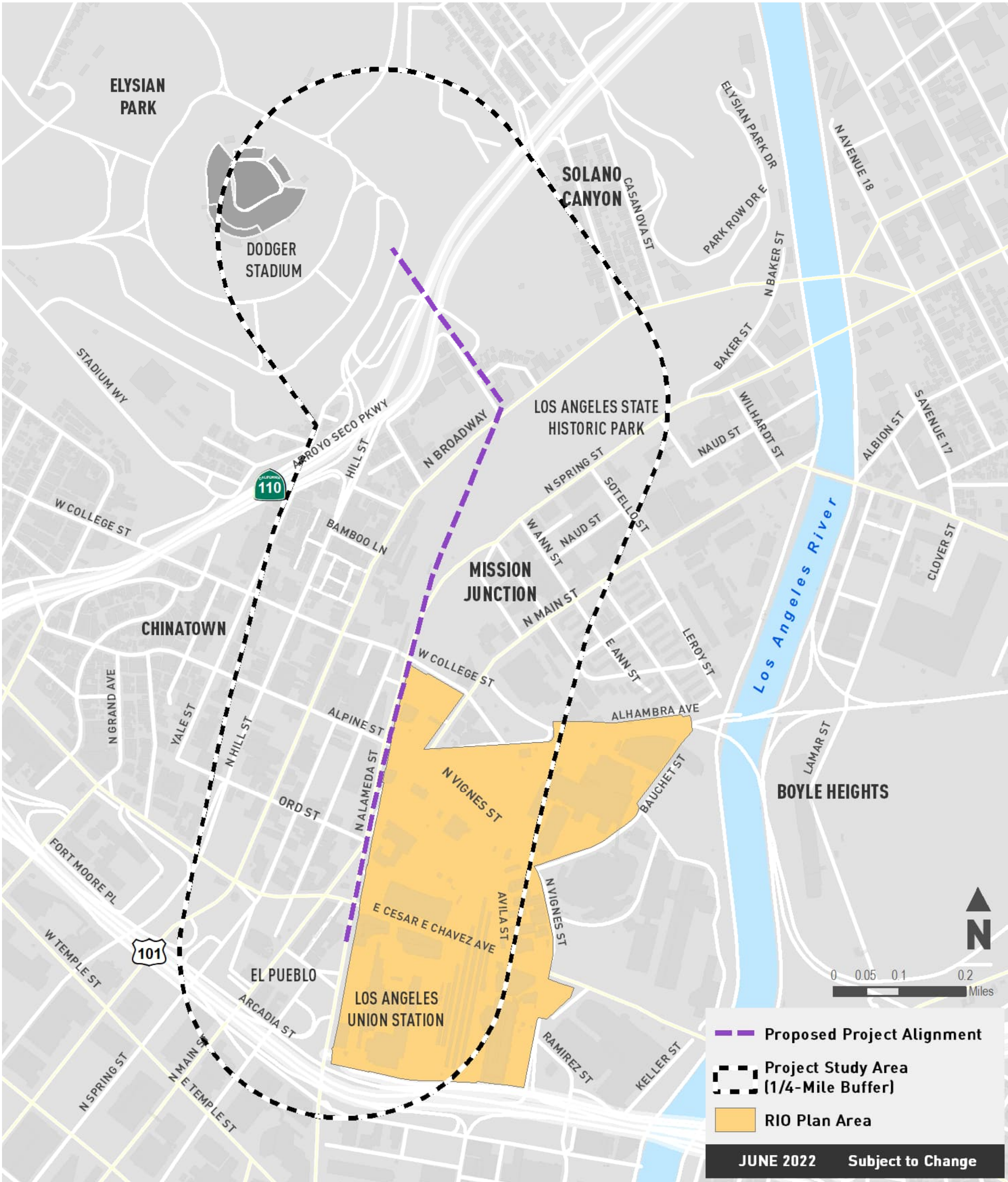


Figure 3.11-3: RIO Parcels within ¼-mile of the Proposed Project Alignment

Project lighting would include low-level lighting for security and wayfinding purposes. Exterior lighting adjacent to stations and towers would be shielded or directed toward the areas to be lit to limit spillover onto adjacent properties and off-site uses and would meet all applicable LAMC lighting standards. With respect to the existing RIO District guidance, and as discussed in Section 3.1, Aesthetics, the lighting of the proposed Project would exceed RIO requirements in certain locations along the alignment. However, these locations are in urban areas with existing lighting that exceed RIO requirements, as they require higher illuminance for safety and security. Further, the proposed Project sites within the RIO are located more than 2,600 feet from the Los Angeles River, and therefore have no direct influence on the lighting within or adjacent to the Los Angeles River. In addition, the proposed Project includes a proposed Specific Plan to establish the land use regulations for the Project, including lighting standards, to ensure consistent implementation of development standards throughout the Project sites in recognition of the Project's unique characteristics, including unique opportunities for public benefits and unique constraints posed by the Project site's location which are not experienced by other sites. The RIO does not impose any limits on the size, use, height and/or setbacks of a building beyond what is restricted by the prevailing zoning and building codes.[75] The proposed Project would not change the current uses of RIO District parcels on which the project is constructed or adjacent to.

Table 3.11-6 further demonstrates how the proposed Project would be consistent with applicable objectives for the RIO District. As such, the proposed Project would not conflict with the implementation of the design guidelines under the RIO on adjacent properties. Therefore, impacts related to consistency with the RIO would be less than significant.

Table 3.11-6: Project Consistency with Applicable RIO District Objectives[76]

Objective	Consistency Discussion
Objective 1: Support the goals of the Los Angeles River Revitalization Master Plan[77]: • **Goal 2. Enhance Connections, and Linkages:** River projects should not be done in isolation but should connect well with nearby communities. Planning for river projects should not consider merely the river channel itself, but communities in a wider corridor. Planning and projects should include open and natural space, transportation, housing, jobs, business, community development, art, and other amenities. • **Goal 3. Increase Access:** Residents who visit and enjoy river amenities will care about the long-term health of the river. River projects should be welcoming to the public. Public access should be enhanced through	The proposed Project would improve mobility and accessibility for the region, including within the RIO District, by providing high-capacity aerial rapid transit connecting the regional transit system at LAUS, Dodger Stadium, the Los Angeles State Historic Park, Elysian Park, and surrounding communities. One of the Project objectives is to enhance community connectivity by providing first/last mile transit and pedestrian access to areas that have historically been underserved, including the Los Angeles State Historic Park and Elysian Park. The Alameda Tower and Alpine Tower, along with the cables between these locations, provide support for cabins along the alignment as they travel from Alameda Station to the Chinatown/State Park Station. At the Chinatown/State Park Station, a mobility hub would be provided for passengers to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. The

[75] Los Angeles Department of City Planning. 2015. Zoning Information No. 2358. River Improvement Overlay District: Ordinance Nos. 183144 and 183145. Available at: http://zimas.lacity.org/documents/zoneinfo/ZI2358.pdf, accessed May 2022.

[76] Los Angeles Department of City Planning. 2015. Zoning Information No. 2358. River Improvement Overlay District: Ordinance Nos. 183144 and 183145. Available at: http://zimas.lacity.org/documents/zoneinfo/ZI2358.pdf, accessed May 2022.

[77] City of Los Angeles Bureau of Engineering. 2002. Los Angeles River Revitalization Master Plan: Guiding Principles. Available at: https://boe.lacity.org/lariverrmp/Background/guiding_principles.htm, accessed May 2022.

Table 3.11-6: Project Consistency with Applicable RIO District Objectives[76]

Objective	Consistency Discussion
environmentally sensitive design and planning. • **Goal 4. Foster Economic Development:** A revitalized river corridor is a local and regional destination; and as such can contribute to the economic vitality of the city and the region. River projects should encourage and enhance appropriate sustainable economic development, adding value to underutilized areas and communities.	Chinatown/State Park Station would also include the installation of landscaping and hardscaping. The Chinatown/State Park Station would provide passenger access to Chinatown, the Los Angeles State Historic Park, and to nearby neighborhoods and land uses, including the Mission Junction neighborhood, which includes the William Mead Homes public housing complex, as well to any future access to the Los Angeles River in this area. Additionally, the proposed Project's design goal is to develop a common architectural design that unifies the overall aerial gondola system, while allowing for each major component to contribute to the respective localized urban condition. The proposed stations would have a barrel form that would utilize a contemporary hollow structural steel section structure and metal panel assembly to allow the introduction of custom perforation patterns that take cues from the immediate neighborhood culture, while also providing a visual lightness to the form. Rather than proposing a single uniform color palette for the entire system, colors for the material finishes at each station and junction will be selected to be complementary to each of their respective sites and surrounding urban fabric. Each station could also provide an opportunity for site specific artwork that is reflective of the unique neighborhood culture, and could be commissioned from local artists. Additionally, each of the towers located within the RIO would be designed so that their bases would not impede adjacent vehicular and pedestrian circulation, while supporting the ropeway and cabins that are primarily aligned above the public ROW. The resulting tower structure gently swoops from the base up to connect to the ropeway. A light-toned gray high performance coating will accentuate the faceted steel panels that comprise the tower's swooping form. The neutral light-tone gray is intended to conform with the surrounding urban environment and will not provide a highly metallic or mirrored finish to minimize glare. Therefore, the proposed Project would be consistent with these goals and objective.
Objective 4: Promote pedestrian, bicycle and other multi-modal connection between the river and its surrounding neighborhoods.	The proposed Project would improve mobility and accessibility for the region, including neighborhoods within the RIO District, by providing high-capacity aerial rapid transit connecting the regional transit system at LAUS, Dodger Stadium, the Los Angeles State Historic Park, Elysian Park, and surrounding communities. One of the Project objectives is to enhance community connectivity by providing first/last mile transit and pedestrian access to areas that have historically been underserved, including the Los Angeles State Historic Park and Elysian Park. The Alameda Tower and Alpine Tower, along with the cables between these locations, provide support for cabins along the alignment as they travel from Alameda Station to the Chinatown/State Park Station. At the Chinatown/State Park Station, a mobility hub would be provided for passengers to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. The Chinatown/State Park Station would also include the installation of landscaping and hardscaping. The Chinatown/State Park Station would provide passenger access to Chinatown, the Los Angeles State Historic Park, and to nearby neighborhoods and land uses,

Table 3.11-6: Project Consistency with Applicable RIO District Objectives[76]

Objective	Consistency Discussion
	including the Mission Junction neighborhood, which includes the William Mead Homes public housing complex, as well to any future access to the Los Angeles River in this area. Therefore, the proposed Project would be consistent with this objective.
Objective 6: Provide an aesthetically pleasing environment for pedestrians and bicyclists accessing the river area.	The Alameda Tower and Alpine Tower, along with the cables between these locations, provide support for cabins along the alignment as they travel from Alameda Station to the Chinatown/State Park Station. At the Chinatown/State Park Station, a mobility hub would be provided for passengers to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. The Chinatown/State Park Station would also include the installation of landscaping and hardscaping. Additionally, the proposed Project's design goal is to develop a common architectural design that unifies the overall aerial gondola system, while allowing for each major component to contribute to the respective localized urban condition. The proposed stations would have a barrel form that would utilize a contemporary hollow structural steel section structure and metal panel assembly to allow the introduction of custom perforation patterns that take cues from the immediate neighborhood culture, while also providing a visual lightness to the form. Rather than proposing a single uniform color palette for the entire system, colors for the material finishes at each station and junction will be selected to be complementary to each of their respective sites and surrounding urban fabric. Each station could also provide an opportunity for site specific artwork that is reflective of the unique neighborhood culture, and could be commissioned from local artists. Therefore, the proposed Project would be consistent with this objective.
Objective 7: Provide safe, convenient access to and circulation along the river.	The proposed Project would improve mobility and accessibility for the region by providing high capacity aerial rapid transit connecting the regional transit system at LAUS, Dodger Stadium, the Los Angeles State Historic Park, Elysian Park, and surrounding communities. The Alameda Tower and Alpine Tower, along with the cables between these locations, provide support for cabins along the alignment as they travel from Alameda Station to the Chinatown/State Park Station. At the Chinatown/State Park Station, a mobility hub would be provided for passengers to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. The Chinatown/State Park Station would also include the installation of landscaping and hardscaping. Project lighting would include low-level lighting for security and wayfinding purposes adjacent to and within the stations, junction, and towers, within cabins, at the vertical circulation, and areas for ticketing, fare checking, and queueing. In addition, low-level lighting to accent signage, architectural features, landscaping, adjacent pedestrian

Table 3.11-6: Project Consistency with Applicable RIO District Objectives[76]

Objective	Consistency Discussion
	plazas, and a mobility hub would be installed at the stations, junction, and towers. Lighting would also be provided underneath the elevated stations and junction. Lighting for the pedestrian access enhancements, including the pedestrian improvements between Metro's L Line (Gold) Station would include new pole lights for security and wayfinding purposes, as well as low-level lighting to accent signage and landscaping. Therefore, the proposed Project would provide safe, convenient access to and circulation within a portion of the RIO District, and would be consistent with this objective.
Objective 9: Support the Low Impact Development Ordinance, the City's Irrigation Guidelines, and the Standard Urban Stormwater Maintenance Program.	The proposed Project would be required to comply with all applicable federal, state, regional, and local agency water quality protection laws and regulations, as well as commonly utilized industry standards, including the City of Los Angeles LID Ordinance. The proposed Project would be designed to incorporate several sustainability features and would be in compliance with the City of Los Angeles Best Management Practices Handbook and the City's LID requirements, as applicable. These BMPs and LID measures and practices would be incorporated at all applicable proposed Project component sites along the proposed Project alignment. Therefore, the proposed Project would be consistent with this objective.

City of Los Angeles Municipal Code

Alameda Station

Alameda Station and the above-grade cables from Alameda Station to the Alameda Tower would be located within City ROW over Alameda Street. The proposed at-grade vertical circulation elements on the west side of Alameda Station would be located within ROW. The LAMC does not provide zoning designations for City ROW.[78] The proposed at-grade vertical circulation elements and queuing areas on the east side of Alameda Station would be located within parcels zoned ADP (Alameda District Specific Plan Zone) within the planned LAUS Forecourt adjacent to LAUS, the region's transportation hub. The parcels adjacent to the west side of the Project alignment, along the west side of Alameda Street, are zoned PF (Public Facilities). The parcels adjacent to the west side of the Project alignment, along the east side of Alameda Street are zoned ADP, M1 (Limited Industrial) (Limited Industrial), and PF. The vertical circulation elements that would be constructed at-grade in the planned LAUS Forecourt to the east of Alameda Street, are ancillary uses to support an overall transit use. These elements would not conflict with the existing zoning and uses at these locations because the ADP zone also allows for the development of uses permitted in the C2 zone, including transit uses such as bus stations, train stations, and scenic railways.[79] Additionally, the queueing areas for the Alameda Station on the east would be located within the LAUS Forecourt, an area intended for the public to gather and to facilitate pedestrian connections to transit, similar to the intended use of the proposed Project. As such, the proposed Project components would be consistent with the allowable uses in this area. Regarding parcels adjacent to the proposed Project alignment, the PF Zone allows for development of fire and police

[78] ZIMAS, search engine available at: http://zimas.lacity.org/, accessed May 2022.

[79] City of Los Angeles Department of City Planning. 2020. List No. 1 of Uses Permitted in Various Zones in the City of Los Angeles (Breakdown by Different Zones). Available at: https://planning.lacity.org/odocument/647665b9-6246-4eaf-a70c-f06285ff28c4/UseListMemo.pdf, accessed May 2022.

stations, government buildings, libraries, post offices, public health facilities, and public schools; the ADP also allows for the development of commercial uses under the C2 Zone, including transit uses such as bus stations, train stations, and scenic railways.[80,81,82] Such uses contribute to the development of public amenities and transit similar to the objectives of the proposed Project, a first/last mile transit project; as such, the proposed Project would be compatible with the allowable uses adjacent to the Project alignment.

Furthermore, the proposed Project includes entitlements and approvals to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards throughout the Project alignment. The development standards are in recognition of the Project's unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system. These entitlements and approvals to establish land use regulations would address the existing permitted height restrictions in the proposed Project area, as well as the signage of the proposed Project. Specifically, as discussed in Chapter 2, Project Description, Subsection 2.11, Required Permits and Approvals, the Project Sponsor is seeking to create Specific Plan pursuant to LAMC 11.5.7 to provide for consistent application of Project design standards, limitations, and operational measures. Additionally, the Project Sponsor is seeking relief from LAMC section 13.17, providing for the River Implementation Overlay District, to allow for the Alameda Station. With approval of the amendments to the LAMC to allow the proposed Project uses, development of the Alameda Station would not conflict with the applicable LAMC requirements at the time of Project implementation, and the impact would be less than significant.

Alameda Tower

The Alameda Tower site would be located entirely within the City ROW on the Alameda Triangle, and as such, does not have a zoning designation.[83] Alameda Tower is adjacent to parcels zoned C2, which allows transit uses such as bus stations, train stations, and scenic railways. As such, the proposed Project, as a first/last mile transit project, would be compatible with the existing zoning adjacent to the Project alignment. Furthermore, the proposed Project includes entitlements and approvals to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards throughout the Project alignment. The development standards are in recognition of the Project's unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system. Specifically, as discussed in Chapter 2, Project Description, Subsection 2.11, Required Permits and Approvals, the Project Sponsor is seeking to create a Specific Plan pursuant to LAMC 11.5.7 to provide for consistent application of Project design standards, limitations, and operational measures. Additionally, the Project Sponsor is seeking relief from LAMC section 13.17, providing for the River Implementation Overlay District, to allow for the Alameda Tower. including supporting components such as stations, junction, towers, and cables. With approval of the amendments to the zoning code to allow the proposed Project uses, development of the Alameda Tower would not conflict with the applicable LAMC requirements at the time of Project implementation, and the impact would be less than significant.

[80] City of Los Angeles Bureau of Engineering. 2002. Los Angeles River Revitalization Master Plan: Guiding Principles. Available at: https://boe.lacity.org/lariverrmp/Background/guiding_principles.htm, accessed May 2022.
[81] LAMC Section 12.17.6A4
[82] LAMC Section 12.04.09B3-8
[83] ZIMAS, search engine available at: http://zimas.lacity.org/, accessed May 2022.

Alpine Tower

The Alpine Tower site is zoned C2, which allows transit uses such as bus stations, train stations, and scenic railways. Adjacent parcels are also zoned C2, and include the Metro L (Gold) Line tracks as an existing transit use. As such, the proposed Project would be consistent with the existing zoning for the Alpine Tower site as a first/last mile transit project and would be compatible with transit uses adjacent to the Project alignment and the Alpine Tower site. Additionally, as previously discussed, the proposed Project includes entitlements and approvals to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards throughout the Project alignment. The development standards are in recognition of the Project's unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system. Specifically, as discussed in Chapter 2, Project Description, Subsection 2.11, Required Permits and Approvals, the Project Sponsor is seeking to create a Specific Plan pursuant to LAMC Section 11.5.7 to provide for consistent application of Project design standards, limitations, and operational measures. Additionally, the Project Sponsor is seeking relief from LAMC section 13.17, providing for the River Implementation Overlay District, to allow for the Alpine Tower. Approval of the LAMC amendment would allow for the proposed Project to be fully consistent with the surrounding zoning, as the proposed Project is already generally consistent with the surrounding area, including Metro's L Line (Gold), and the existing zoning for the site. With approval of the amendments to the zoning code, development of the Alpine Tower would not conflict with the applicable LAMC requirements at the time of Project implementation, and the impact would be less than significant.

Chinatown/State Park Station

As previously discussed, the northern portion of the Chinatown/State Park Station would be located within the boundaries of the Los Angeles State Historic Park property, which is State-owned land and thus not subject to the requirements of the LAMC. The southern portion of the station would be located on City ROW; the LAMC does not provide zoning designations for City ROW.[84] The above-grade cables between the Chinatown/State Park Station and Broadway Junction would be located above the Los Angeles State Historic Park property and parcels zoned M2; the M2 zone permits uses within the M1 zone, including the development of stadiums, arenas, auditoriums and the like, having a seating capacity of more than 3,000 people. In addition, the objectives of the proposed Project would be compatible with adjacent zoning designations which also seek to encourage the use of open space and recreational facilities, as the proposed Project would provide improved access to local parks, such as the Los Angeles State Historic Park.

The proposed Project is also compatible with adjacent uses, including the Metro L Line (Gold) tracks and Metro L Line (Gold) Station, located approximately 500 feet from the proposed Project's Chinatown/State Park Station. Additionally, as previously discussed, the proposed Project includes entitlements and approvals to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards throughout the Project alignment. The development standards are in recognition of the Project's unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system. Specifically, as discussed in Chapter 2, Project Description, Subsection 2.11, Required Permits and Approvals, the Project Sponsor is seeking to create a Specific Plan pursuant to LAMC Section 11.5.7 to provide for consistent application of Project design standards, limitations, and operational measures. Additionally, the Project Sponsor is

[84] ZIMAS, search engine available at: http://zimas.lacity.org/, accessed May 2022.

seeking an exception from the CASP to allow for the Chinatown/State Park Station. Approval of the amendment to LAMC would allow for the proposed Project to be fully consistent with the surrounding zoning, as the proposed Project is already generally consistent with the surrounding area, which includes Metro's L Line (Gold). With approval of the amendments to the zoning code, development of the Chinatown/State Park Station would not conflict with the applicable LAMC requirements at the time of Project implementation, and the impact would be less than significant.

Broadway Junction

The Broadway Junction would be located on privately-owned property at the intersection of North Broadway and Bishops Road. The parcels on the south side of the site, fronting Broadway, are zoned C2. The parcels on the north side of the Broadway Junction site, at 448 Savoy Street and 442 Savoy Street, are zoned R3.[85] The portion of the proposed Project alignment from Broadway Junction to Stadium Tower is within the public and freeway ROW. Although the proposed Project would not be consistent with the R3 zoning as it does not fall under any of the permitted residential uses for buildings or structures due to the unique aspects of an aerial gondola system, the proposed Project would be consistent with the C2 zoning as a first/last mile transit project, because the C2 zone permits transit uses such as bus stations, scenic railways, and train stations. Additionally, approval of the amendment to LAMC would allow for the proposed Project to be fully consistent with the surrounding zoning, as the proposed Project is already generally consistent with the surrounding area, including the nearby Metro L Line (Gold) tracks. Additionally, as previously discussed, the proposed Project includes entitlements and approvals to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards throughout the Project alignment. The development standards are in recognition of the Project's unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system, as well as new landscape. Specifically, the Project Sponsor is seeking to create a Specific Plan pursuant to LAMC Section 11.5.7 to provide for consistent application of Project design standards, limitations, and operational measures. With approval of the amendments to the zoning code, development of the Broadway Junction would not conflict with the applicable LAMC requirements at the time of Project implementation, as the proposed Project is already generally consistent with the surrounding area, including the nearby Metro L Line (Gold) tracks, and the impact would be less than significant.

Stadium Tower

The Stadium Tower site and surrounding area is currently zoned A1-1XL.[86] This zone permits agricultural uses with an Extra Limited Height of two stories, or 30 feet. However, the Dodger Stadium property, including the Stadium Tower site, is subject to a Conditional Use Permit, which allows the development of ancillary structures and uses, including "mass transportation service".[87] The construction and operation of the Stadium Tower would support transit service to and from Dodger Stadium. As the Stadium Tower would stand 179 feet tall with the cable suspended 159 feet above-ground, the proposed Project would also require an approved Conditional Use Permit to be consistent with zoning in this area. The Project Sponsor is seeking to create a Specific Plan pursuant to LAMC Section 11.5.7 to provide for consistent application of Project design standards, limitations, and operational measures. The Project Sponsor may also seek a Plan Approval under the existing Conditional Use Permit for the Stadium Tower, including an exception from the site's

85 ZIMAS, search engine available at: http://zimas.lacity.org/, accessed May 2022.
86 ZIMAS, search engine available at: http://zimas.lacity.org/, accessed May 2022.
87 City of Los Angeles Department of City Planning, Office of Zoning Administrator, Z.A Case No. 15430, Dodger Baseball Stadium Site – Chavez Ravine Area, August 4, 1960.

1XL (Extra Limited Height) district designation. CUP Condition 4 provides for collaboration "in devising mass transportation service to the Stadium site which will be sufficiently efficient to encourage patronage thereof and thus reduce the number of private automobiles driven to the Stadium events." As such, with approval of the amendments to the zoning code and/or the Plan Approval, development of the Stadium Tower would not conflict with the applicable LAMC requirements at the time of Project implementation, and the impact would be less than significant.

Dodger Stadium Station

The Dodger Stadium Station site is zoned A1-1XL[88] and is operated as a professional athletic stadium pursuant to a Conditional Use Permit, which allows the operation of the 56,0000-seat-capacity Major League Baseball stadium and various ancillary structures and uses, including "mass transportation service" to the site.[89] The construction and operation of the Dodger Stadium Station would support transit service to and from the site. The proposed Project would be consistent with the A1 zoning with the approval of a Conditional Use Permit, which would allow for uses other than agricultural uses. The Project Sponsor may seek a Plan Approval under the existing Conditional Use Permit to allow for the Dodger Stadium Station, including an exception from the site's 1XL (Extra Limited Height) district designation for the proposed Dodger Stadium Station which would exceed these limits, similar to the Stadium Tower described above. In addition, the Project Sponsor is seeking to create a Specific Plan pursuant to LAMC Section 11.5.7 to provide for consistent application of Project design standards, limitations, and operational measures. CUP Condition 4 provides for collaboration "in devising mass transportation service to the Stadium site which will be sufficiently efficient to encourage patronage thereof and thus reduce the number of private automobiles driven to the Stadium events." As such, with approval of the amendments to the zoning code and/or the Plan Approval, development of the Dodger Stadium Station would not conflict with the applicable LAMC requirements at the time of Project implementation, and the impact would be less than significant.

3.11.4 Mitigation Measures

The following mitigation measure would be implemented to reduce impacts related to land use.

MM-LUP-A *Obtain a Los Angeles State Historic Park General Plan Amendment*. Pursuant to Public Resources Code 5002.2, the proposed Project shall obtain an amendment to the Los Angeles State Historic Park General Plan to allow transit uses within the Los Angeles State Historic Park General Plan.

3.11.5 Level of Significance after Mitigation

With implementation of Mitigation Measure LUP-A, potential impacts associated with land use for LU-2 would be reduced to a level that is less than significant. Therefore, no significant unavoidable adverse impacts related to land use would occur.

[88] ZIMAS, search engine available at: http://zimas.lacity.org/, accessed May 2022.
[89] City of Los Angeles Department of City Planning, Office of Zoning Administrator, Z.A Case No. 15430, Dodger Baseball Stadium Site – Chavez Ravine Area, August 4, 1960.

This page intentionally left blank.

3.12 MINERAL RESOURCES

This section evaluates the potential impacts of the proposed Project on mineral resources. The analysis describes the existing physical conditions of the Project area, and the regulatory setting as it relates to mineral resources. The proposed Project would impact mineral resources if its implementation would prevent access to or result in the permanent loss of mineral resources in the Project area.

3.12.1 Regulatory Setting

State

California Surface Mining and Reclamation Act of 1975

The California Surface Mining and Reclamation Act of 1975 (Public Resources Code Section 2710 et seq.; subsequently amended) is the primary regulation of on-shore surface mining in the state. The Surface Mining and Reclamation Act requires the State Geologist (Division of Mines and Geology) to identify all mineral deposits in the state, and to classify them as: (1) containing little or no mineral deposits; (2) significant deposits; or (3) deposits identified but further evaluation is needed. In 1979, the California State Mining and Geology Board adopted guidelines for the management of mineral resources and preparation of local plans. The guidelines require local general plans to reference the State-identified mineral deposits and sites that are identified by the State Geologist for conservation and/or future mineral extraction. Subsequently, the State Mining and Geology Board identified urbanized areas where irreversible land uses precluded mineral extraction. Much of the City of Los Angeles was deemed urbanized, and therefore exempt, from the California Surface Mining and Reclamation Act of 1975.

Local

City of Los Angeles General Plan Conservation Element

The City of Los Angeles General Plan Conservation Element includes a discussion of mineral resources in the city. The Conservation Element contains two policies pertaining to mineral resources. Section 18 Policy 1 requires that the city continue to implement Surface Mining Reclamation Act provisions to establish extraction operations at appropriate sites; minimize operation impacts on adjacent uses, ecologically important areas and groundwater; protect the health and safety of the public; and require appropriate restoration, reclamation, and reuse of closed sites. Section 19 Policy 3 requires that the city continue to protect neighborhoods from potential accidents and subsidence associated with drilling, extraction, and transport operations, consistent with the California Department of Conservation, Geologic Energy Management Division requirements.[1]

3.12.2 Environmental Setting

Mineral resources in the City of Los Angeles have been classified by the State Geologist as various Mineral Resources Zones (MRZs), according to the known or inferred mineral potential of such sites. MRZ-2 sites contain potentially significant sand and gravel deposits, which are to be conserved. Any proposed development plan must consider access to the deposits for the

[1] City of Los Angeles Department of City Planning, City of Los Angeles General Plan Conservation Element, adopted September 2001. Available at: http://planning.lacity.org/cwd/gnlpln/consvelt.pdf. Accessed April 2022.

purposes of extraction. According to the City of Los Angeles General Plan Conservation Element, no portion of the proposed Project alignment is in an area identified as an MRZ-2 site.[2] The proposed Project alignment is in an area designated as MRZ-3, which is an area containing mineral deposits, the significance of which cannot be evaluated from available data.[3] Much of the area in the City of Los Angeles was developed with structures prior to the MRZ classifications, and therefore are unavailable for extraction.[4]

Additionally, according to the State of California Department of Conservation, Geologic Energy Management Division, the proposed Project alignment is in the southeastern corner of the Los Angeles City Oil Field near the intersection of Alameda and College Streets. The Los Angeles Basin is known to be a source of petroleum originating from Upper Miocene (5 to 11 million years old) rock formations. Developed in 1857, the Los Angeles City Oil Field extends immediately south of Dodger Stadium west to Vermont Avenue, encompassing an area approximately 780 acres. The majority of wells in the Los Angeles City Oil Field, including the wells closest to the proposed Project alignment, are either plugged or idle. The nearest active well is approximately 1.5 miles west of the proposed Project alignment.[5]

3.12.3 Methodology

The previously described maps and online databases from the City of Los Angeles General Plan Conservation Element and the California Department of Conservation, Geologic Energy Management Division were used to evaluate the presence of mineral resources in the Project area.

The following thresholds were used to determine the significance of impacts to mineral resources.

Thresholds of Significance

For purposes of this Draft Environmental Impact Report (EIR), the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on mineral resources if it would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or

---

2 City of Los Angeles Department of City Planning, City of Los Angeles General Plan Conservation Element Exhibit A, Mineral Resources, adopted September 2001. Available at: https://planning.lacity.org/odocument/28af7e21-ffdd-4f26-84e6-dfa967b2a1ee/Conservation_Element.pdf. Accessed April 2022.

3 California Department of Conservation. 2021. California Geological Survey, Special Report 254, Plate 1 – Mineral Resource Zone Map. Available at: https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_254-MLC-SanFernandoValleySaugusNewhallPCR-2021-Plate01-MRZs-a11y.pdf. Accessed August 2022.

4 City of Los Angeles Department of City Planning, City of Los Angeles General Plan Conservation Element Exhibit A, Mineral Resources, adopted September 2001. Available at: https://planning.lacity.org/odocument/28af7e21-ffdd-4f26-84e6-dfa967b2a1ee/Conservation_Element.pdf, Accessed April 2022.

5 California Department of Conservation, Geologic Energy Management Division (CalGEM), Well Finder, search by address. Search engine available at: https://maps.conservation.ca.gov/doggr/wellfinder/#openModal, accessed April 2022.

- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

3.12.4 Environmental Impacts

MIN-1: *Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?*

No Impact. The proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region or State. As discussed, the State requires local general plans to reference the State-identified mineral deposits and sites that are identified by the State Geologist for conservation and/or future mineral extraction. The City of Los Angeles General Plan Conservation Element states that any proposed development plan must consider access to MRZ-2 sites containing potentially significant sand and gravel deposits for purposes of extraction. The proposed Project alignment is in an area designated as MRZ-3, which includes areas containing mineral deposits, the significance of which cannot be evaluated from available data. Therefore, the proposed Project alignment does not contain known mineral resources that would be of value to the region or State. Additionally, much of the area in the City of Los Angeles was developed with structures prior to the MRZ classifications, and is unavailable for extraction. The proposed Project alignment primarily follows the public right-of-way (ROW), and is in an urbanized area of the City of Los Angeles, and the mining of such materials in an urbanized environment is not practical.

Additionally, although the proposed Project alignment is in the Los Angeles City Oil Field, the closest active well is approximately 1.5 miles west of the proposed Project alignment, and would not be affected by implementation of the proposed Project. Therefore, the proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region or State, and no impact would occur.

MIN-2: *Would the Project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

No Impact. The proposed Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on any relevant plans. The proposed Project alignment is in an area designated as MRZ-3, which includes areas containing mineral deposits, the significance of which cannot be evaluated from available data. Therefore, the proposed Project alignment is not delineated as a locally important mineral resources recovery site on a local general plan, specific plan, or other land use plan. Furthermore, as discussed in the City of Los Angeles General Plan Conservation Element, much of the area in the City of Los Angeles was developed with structures prior to the MRZ classifications, and is unavailable for extraction. The proposed Project alignment primarily follows the public ROW in an urbanized area of the City of Los Angeles, and the mining of such materials in an urbanized environment is not practical.

Additionally, the City of Los Angeles Conservation Element Section 19 Policy 3 requires that the City continues to protect neighborhoods from potential accidents and subsidence associated with drilling, extraction, and transport operations, consistent with the State requirements. The majority of wells in the Los Angeles City Oil Field, including the wells closest to the proposed Project alignment, are either plugged or idle, with the nearest active well situated approximately 1.5 miles west of the proposed Project alignment. Therefore, construction and operation of the proposed Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on any relevant plans, and no impact would occur.

3.12.5 Mitigation Measures

The proposed Project would result in no impacts to mineral resources. No mitigation measures are required.

3.12.6 Level of Significance after Mitigation

The proposed Project would result in no impacts to mineral resources. No mitigation measures are required.

3.13 NOISE

This section evaluates the potential impacts to noise and vibration from construction and operation of the proposed Project. Information contained in this section is summarized from the *Noise and Vibration Technical Report* (Appendix M of this Draft EIR). This section begins with a discussion of the basics of sound, noise, and vibration followed by discussions of the regulatory setting, the environmental setting, methodology, and then discusses noise, followed by vibration related to the Project.

3.13.1 Basics of Sound, Noise, and Vibration

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is typically defined as unwanted sound. The following is a brief discussion of fundamental environmental noise concepts.

3.13.1.1 Characteristics of Noise

Noise is defined as loud, unexpected, or annoying sound. The fundamental model of acoustics consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receptor determine the sound level and characteristics of the noise perceived by the receptor.

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure levels (SPL) are typically described using a logarithmic scale in terms of decibels (dB). Under the decibel scale, a doubling of sound energy corresponds to a 3 dB increase. When two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than one source under the same conditions. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different than what is measured. It is widely accepted that people can begin to detect sound level increases of 3 dB in typical noisy environments. Furthermore, a 5 dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness. Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3 dB increase in sound level, would generally be perceived as barely detectable.

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000–4,000 Hz and perceive sounds within that range better than sounds of the same amplitude at higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an “A-weighted” sound level (expressed in units of dBA) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds at moderate levels. Human judgement of the relative loudness or annoyance of a sound typically correlates with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special conditions (e.g., B-, C-, and D-scales), but these scales are rarely used in conjunction with noise affecting humans. Noise levels for the Project analysis are reported in terms of A-weighted decibels or dBA. Table 3.13-1 describes typical A-weighted noise levels for various noise sources.

3.13.1.2 Noise Descriptors

Noise in our daily environment fluctuates over time. Some fluctuations are minor, but some are substantial. Some noise levels occur in regular patterns, but others are random. Some noise levels fluctuate rapidly, but others slowly. Some noise levels vary widely, but others are relatively constant. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors used in the noise analysis for the proposed Project.

- **Equivalent Sound Level (L_{eq})**: L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour A-weighted equivalent sound level ($L_{Aeq(h)}$) is the energy-average of A-weighted sound levels occurring during a one-hour period and is the basis for noise abatement criteria for many agencies.

- **Daytime Equivalent Sound Level (L_{day})**: L_{day} is an energy-average of the A-weighted sound levels occurring during daytime hours - from 7:00 AM to 10:00 PM.

- **Nighttime Equivalent Sound Level (L_{night})**: L_{night} is an energy-average of the A-weighted sound levels occurring during nighttime hours - from 10:00 PM to 7:00 AM.

- **Day-Night Level (L_{dn})**: L_{dn} is the energy-average of A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10:00 PM and 7:00 AM to address the added sensitivity of people to noise during normal sleeping hours. This metric is often used to assess human annoyance to community noise.

- **Community Noise Equivalent Level (CNEL)**: CNEL is the energy-average of A-weighted sound levels occurring over a 24-hour period, with a 5 dB penalty applied to A-weighted sound levels occurring during evening hours between 7:00 PM and 10:00 PM, and a 10 dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10:00 PM and 7:00 AM.

Table 3.13-1: Typical A-Weighted Sound Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	**— 70 —**	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	**— 60 —**	
		Large business office
Quiet urban daytime	**— 50 —**	Dishwasher next room
Quiet urban nighttime	**— 40 —**	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	**— 0 —**	Lowest threshold of human hearing

Source: Caltrans 2013

- **Sound Power Level (L_w):** Sound power level is a quantity that describes the quantity of acoustical energy that is emitted by a sound source independent of the receptor's distance from the object (similar to the wattage of a light bulb). Sound power level is not usually referenced in regulations describing maximum allowable noise levels, but rather is used in some calculations and design standards to achieve a desired or allowable noise level.

- **Maximum Sound Level (L_{max}):** The maximum instantaneous sound level reached during a given period of time. This metric is commonly used in vehicle and construction equipment noise specifications.

3.13.1.3 Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on the following factors.

Geometric Spreading

Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 decibels for each doubling of distance from a point source. A line source, such as a highway or transit line, consist of several localized noise sources on a defined path. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 decibels for each doubling of distance from a line source. This section evaluates noise sources from the proposed Project as point sources except for vehicular traffic associated with the Project, which is treated as a line source.

Ground Absorption

When a noise source is located close to the ground, noise attenuation from ground absorption and reflective wave-canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 feet. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or still body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receptor, such as soft dirt, grass, or scattered bushes and trees), an excess ground-attenuation value of 1.5 decibels per doubling of distance is normally assumed. When added to the spherical spreading for point sources, the excess ground attenuation results in an overall drop-off rate of 7.5 decibels per doubling of distance. As mentioned above, ground absorption/attenuation is only relevant to noise sources that are close to the ground and is not relevant to the noise sources associated with the proposed Project that are located well above ground level, for which ground absorption effects would be minimal. Accordingly, for noise sources located more than 10 feet above ground level, this section does not apply any noise reduction for ground absorption.

Atmospheric Effects

Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can increase at large distances (e.g., more than 500 feet) from the source due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors, such as air temperature, humidity, and turbulence, can also have significant effects.

Shielding by Natural or Human-Made Features

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and solid walls) can substantially reduce noise levels. Walls are often constructed between a source and a receptor specifically to reduce noise. A barrier that breaks the line-of-sight between a source and a receptor will typically result in at least 5 dBA of noise reduction. Taller barriers provide increased noise reduction, up to a practical limit of 10 to 15 dBA.

3.13.1.4 Characteristics of Vibration

Vibration is an oscillatory motion through a solid medium, such as soil or concrete, in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is also acoustic energy transmitted as waves through the solid medium. The rate at which pressure changes occur is called the frequency of the vibration, measured by the number of oscillations per second or Hertz (Hz). Vibration may be in the form of a single pulse of acoustical energy, a series of pulses, or a continuous oscillating motion.

The way that vibration is transmitted through the ground depends on the soil type, the presence of rock formations or man-made features, and the topography between the vibration source and the receptor location. Generally, vibration waves tend to dissipate and reduce in magnitude with distance from the source. The high frequency vibrations are generally attenuated rapidly as they travel through the ground, so that the vibration received at locations distant from the source tends to be dominated by low-frequency vibration. The frequencies of ground-borne vibration most perceptible to humans are in the range from less than 1 Hz to 100 Hz.

Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as blasting, pile driving, and heavy earth-moving equipment.

Ground-borne vibration levels rarely affect human health. Instead, most people consider ground-borne vibration to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of ground-borne vibration can damage fragile buildings or interfere with equipment that is highly sensitive to ground-borne vibration (e.g., electron microscopes).

Vibration Descriptors

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root-mean-square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the square root of the average of the squared amplitude of the velocity signal. Decibel notation for vibration level (VdB) is commonly used to measure RMS. The VdB acts to compress the range of numbers required to describe vibration. Vibration velocity level (L_v), is expressed in velocity level decibels (L_v, VdB).

Effects of Vibration

When ground-borne vibration arrives at a building, a portion of the energy will be reflected or refracted away from the building, and a portion of the energy will typically continue to penetrate through the ground-building interface. However, once the vibration energy is in the building structure, it can be amplified by the resonance of the walls and floors. Occupants can perceive vibration as motion of the building elements (particularly floors) and also rattling of lightweight components, such as windows, shutters or items on shelves. At very high amplitudes (energy levels), low-frequency vibration can cause damage to buildings.

Unlike noise, ground-borne vibration is not a phenomenon that most people experience every day. Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people or slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

3.13.2 Regulatory Setting

3.13.2.1 Noise

Federal

Federal Transit Administration

The Federal Transit Administration (FTA) methodologies for assessing noise impacts are defined in the FTA's Transit Noise and Vibration Impact Assessment Manual (FTA Manual)[1]. The values presented in Table 3.13-2 represent the detailed construction noise impact assessment criteria for daytime construction from the FTA Manual.

Table 3.13-2: FTA Detailed Construction Noise Assessment Criteria

Land Use	Daytime Noise $L_{eq\ (8\text{-}hr)}$
Residential	80
Commercial	85
Industrial	90

Source: FTA, 2018

The FTA operational noise impact criteria for transit projects are shown graphically on Figure 3.13-1. The Land Use Categories (1, 2, and 3) shown on Figure 3.13-1 are defined in Table 3.13-3.

[1] FTA, *Transit Noise and Vibration Impact Assessment Manual*, Report Number 0123, Federal Transit Administration, 2018

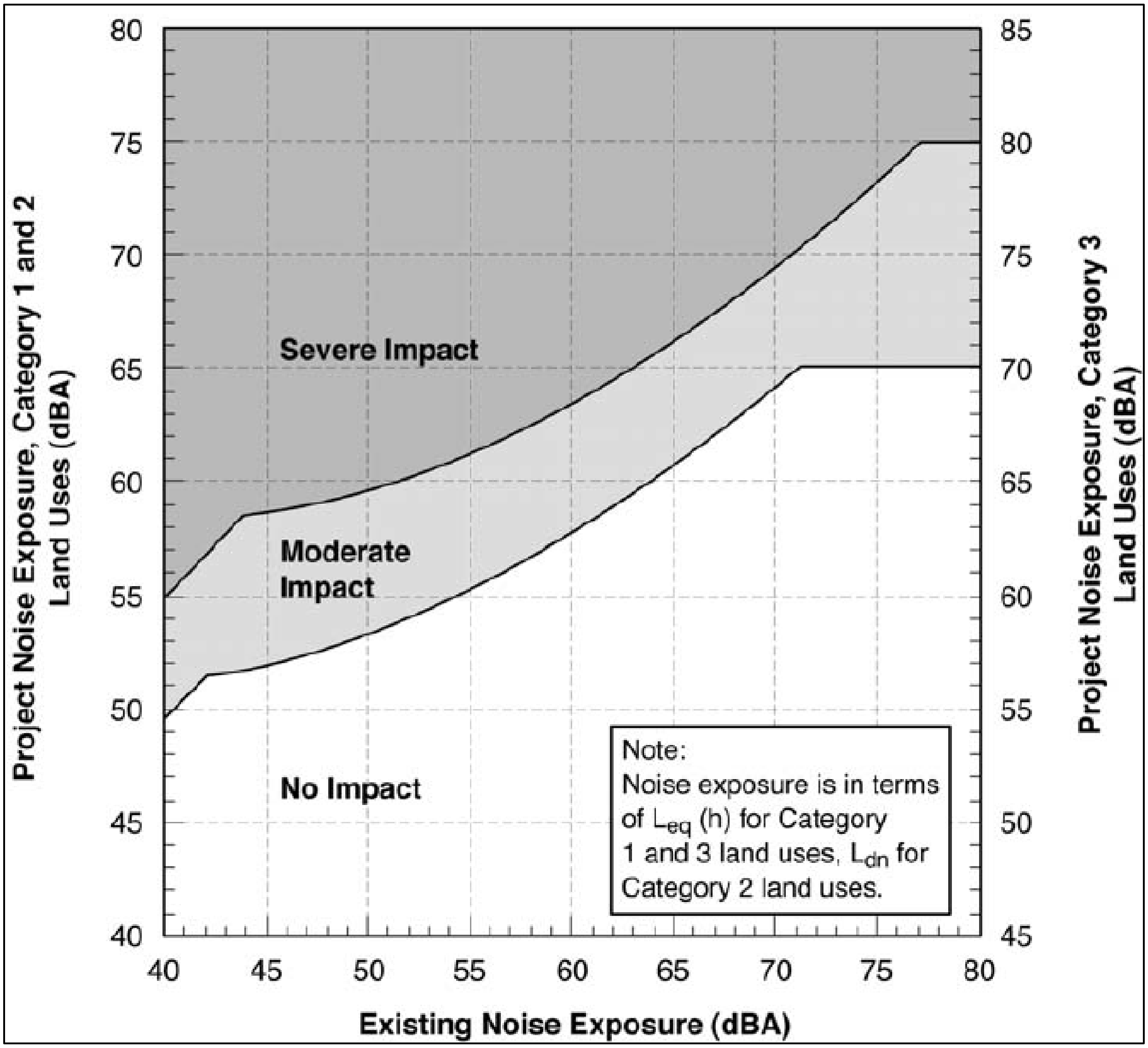


Figure 3.13-1: Operational Noise Impact Criteria for Transit Projects

Table 3.13-3: FTA Land Use Categories and Metrics for Transit Noise Impact Criteria

Land Use Category	Land Use Type	Noise Metric (dBA)	Description of Land Use Category
1	High Sensitivity	Outdoor $L_{eq(h)}$[1]	Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor use.
2	Residential	Outdoor L_{dn}	Residences and buildings where people normally sleep. This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.
3	Institutional	Outdoor $L_{eq(h)}$[1]	Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Buildings with interior spaces where quiet is important, such as medical offices, conference rooms, recording studios, and concert halls fall into this category. Places for meditation or study associated with cemeteries, monuments, and museums. Certain historical sites, parks, and recreational facilities are also included.

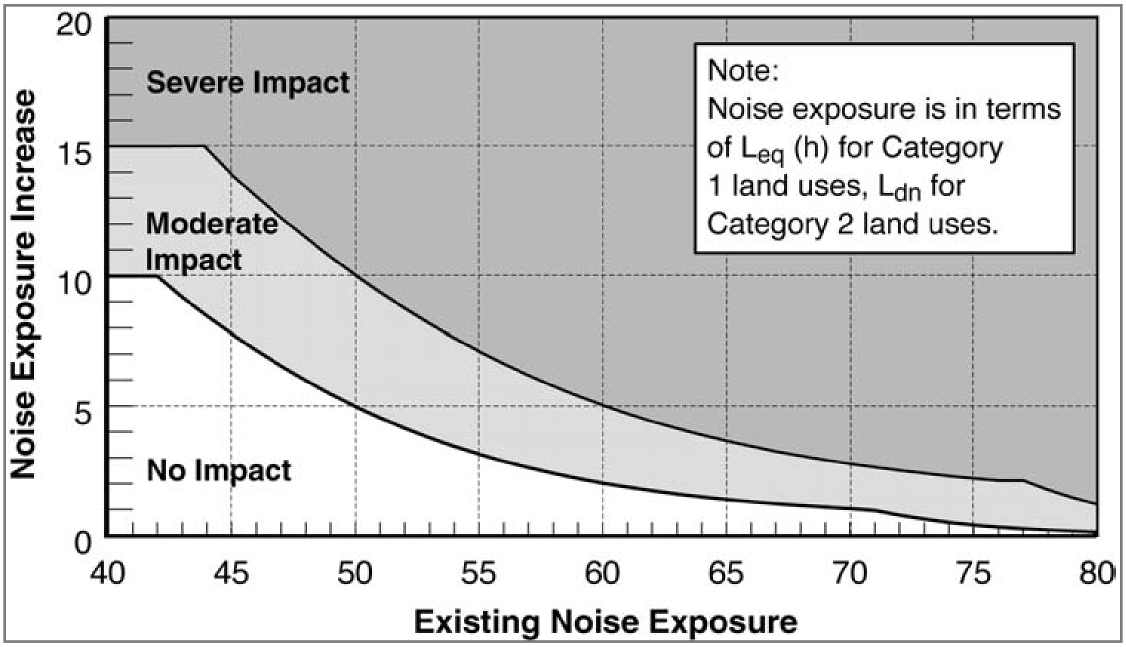
[1] L_{eq} for the noisiest hour of system-related activity during hours of noise sensitivity.
Source: FTA, 2018

With a noise exposure below the lower of the two curves on Figure 3.13-1, a proposed project is considered to have no noise impact because typically, the introduction of the proposed project would result in a minimal increase in the number of people highly annoyed by the new noise. The curve defining the onset of noise impact stops increasing at 65 dBA for Land Use Categories 1 and 2 (the left-hand axis), a standard limit for an acceptable living environment defined by a number of federal, state, and local agencies. Project noise above the upper curve is considered to cause a severe impact because a significant percentage of people would be highly annoyed by the new noise. The upper curve flattens at 75 dBA for Land Use Categories 1 and 2, indicating a level associated with an unacceptable living environment. As indicated by the Land Use Category 3 scale on Figure 3.13-1 (right-hand axis), the noise criteria are 5 dB higher for Land Use Category 3 because these types of land uses are considered to be less sensitive to noise than Land Use Categories 1 and 2.

Between the two curves, a proposed project is judged to have a moderate impact. A moderate impact exists because the change in the combined noise level resulting from the addition of the project is noticeable to most people; however, the level of noise is not sufficient to cause strong, adverse reactions from the community. In this transitional area, other project-specific factors must be considered to determine the impact's magnitude and the need for mitigation, such as the existing noise level, predicted level of increase over existing noise levels, and the types and numbers of noise-sensitive land uses affected.

Although the curves are defined in terms of existing and project component noise exposures, the increase in the combined noise is the basis for the criteria. Figure 3.13-2 shows the noise impact criteria for Land Use Categories 1 and 2 in terms of the allowable increase in the combined noise exposure. Because L_{dn} and L_{eq} are measures of total acoustic energy, any new noise source in a community would cause an increase, even if the new source level is less than the existing level.

Figure 3.13-2 shows that the criterion for moderate impact allows a noise exposure increase of 10 dB if the existing noise exposure is 42 dBA or less, but only a 1 dB increase when the existing noise exposure is 70 dBA.



Source: FTA, 2018

Figure 3.13-2: FTA Allowable Increase in Operational Cumulative Noise Levels

As the existing ambient noise level increases, the allowable transit noise level increases, but the total amount of allowable increase in community noise exposure is reduced. This accounts for the unexpected result that a project noise exposure that is less than the existing noise exposure can still cause an impact. Table 3.13-4 shows examples which indicate the allowed transit noise level for different existing levels of exposure.

Table 3.13-4: FTA Operational Noise Impact Criteria: Effect on Cumulative Noise Exposure

L_{dn} or L_{eq} in dBA (rounded to the nearest whole decibel)			
Existing Noise Exposure	**Allowable Project Noise Exposure Before Moderate Impact**	**Allowable Combined Total Noise Exposure**	**Allowable Noise Exposure Increase**
45	51	52	7
50	53	55	5
55	55	58	3
60	57	62	2
65	60	66	1
70	64	71	1
75	65	75	0

Source: FTA, 2018

State

California Department of Health Services (DHS) Guidelines

The state of California has not adopted statewide standards for environmental noise. The California Department of Health Services (DHS) has established guidelines for evaluating the compatibility of various land uses as a function of community noise exposure, as presented in Figure 3.13-3. The purpose of these guidelines is to maintain acceptable noise levels in a community setting for different land use types. Noise levels are divided into four general categories, which vary in range according to land use type:

- “normally acceptable,”
- “conditionally acceptable,”
- “normally unacceptable,” and
- “clearly unacceptable.”

For instance, a noise environment ranging from 50 dBA CNEL to 65 dBA CNEL is considered to be “normally acceptable” for multi-family residential uses, while a noise environment of 75 dBA CNEL or above for multi-family residential uses is considered to be “clearly unacceptable.”

California Government Code Section 65302

California Government Code Section 65302 requires each county and city in the state to prepare and adopt a comprehensive long-range general plan for its physical development, with Section 65302(f) requiring a noise element to be included in the general plan.

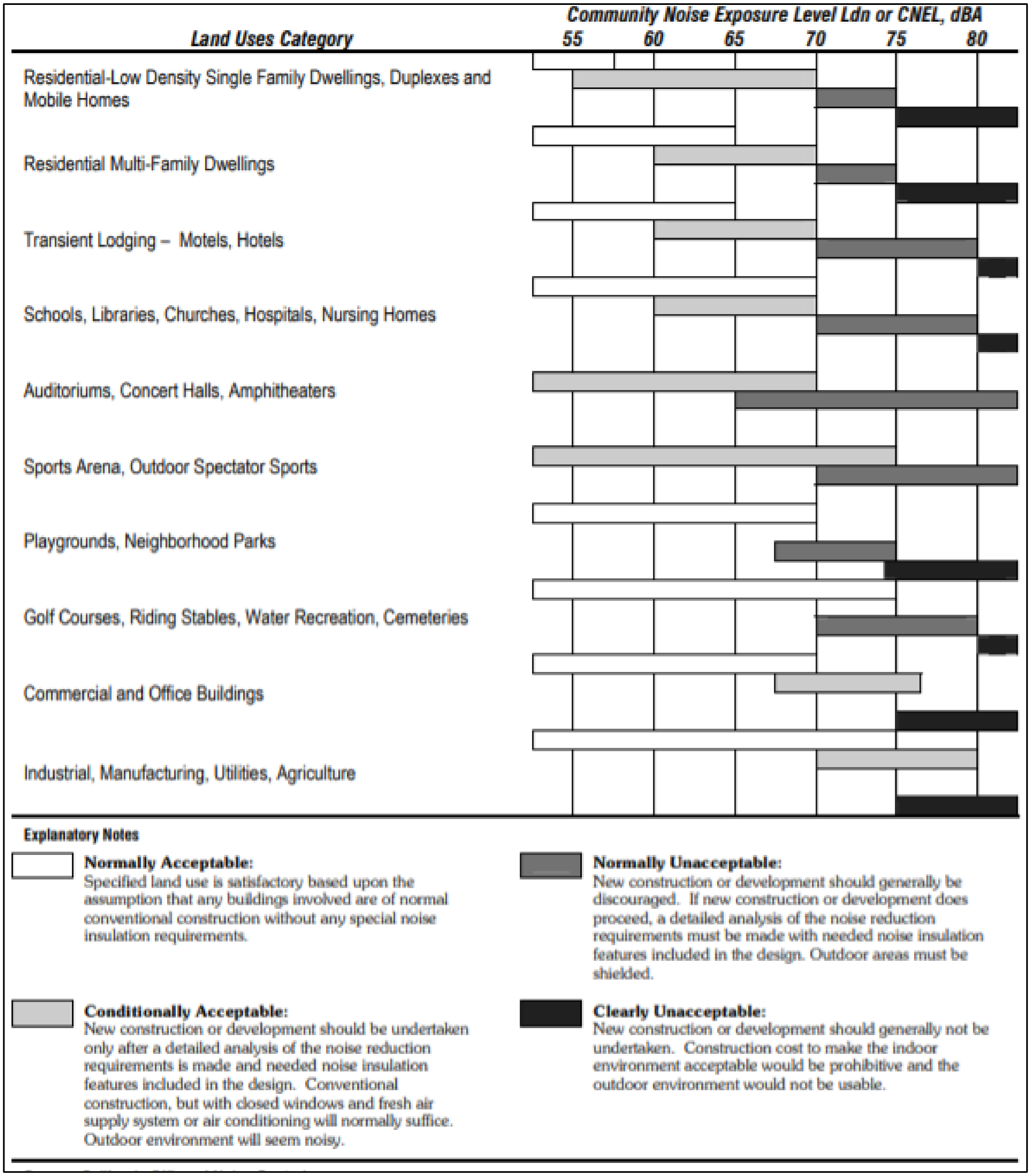
Local

Los Angeles Municipal Code

The City of Los Angeles has established noise ordinances concerning the generation and control of noise that could adversely affect its citizens and noise-sensitive land uses.

Section 111.02

Section 111.02 of the Los Angeles Municipal Code (LAMC) provides procedures and criteria for the measurement of the sound level of certain noise sources. In accordance with the LAMC, a noise source that causes a noise level increase of 5 dBA over the existing average ambient noise level as measured at an adjacent property line is considered to create a violation of the LAMC. To account for people’s increased tolerance for short-duration noise events, the LAMC provides a 5-dBA allowance for a noise source that causes noise lasting more than 5 but less than 15 minutes in any 1-hour period and an additional 5-dBA allowance (total of 10 dBA) for a noise source that causes noise lasting 5 minutes or less in any 1-hour period.



Source: California Office of Noise Control

Figure 3.13-3: Guidelines for Noise Compatible Land Use

Section 112.05

Section 112.05 of the LAMC sets a maximum noise level for construction equipment of 75 dBA at a distance of 50 feet between 7:00 AM and 10:00 PM when operated within 500 feet of a residential zone. Compliance with this standard would not apply where “technically infeasible.”

Section 41.40

Section 41.40 of the LAMC prohibits construction between the hours of:

- 9:00 PM and 7:00 AM Monday through Friday;
- 6:00 PM and 8:00 AM on Saturday; and
- At any time on Sunday (i.e., construction is allowed Monday through Friday between 7:00 AM and 9:00 PM; and Saturdays and National Holidays between 8:00 AM and 6:00 PM).

Approval would be required from the City of Los Angeles Board of Police Commissioners for extended construction hours and construction on Sundays.

City of Los Angeles General Plan, Noise Element

The Noise Element of the City of Los Angeles General Plan establishes CNEL guidelines for land use compatibility and includes a number of goals, objectives, and polices for land use planning purposes. The overall purpose of the Noise Element is to guide policy makers in making land use determinations and in preparing noise ordinances that would limit exposure of citizens to excessive noise levels. The following policies and objectives from the Noise Element are applicable to the proposed Project:

- Objective 2 (non-airport): Reduce or eliminate non-airport-related intrusive noise, especially relative to noise-sensitive land uses.
- Policy 2.1: Enforce and/or implement applicable city, state, and federal regulations intended to mitigate proposed noise-producing activities, reduce intrusive noise and alleviate noise that is deemed a public nuisance.
- Objective 3 (Land Use Development): Reduce or eliminate noise impacts associated with the proposed development of land and changes in land use.
- Policy 3.1: Develop land use policies and programs that will reduce or eliminate potential and existing noise impacts.

The City’s Noise Element includes the CNEL guidelines for land use compatibility, which are provided in Table 3.13-5.

Table 3.13-5: City of Los Angeles Guidelines for Noise Compatible Land Use

Land Use Category	Day-Night Average Exterior Sound Level (CNEL dBA)						
	50	55	60	65	70	75	80
Residential Single Family, Duplex, Mobile Home	A	C	C	C	N	U	U
Residential Multi-Family	A	A	C	C	N	U	U
Transient Lodging, Motel, Hotel	A	A	C	C	N	U	U
School, Library, Church, Hospital, Nursing Home	A	A	C	C	N	N	U
Auditorium, Concert Hall, Amphitheatre	C	C	C	C/N	U	U	U
Sport Arena, Outdoor Spectator Sports	C	C	C	C	C/U	U	U
Playground, Neighborhood Park	A	A	A	A/N	N	N/U	U
Golf Course, Riding Stable, Water Recreation, Cemetery	A	A	A	A	N	A/N	U
Office Building, Business Commercial Professional	A	A	A	A/C	C	C/N	N
Agricultural, Industrial, Manufacturing, Utilities	A	A	A	A	A/C	C/N	N

A = Normally acceptable. Specified land use is satisfactory, based upon assumption buildings involved are conventional construction, without any special noise insulation.
C = Conditionally acceptable. New construction or development only after a detailed analysis of noise mitigation is made and needed noise insulation features are included in project design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will suffice.
N = Normally unacceptable. New construction or development generally should be discouraged. A detailed analysis of noise reduction requirements must be made, and noise insulation features included in the design of the project.
U = Clearly unacceptable. New construction or development generally should not be undertaken.
Source: Noise Element of the City of Los Angeles General Plan, 1999

3.13.2.2 Vibration

Federal

The evaluation of vibration impacts can be divided into two categories - human annoyance and building damage. The FTA guidelines provide ground-borne noise and vibration criteria for human annoyance. Ground-borne noise is typically only assessed at locations with subway or tunnel operations where there is no airborne noise path. Since there are no subway or tunnel operations associated with the proposed Project, ground-borne noise impacts were not assessed.

The FTA guidelines' vibration criteria for human annoyance are listed in Table 3.13-6. These levels represent the maximum RMS level of an event. In addition, the guidelines provide human annoyance criteria for special buildings that are very sensitive to ground-borne vibration that could disrupt or disturb their intended use. The human annoyance vibration impact criteria for these special buildings, defined as concert halls, television studios, recording studios, auditoriums, and theaters, are shown in Table 3.13-7.

Both Table 3.13-6 and Table 3.13-7 differentiate human annoyance vibration impact thresholds depending on the frequency of daily vibration events, with fewer than 30 vibration events per day considered "infrequent," between 30 and 70 events considered "occasional," and more than 70 events considered "frequent." These dividing lines were originally selected to differentiate between the operational impacts of freight rail, commuter rail and light rail transit systems. The FTA criteria for "frequent events" are used for the proposed Project to apply the most conservative threshold.

Table 3.13-6: FTA Ground-Borne-Vibration Human Annoyance Impact Criteria

Land Use Category	Ground-Borne Vibration Impact Levels (VdB re 1 micro inch/second)		
	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]
Category 1: Buildings where vibration would interfere with interior operations	65 VdB[4]	65 VdB[4]	65 VdB[4]
Category 2: Residences and buildings where people normally sleep	72 VdB	75 VdB	80 VdB
Category 3: Institutional land uses with primarily daytime use	75 VdB	78 VdB	83 VdB

Notes:
[1] "Frequent events" are defined as more than 70 vibration events of the same kind per day.
[2] "Occasional events" are defined as between 30 and 70 vibration events of the same kind per day.
[3] "Infrequent events" are defined as fewer than 30 vibration events of the same kind per day.
[4] This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research would require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the heating, ventilation, and air conditioning systems and stiffened floors.
VdB = root mean square vibration velocity level, decibels
Source: FTA, 2018

Table 3.13-7: FTA Ground-Borne-Vibration Human Annoyance Impact Criteria for Special Buildings

Type of Building or Room	Ground-Borne Vibration Impact Levels (VdB re 1 micro inch/second)	
	Frequent Events[1]	Occasional or Infrequent Events[2]
Concert halls	65 VdB	65 VdB
Television studios	65 VdB	65 VdB
Recording studios	65 VdB	65 VdB
Auditoriums	72 VdB	80 VdB
Theaters	72 VdB	80 VdB

Notes:
[1] "Frequent events" are defined as more than 70 vibration events of the same kind per day.
[2] "Occasional or infrequent events" are defined as fewer than 70 vibration events of the same kind per day.
VdB = root mean square vibration velocity level, decibels
Source: FTA, 2018

In addition to human annoyance impact criteria, the FTA guidelines provide vibration criteria for building damage. Construction activities can result in varying degrees of ground vibration, depending on the equipment and method employed. The vibration associated with typical transit construction is not likely to cause major structural damage to building structures, but it could cause slight architectural damage at the highest level (FTA Manual 2018). Construction vibration impact on a building is generally assessed in terms of PPV in inches per second. Table 3.13-8 summarizes the FTA guidelines' construction vibration criteria for the analysis of potential building damage.

Table 3.13-8: FTA Construction Vibration Building Potential Damage Criteria

Building Category	PPV (inches per second)	Approximate L_v[1]
I. Reinforced-concrete, steel or timber (no plaster)	0.50	102 VdB
II. Engineered concrete and masonry (no plaster)	0.30	98 VdB
III. Non-engineered timber and masonry buildings	0.20	94 VdB
IV. Buildings extremely susceptible to vibration damage	0.12	90 VdB

Notes:
[1] VdB re 1 micro-inch per second
L_v = velocity level, decibels
PPV = peak particle velocity
VdB = root mean square vibration
Sources: FTA, 2018

State

The California Department of Transportation (Caltrans) has published the 2020 Transportation and Vibration Guidance Manual, including potential vibration damage thresholds which is largely consistent with the standards and techniques presented in the FTA Noise and Vibration Impact Assessment manual, as discussed above.

Local

The City currently does not have any adopted standards, guidance, or thresholds relative to ground-borne vibration. Therefore, available guidance from the FTA is utilized to assess impacts due to ground borne vibration for project construction and operation.

3.13.3 Environmental Setting

3.13.3.1 Existing Noise Conditions

A noise survey was conducted to establish existing noise conditions in a variety of locations throughout the Project area, focusing on areas of existing or future noise-sensitive receptors, including single-family residential (SFR) areas, multi-family residential (MFR) areas, parks, schools, and other outdoor areas of frequent human use.

The existing condition noise survey included a combination of short-term (approximately 15 minutes) and long-term (24-hour) measurements at a total of 22 locations. Most measurements were conducted between June 15 and June 18, 2020; measurements for an additional location were conducted on May 11, 2022. The noise measurements were generally conducted at the sites representative of noise-sensitive receptors along the proposed Project alignment, from LAUS to Dodger Stadium. These included identified locations of existing and future residential developments, schools, parks, and other areas with frequent outdoor human use. See Appendix M for noise measurement procedures, measurement detail, photos, and instrument calibration certificates.

The 22 measurement locations are shown in Figure 3.13-4. Table 3.13-9 provides descriptions for each of the 22 measurement locations, including addresses, cross-streets, and/or the names of the measurement location; site ID, which corresponds to the measurement location shown in Figure 3.13-4; and land use description.

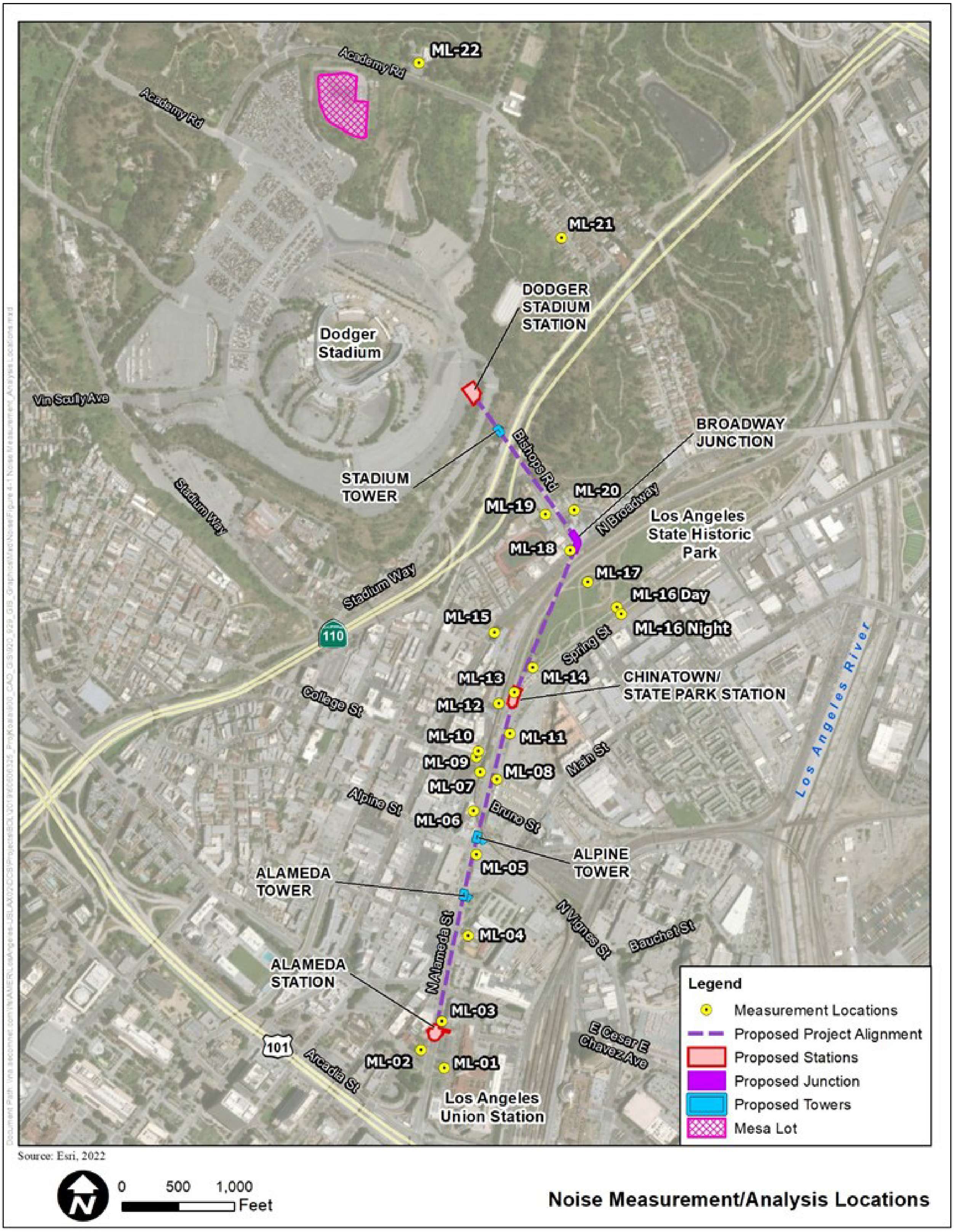


Figure 3.13-4: Measurement Locations

Table 3.13-9: Measurement Location Descriptions

Site ID	Location Description	Current Land Use	FTA Land Use Category
ML-01	LAUS Entrance Plaza	Public Plaza (Daytime Use)	Category 3 - Institutional
ML-02	Father Serra Park	Public Plaza (Daytime Use)	Category 3 - Institutional
ML-03	Mozaic Apartments	Multi-Family Residence (24-hour)	Category 2 - Residential
ML-04	The California Endowment	Business (Daytime Use)	Category 3 - Institutional
ML-05	Alameda Street and Alpine Street	Parking Lot (Daytime Use); Possible Future Residential	Category 2 - Residential
ML-06	Chinatown Senior Lofts	Multi-Family Residence (24-hour)	Category 2 - Residential
ML-07	Under Chinatown Station	Public Plaza (Daytime Use)	Category 3 - Institutional
ML-08	College Street and Alameda Street	School Bus Parking Lot (Daytime Use); Possible Future Residential	Category 2 - Residential
ML-09	Blossom Apartments Sidewalk	Multi-Family Residence (24-hour)	Category 2 - Residential
ML-10	Blossom Apartments Upper Plaza	Multi-Family Residence (24-hour)	Category 2 - Residential
ML-11	College Station Development	Parking Lot (Daytime Use); Future Residential Development	Category 2 - Residential
ML-12	Parking under L Line (Gold) tracks	Parking Lot (Daytime Use)	Category 3 - Institutional
ML-13	Los Angeles State Historic Park	Public Park (Daytime Use)	Category 3 - Institutional
ML-14	Los Angeles State Historic Park	Public Park (Daytime Use)	Category 3 - Institutional
ML-15	Broadway and Bernard Street	Retail (Daytime Use)	Category 3 - Institutional
ML-16	Los Angeles State Historic Park	Public Park (Daytime Use)	Category 3 - Institutional
ML-17	Los Angeles State Historic Park	Public Park (Daytime Use)	Category 3 - Institutional
ML-18	Bishops Road and Broadway	School (Daytime Use)	Category 3 - Institutional
ML-19	Cathedral High School	School (Daytime Use)	Category 3 - Institutional
ML-20	430 Savoy Street	Single Residence (24-hour)	Category 2 - Residential
ML-21	Solano Canyon	Residential (24-hour)	Category 2 - Residential
ML-22	Elysian Park Recreation Center	Public Park (Daytime Use)	Category 3 - Institutional

Note: Not all the measurement locations identified in this table were eventually used to represent noise-sensitive receptors. Some of these were used as alternative measurement locations, but not representative of additional noise-sensitive land uses.

3.13.3.2 Noise-Sensitive Receptors

Table 3.13-10 provides a summary of the existing conditions in the Project area, reporting for each measurement: site ID, location, time period, $L_{eq(day)}$, $L_{eq(night)}$, L_{dn}, and CNEL. Short-term data for multi-hour noise descriptors were derived from the difference in L_{eq} between the short-term measurement in question and the closest long-term measurement at the same time.

Table 3.13-10: Existing Ambient Noise Level (in dBA) Summary

Site ID	Location Description	L_{day}	L_{night}	L_{dn}	CNEL
ML-01	LAUS Entrance Plaza	61.1	57.7	64.8	65.1
ML-02	Father Serra Park	69.0	65.5	72.6	72.9
ML-03	Mozaic Apartments	68.4	65.5	72.5	72.7
ML-04	The California Endowment	63.6	60.7	67.7	68.0
ML-05	Alameda Street and Alpine Street	65.6	64.9	71.5	71.6
ML-06	Chinatown Senior Lofts	69.0	64.1	71.6	72.0
ML-07*	Under Chinatown Station	66.7	63.2	70.3	70.6
ML-08	College Street and Alameda Street	69.8	65.1	72.6	72.9
ML-09	Blossom Apartments Sidewalk	65.0	54.9	64.9	65.6
ML-10	Blossom Apartments Upper Plaza	61.1	56.5	63.9	64.3
ML-11	College Station Development	64.7	64.4	70.8	71.0
ML-12	Parking under L Line (Gold) tracks	63.0	59.5	66.6	66.9
ML-13	Los Angeles State Historic Park	64.1	59.1	66.7	67.1
ML-14	Los Angeles State Historic Park	58.7	55.2	62.3	62.6
ML-15	Broadway and Bernard Street	67.7	63.6	70.9	71.2
ML-16	Los Angeles State Historic Park	55.4	50.5	58.0	58.5
ML-17	Los Angeles State Historic Park	53.6	48.7	56.3	56.7
ML-18	Bishops Road and Broadway Street	65.8	60.9	68.5	69.0
ML-19	Cathedral High School	58.7	53.8	61.3	61.8
ML-20*	430 Savoy Street	56.1	51.2	58.7	59.3
ML-21	Solano Canyon	56.5	51.6	59.1	59.6
ML-22**	Elysian Park Recreation Center (day use only)	57.2	--	--	--

Notes: Measurement results are based on representative short-term noise measurements, typically 15-30 minutes, and extrapolated using long-term measurement references to represent indicated time periods
* Measurement locations ML-07 and ML-20 were long-term 24-hour noise measurements.
**Measurement location ML-22, was at a remote daytime use only location (public park) so only representative daytime noise measurements were collected at that location.

Continuous 24-hour noise levels were measured at two locations, ML-07 (representative of areas adjacent to busy roadways (such as Alameda Street) and ML-20 (representative of locations further from busy streets); at the remainder of locations short-term noise levels were taken. Longer-duration noise metrics for short-term locations (L_{day}, L_{night}, L_{dn} and CNEL) were calculated by comparing the short-term noise measurement and the appropriate representative long-term noise measurement location. More specifically, the difference in monitored sound levels at the same times-of-day between a short-term measurement and the appropriate long-term measurement were used to develop long-term values for the locations where short-term noise levels were taken. These values were then used to determine the L_{day}, L_{night}, L_{dn} and CNEL values at the short-term monitoring locations. This is an acoustical standard method for determining L_{day}, L_{night}, L_{dn} and CNEL values.

Note that, during the time when the noise measurements were conducted for this analysis (June of 2020 for all measurements except ML-22, which was conducted on May 11, 2022), local traffic volumes were anticipated to be somewhat lower than normal due to COVID-19 Pandemic restrictions. While no comparative traffic data was available to confirm this observation, an informal comparison of measured noise levels to previously measured noise levels for other technical studies in similar locations during pre-COVID conditions show that the previously measured noise levels were up to 3 dBA higher. As no correction was applied to the measured data in this analysis, the results represent a conservative noise impact assessment because the measured noise levels were at least somewhat lower than typical conditions.

The noise-sensitive receptors (NSRs) evaluated in the construction and operational noise analysis are listed in Table 3.13-11 (including existing noise level information) and are shown in Figure 3.14-5 for the proposed Project.

As mentioned previously, the NSRs represent existing noise conditions in a variety of locations throughout the Project area, focusing on areas of existing or future noise-sensitive receptors, including single-family residential (SFR) areas, multi-family residential (MFR) areas, parks, schools, and other outdoor areas of frequent human use. For this Project, to ensure that the analysis is conservative, exterior facades with operable windows were also considered for noise impacts at residential units and school buildings. The noise measurements were conducted at the sites of impact-sensitive receptors along the proposed Project alignment, from LAUS to Dodger Stadium.

3.13.3.3 Existing Vibration Conditions

Unlike existing ambient noise conditions, existing vibration levels are not typically considered in the assessment of project vibration impacts, so existing vibration levels were not measured for this project. However, for the identified Project area it is assumed that existing ambient vibration levels would typically be below human perceptibility, except for some heavy loaded trucks operating on local streets, which could be perceptible within about 25 feet. Vibration levels for “Rubber Tired Vehicles” would be less than ~70 VdB at 25 feet, which is generally not perceptible per FTA.

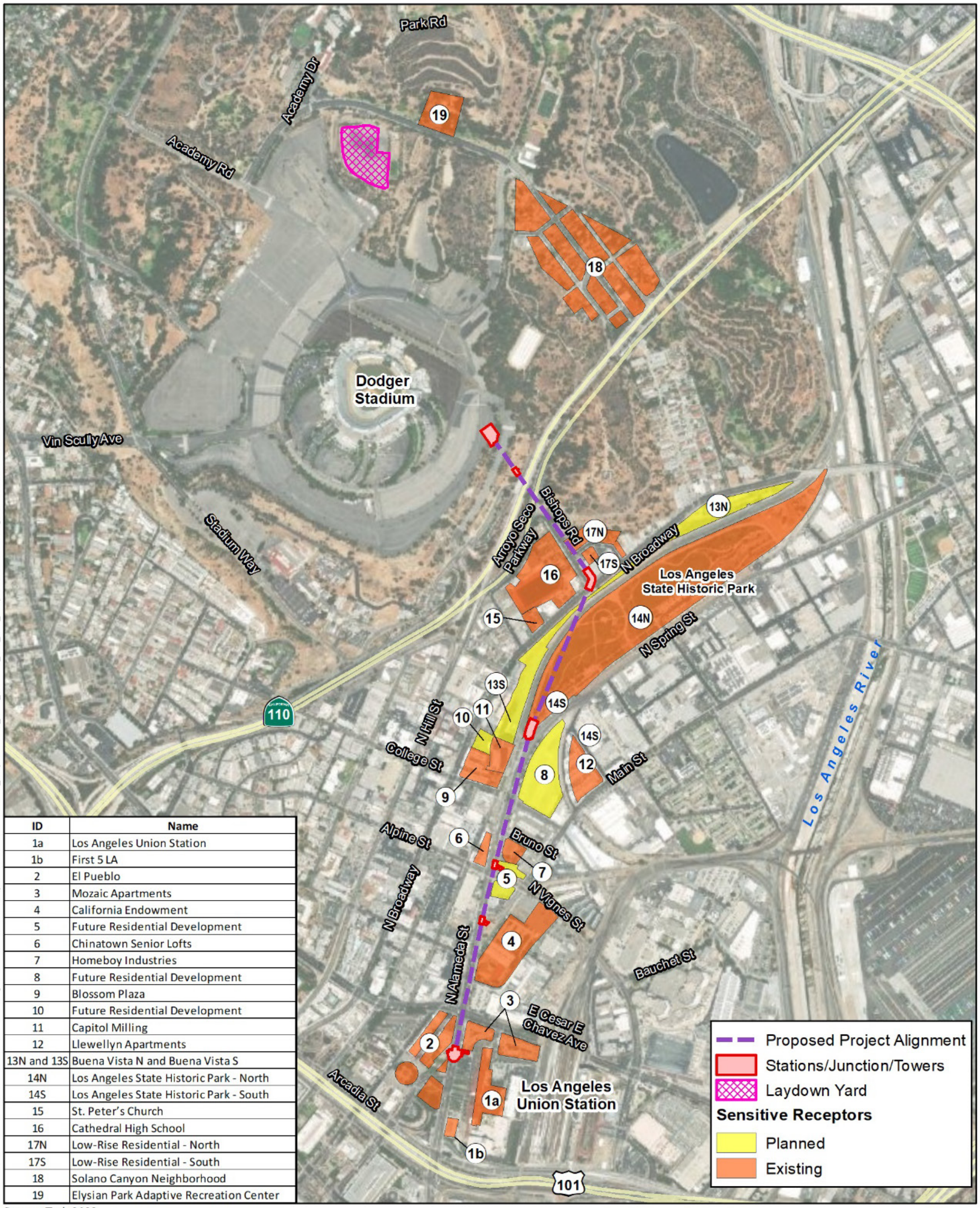
3.13.4 Methodology

The general procedure for assessing noise and vibration impacts for the proposed Project is to predict the future noise and vibration levels associated with the Project, and then compare those predicted levels to the appropriate identified significant impact criteria. The noise and vibration impact analysis for this Project includes two primary phases - noise and vibration for construction of Project components, and ongoing operational noise (for both the system and people noise). The methodologies and assumptions for predicting future noise and vibration values for these phases are described below.

Table 3.13-11: Noise Receptors and Existing Noise Levels (in dBA) Summary

NSR	Name	Land Use[1]	ML[2]	$L_{eq(day)}$ 7:00-22:00	$L_{eq(night)}$ 22:00-7:00	Ldn 24-hr	CNEL 24-hr
NSR 1A	Los Angeles Union Station	Transit Terminal	ML-01	61.1	57.7	64.8	65.1
NSR 1B	First 5 LA	Daycare Center	ML-01	61.1	57.7	64.8	65.1
NSR 2	El Pueblo	Public Park	ML-02	69.0	65.5	72.6	72.9
NSR 3	Mozaic Apartments	MFR	ML-03	68.4	65.5	72.5	72.7
NSR 4	The California Endowment	Office Building	ML-04	63.6	60.7	67.7	68.0
NSR 5	Future Residential Development	Future MFR[3]	ML-05	65.6	64.9	71.5	71.6
NSR 6	Chinatown Senior Lofts	MFR	ML-06	69.0	64.1	71.6	72.0
NSR 7	Homeboy Industries	Office Building	ML-08	69.8	65.1	72.6	72.9
NSR 8	Future Residential Development	Future MFR[3]	ML-11	64.7	64.4	70.8	71.0
NSR 9	Blossom Plaza	MFR	ML-10	61.1	56.5	63.9	64.3
NSR 10	Future Residential Development	Future MFR[3]	ML-10	61.1	56.5	63.9	64.3
NSR 11	Capitol Milling	Commercial	ML-12	63.0	59.5	66.6	66.9
NSR 12	Residential Development	MFR	ML-11	64.7	64.4	70.8	71.0
NSR 13N	Future Residential Development - North	Future MFR[3]	ML-18	65.8	60.9	68.5	69.0
NSR 13S	Future Residential Development - South	Future MFR[3]	ML-15	67.7	63.6	70.9	71.2
NSR 14N	Los Angeles State Historic Park – North	Public Park	ML-17	53.6	48.7	56.3	56.7
NSR 14S	Los Angeles State Historic Park – South	Public Park	ML-14	58.7	55.2	62.3	62.6
NSR 15	St Peter's Church	Church	ML-18	65.8	60.9	68.5	69.0
NSR 16	Cathedral High School	School	ML-19	58.7	53.8	61.3	61.8
NSR 17N	Low-Rise Residential - North (on Savoy Street)	SFR	ML-20	56.1	51.2	58.9	59.3
NSR 17S	Low-Rise Residential - South (on Savoy Street)	SFR	ML-20	56.1	51.2	58.9	59.3
NSR 18	Solano Canyon Neighborhood	SFR	ML-21	56.5	51.6	59.1	59.6
NSR 19[4]	Elysian Park Recreation Center	Public Park	ML-22	57.2	--	--	--

Notes:
[1] SFR = Single Family Residential, MFR = Multi-Family Residential, ML= Measurement Location.
[2] Not all noise measurement locations represented NSRs; Some of these were alternate locations for potential future NSRs.
[3] NSR 5 is currently an undeveloped City-owned parking lot and is proposed for future multi-family residential uses. NSR 8 is a vacant lot at N. Spring St. and W. College St. that's proposed for College Station, a mixed-use transit-oriented development that would include up to 770 residential units. NSR 10 is a proposed mixed-use project at 924 N. Broadway that would include 178 residential units. NSR 13N and 13S are two phases of the proposed Buena Vista mixed-use development at 1251 North Spring Street and 1030-1080 N. Broadway that would include up to 986 residential units.
[4] NSR 19/ML-22, is a daytime use only location (public park picnic area) that is not near Project operations but will have a laydown yard nearby during the Project construction phases, so only representative daytime noise measurements were collected at that location. Only construction impacts were modeled for this location.



Source: Esri, 2022

0 750 1,500 Feet

Noise Sensitive Receptors Map

Figure 3.13-5: Noise Sensitive Receptors Map

3.13.4.1 Construction Noise

On-Site Construction Activities

Potential construction noise impacts were determined by calculating the Project-related construction noise levels at representative sensitive receptors and comparing these values to existing ambient noise levels (i.e., noise levels without construction noise from the proposed Project). Construction noise associated with the proposed Project was analyzed based on the construction equipment and processes expected to be in use during the worst-case (loudest) part of the construction process. The construction noise model for the proposed Project is based on the FHWA Roadway Construction Noise Model (RCNM). Additionally, the FTA "detailed" construction noise analysis was used due to the complexity of the construction noise resulting from the wide variety of equipment being used and the multiple construction phases.

The methodology used to analyze on-site construction activities starts with the reference noise level and usage factor for each type of construction equipment to be used under conservative worst-case conditions for each identified construction phase. These reference noise levels are then adjusted for the distance from source to the noise-sensitive receptor, the fractional portion of time (Acoustic Use Factor or AUF) that the equipment is operating at full power (L_{max}), and any acoustical shielding that may be present (such as buildings or terrain), and then summing together the contributed noise from all pieces of equipment.

Appendix B of this Draft EIR provides the construction assumptions for the Project and includes construction equipment rosters and usage data for worst-case noise conditions.

The acoustic contribution for all equipment assumed to be operating during the defined construction phase is summed together on an energy basis as the estimated combined noise level for each specific noise-sensitive receptor and then adjusted for distance and acoustical shielding from intervening structures such as buildings or terrain in accordance with FTA methodology for estimating barrier insertion loss (as detailed in FTA Table 4-28).

The list of construction equipment available to be used for the various construction phases of the proposed Project are selected from the full RCNM equipment list, including maximum noise level (L_{max}) and Acoustic Use Factor (AUF) as shown in Table 3.13-12. The list of equipment used for the analysis of construction noise levels for various construction phases were identified in Appendix B of this Draft EIR and are provided in Table 3.13-16.

In addition, to evaluate compliance with LAMC Section 112.05, which sets a maximum noise level for construction equipment of 75 dBA at 50 feet, the analysis included an evaluation of the Project's proposed construction equipment at 50 feet.

Table 3.13-12: Acoustical Properties of Construction Equipment

Equivalent Type	$L_{max\text{-}ref}$ dBA (50 feet)	AUF%
Auger Drill	84	20
Backhoe	78	40
Boring Jack Power Unit	83	50
Chain Saw	84	20
Compactor (ground)	83	20
Compressor (air)	78	40
Concrete Mixer Truck	79	40
Concrete Pump Truck	81	20
Concrete Saw	90	20
Crane	81	16
Dozer	82	40
Drill Rig Truck	79	20
Drum Mixer	80	50
Dump Truck	76	40
Excavator	81	40
Flat Bed Truck	74	40
Front End Loader	79	40
Generator (>25KVA)	81	50
Generator (<25KVA)	73	50
Gradall	83	40
Grader	85	40
Horizontal Boring Jack	82	25
Hoe Ram	90	20
Jackhammer	89	20
Man Lift	75	20
Pavement Scarifier	90	20
Paver	77	50
Pickup Truck	75	40
Pneumatic Tools	85	50
Pumps	81	50
Roller	80	20
Scraper	84	40
Shears (on backhoe)	96	40
Tractor	84	40
Vacuum Excavator	85	40
Vacuum Street Sweeper	82	10
Ventilating Fan	79	100
Vibrating Hopper	87	50
Vibratory Concrete Mixer	80	20
Warning Horn	83	5
Welder/Torch	74	40

Off-Site Construction Noise

In addition to the construction equipment identified above, there would be some additional traffic on the local roadway network to and from the construction sites associated with construction equipment movements, worker trips, and material delivery and removal. An off-site noise analysis was conducted using the FHWA Traffic Noise Model (TNM) version 2.5 to predict and evaluate additional noise contributed by construction-related traffic noise at typical receptor distances. The

TNM is the current standard computer noise model used nationally for traffic noise studies. The model allows for the input of roadways, noise receptors, and sound barriers, if applicable. The existing traffic volumes for haul route roadways were obtained from Fehr and Peers, the Project's traffic consultant. The additional construction-related off-site heavy truck volumes are included in Appendix B of this Draft EIR.

The TNM was used to calculate existing traffic noise levels at typical receptor distances (50 to 100 feet) from the roadway centerline for the area streets used for haul routes, which were then compared to calculated noise levels for the existing traffic plus project traffic to assess increases in traffic noise levels as a result of the project traffic.

3.13.4.2 Operational Noise

Operational noise impacts were evaluated by identifying the noise levels that would be generated by Project operation noise sources, including stations, junction, towers, cabins passing along the support sheaves at towers, and passengers at stations waiting to board the system. The noise level from each noise source at each surrounding sensitive receptor property line location was then calculated and compared to the existing ambient noise levels. Details and results of the operational noise impacts are presented in Section 3.13.5.

Operational System Noise

There is no universally recognized standard methodology for predicting noise levels for gondola transportation systems, such as those proposed for use on this Project. However, a targeted literature review identified a relevant journal article, *Noise prediction models for gondola ropeway* components[2], which was used as a basis for predicting the noise from the Project's operations. This article includes equations for predicting noise levels for both station noise and tower noise based on empirical data collected from several modern aerial gondola systems. The article includes equations for two types of gondola systems – powered and tensioning. As provided in the article, the noise levels for the powered system are louder than the tensioning system. Accordingly, to provide a conservative analysis, this report utilized the equations for the powered systems to provide a worst-case evaluation. The noise levels calculated using the equations from the article represent predicted sound level values. The use of the Rossi article equations was validated by comparing predicted noise levels generated by the equations to *in-situ* measured (real-world data from an operating system) noise levels for a 3S gondola system similar to that proposed for this Project. This comparison was conducted to determine whether the predicted sound levels using the Rossi article equations are similar enough to actual system sound measurements such that the equations could be used to model the sound values for the proposed Project. This comparison of predicted and measured values resulted in differences of up to 3.9 dBA for the stations and up to 1.2 dBA for the towers (detailed in the Noise and Vibration Technical Report for the Project), which is within the normally-accepted tolerance of noise prediction models.

<u>Station and Junction Noise</u>

Noise from the stations and junction at receptor locations are generated by the equipment that powers and directs the movement of the gondolas and takes into consideration the sound power

[2] *Federico Rossi and Andrea Nicolini, Noise Control Engineering Journal #59(5), October 2011*

generated by the equipment, the distance from the station/junction to the receptor, and the offset angle of the receptors relative to the gondola's direction of travel.

The following assumptions regarding the Project's stations/junction were utilized for the Project's analysis:

- The stations generate noise in a similar way as the systems in the Rossi article (which are considered to be conservative as a result of model validation.
- The proposed Project includes three stations. While some stations may have power equipment (electrical motors to move the gondolas) and some may not, it was conservatively assumed that all stations would have power units, presenting a worst-case noise analysis.
- The proposed Project includes one junction. The junction is a non-passenger junction used to execute a turn in the ropeway (while the junction includes vertical circulation elements, which are for maintenance). Acoustically, it was assumed that the junction would have the same power unit as the stations and was modeled using the same equations and parameters as the stations.
- Distance from stations/junction to receptor was measured from the outline of the station/junction footprint to the receptor to provide the worst-case scenario.
- All angles were measured from the line direction provided in the preliminary construction phasing diagrams that were provided by the Project team.

<u>Tower Noise</u>

Tower noise was calculated based on equations in the Rossi article, including noise generated by the rope passing over the sheaves (mechanism at top of tower which supports and/or holds down the cables) and noise generated by the gondola cabin passing over the sheaves. The calculated levels for both sources are combined using a time weighted average, which is detailed in the *Noise and Vibration Technical Report* (Appendix M of this Draft EIR).

The following assumptions regarding the Project's towers were utilized for the Project's analysis:

- Tower to noise-sensitive receptor distances are based on the plan distance with no extra distance added to account for tower height to provide worst-case propagation distance and a conservative analysis.
- The length of time that the gondola cabin is crossing over the support sheaves (support system on top of towers through which the rope passes under or over) was calculated by dividing the assumed length of sheaves by the line speed.
- Sheave length was assumed to be 80 feet for all sheaves consistent with the Project design.
- The length of time the cable is passing over the sheaves between cabins was found by subtracting the length of time that the gondola is crossing over the support sheaves from the headway between gondolas.

Operational System Sound Power Levels for Prediction Models

The reference sound power level values used for the prediction of operational system noise for stations, junction and towers, as provided in the Rossi article are presented in Table 3.13-13, below, including:

- Noise from stations and the junction,
- Noise at the tower generated by the rope traveling through (i.e., between gondola cabins),
- Noise at the tower generated by a gondola cabin traveling through.

The "Offset angle" is the angle from the noise source to the noise-sensitive receptor; noise levels vary depending on this angle.

Table 3.13-13: Gondola System Sound Power Reference Levels ($L_{ws\phi}$, dBA)

Offset angle To cable (degrees)	Stations and Junction		Towers* (Rope)		Towers* (Gondola Cabin)	
	11.5 ft/s (3.5 m/s)	16.4 ft/s (5.0 m/s)	11.5 ft/s (3.5 m/s)	16.4 ft/s (5.0 m/s)	11.5 ft/s (3.5 m/s)	16.4 ft/s (5.0 m/s)
0	71	76	70.5	75	80	84.5
45	71	75.5	--	--	80	84.5
90	71	74	71.5	76	80	84.5
135	71	75.5	--	--	80	84.5
180	72	77	70.5	75	80	84.5
225	72	75.5	--	--	80	84.5
270	72.5	75.5	71.5	76	80	84.5
315	72	76	--	--	80	84.5

Source: Rossi and Nicolini, 2011
*Tower sound power levels assume hold down sheaves, which are the tower components over which the rope travels, as they are slightly more conservative than other referenced sheave types.
Station sound power levels assumed the louder "powered" stations.

Passenger Noise

Passenger noise was calculated using reference values as shown in Table 3.13-14, with model inputs being overall passenger queuing number estimates accompanied by percentage breakdowns by gender/age and vocal effort (explained more in the operational assumptions section).

Table 3.13-14: Passenger Noise Reference Values in L_{eq}, dBA at 3.3 feet (1 meter)

Gender/age	Casual	Normal	Raised	Loud	Shouted
Females	50	55	63	71	82
Males	52	58	65	76	89
Children	53	58	65	74	82

Source: Olsen 1998[3]

[3] Olsen, W.O. Average Speech Levels and Spectra in Various Speaking/Listening Conditions. *American Journal of Audiology*, 7(2), pp. 21-25, October 1998.

Conservatively, the passenger noise modeling assumptions utilized in the analysis for all operational scenarios are those that are applicable to the Dodger Game Day scenario, as part of the 2042 horizon year, which would generate the highest ridership and therefore the highest passenger noise levels. The Dodger Game Day scenario utilized the following assumptions, which are discussed further in Section 3.13.5.

- Passenger breakdown - 50% males, 30% females, 20% children.
- Vocal Effort - 50% not talking; of the 50% talking 60% normal, 35% raised, 5% loud.

Gondola Cabin Noise

In addition to the primary operational noise levels from the stations, junction, towers and passengers at stations as discussed above, an analysis was also conducted to assess the noise from the gondola cabins themselves as they travel between and within the stations, towers and junction in proximity to receptor locations. While the cabins themselves would be mostly silent, some noise might be expected from the people traveling inside the cabin and any heating, ventilation, and air conditioning (HVAC) equipment associated with the cabin.

For this analysis, the closest distance from the cabin path to the receptor was calculated, the number and mix of people inside the cabin was considered (assuming up to 40 people per cabin with acoustical assumptions similar to those presented above), the typical noise reduction for standard automotive safety glass (approximately 25 dBA), as well as a maximum allowable sound power level allowed for the HVAC units in order for the resulting noise level at the nearest receptor to be at least 10 dBA below the expected nighttime ambient noise level. These requirements are listed as Project Design Feature (PDF) NOI-PDF-A in Section 3.13.6 below.

Combined Operational Noise

The combined operational noise at any analysis location is the energy-sum of the system noise (stations, junction, and/or towers), passenger noise sources (stations), and cabins within 500 feet of the analysis location, as calculated in hourly L_{eq}, and CNEL, in dBA.

3.13.4.3 Construction Vibration

Ground-borne vibration impacts due to the proposed Project's construction activities were evaluated for both on-site and off-site construction activities by identifying potential vibration sources (i.e., construction equipment), estimating the vibration levels at the potentially affected receptor, and comparing the proposed Project's activities to the applicable vibration significance thresholds. The methodology for calculating the construction vibration levels is described below.

Construction-related vibration is assessed using two different metrics: 1) to assess potential structural damage from vibration and; 2) to assess human annoyance from vibration. Peak particle velocity (PPV) in inches per second (in/sec) is used to assess potential structural damage. Vibration velocity level (L_v) in VdB is used to assess human annoyance. These are calculated using relevant equations in the FTA Manual, which are detailed in the *Noise and Vibration Technical Report* (Appendix M of this Draft EIR).

Not all construction equipment produces significant ground-borne vibration. Of the equipment for the proposed Project as shown in Table 3.13-15, the equipment with the highest reference vibration level would be "Vibratory Roller" which has reference values of PPV_{ref} equal to 0.21 in/sec at 25 feet, and $L_{v\text{-}(ref)}$ equal to 94 VdB at 25 feet. Other construction equipment types expected to be used for the Project that cause ground-borne vibration are listed in Table 3.13-15 (from FTA 2018, Table 7-4).

Table 3.13-15: Reference Vibration Properties of Construction Equipment

Equipment Type	PPV at 25 ft, in/sec	L_v, VdB at 25 ft.
Vibratory Roller	0.21	94
Hoe-Ram	0.089	87
Large Bulldozer	0.089	87
Caisson/Auger Drilling	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: FTA 2018, Table 7-4

Potential vibration impacts for both damage and human annoyance are typically assessed using the closest distance to the potentially impacted structure.

3.13.4.4 Operational Vibration

Ground-borne vibration impacts due to the proposed Project's operation activities were evaluated by identifying potential vibration sources and evaluating potential vibration outside of the Project footprint.

3.13.4.5 Thresholds of Significance

For the purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on noise if it would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

- Generation of excessive ground-borne vibration or ground-borne noise levels; or

- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

For purposes of this proposed Project, for which Metro is the Lead Agency and the City is a responsible agency, but which is proposed by the private Project Sponsor, both thresholds and the City's thresholds are included as part of the analysis. Metro applies the FTA impact criteria for both noise and vibration. The City utilizes thresholds from the City's 2006 L.A. CEQA Thresholds Guide and the LAMC for noise, which are generally not utilized by Metro, but are included for purposes of this Draft EIR. For vibration, the City of Los Angeles also uses the FTA impact criteria.

Construction Impact Thresholds

Noise Thresholds

Metro uses the following noise threshold:

From FTA Manual, a significant noise impact would exist if:

- The Project construction noise level would exceed a daytime L_{eq} of 80 dBA at a residential, school, church property, or park use or 85 dBA at a commercial property.

The City of Los Angeles uses the following noise thresholds:

The L.A. CEQA Thresholds Guide identifies the following criteria to evaluate construction noise:

- Construction activities lasting more than one day would exceed ambient exterior noise levels by 10 dBA or more at a noise-sensitive use;

- Construction activities lasting more than 10 days in a three-month period would exceed ambient existing exterior noise levels by 5 dBA or more at a noise-sensitive use; or

- Construction activities noise level would exceed the ambient noise level by 5 dBA or more at a noise-sensitive use between the hours of 9:00 PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturday, or anytime on Sunday.

LAMC Section 112.05 identifies the following criteria to evaluate construction noise:

- Between the hours of 7:00 AM and 10:00PM, in any residential zone of the City or within 500 feet thereof, the maximum allowable noise level for construction equipment is 75 dBA when measured at 50 feet from the noise source. Said noise limitations shall not apply where compliance therewith is technically infeasible despite the use of mufflers, shields, sound barriers and/or other noise reduction device or techniques during the operation of the equipment.

- For purposes of analyzing construction impacts in this Draft EIR, this LAMC standard will be expanded to include sensitive uses in addition to a “residential zone” and will not include the waiver for the limitation where reducing noise below 75 dBA is technically infeasible.

Vibration Thresholds

Metro and the City of Los Angeles both use the following vibration threshold:

From FTA Guidance, a significant vibration impact would exist if:

- For human annoyance, ground vibration levels exceed 72 VdB at residential structures, or 75 VdB at institution land uses.

- For potential structural damage, ground vibration levels exceeding:

  - 0.5 PPV, inches per second, for category 1 buildings (reinforced-concrete, steel or timber (no plaster))

- 0.3 PPV, inches per second, for category 2 buildings (engineered concrete and masonry (no plaster))
- 0.2 PPV, inches per second, for category 3 buildings (non-engineered timber and masonry buildings)
- 0.12 PPV, inches per second, for category 4 buildings (buildings extremely susceptible to vibration damage).

Based on the guidance provided above, and as construction activities for the proposed Project would last more than 10 days in a three-month period, the applicable construction-related noise and vibration thresholds for the proposed Project are:

- **Noise-1:** A project would normally have a significant impact on noise levels from construction if construction activities lasting more than 10 days in a three-month period would exceed existing ambient exterior noise levels by 5 dBA $L_{eq(day)}$ or more at a noise-sensitive use (City: L.A. CEQA Thresholds Guide).

- **Noise-2:** A significant noise impact would exist if noise from construction equipment generates noise levels greater than 75 dBA at a distance of 50 feet from the source between 7:00 AM and 10:00 PM (City: LAMC).

- **Noise-3:** A significant noise impact would exist if the Project construction noise level would exceed 80 dBA $L_{eq(day)}$ at residential properties, churches, schools, and parks, or 85 dBA $L_{eq(day)}$ at commercial uses (Metro: FTA).

- **Vibration-1:** A significant vibration impact would exist for human annoyance if ground vibration levels exceed 72 VdB at residential structures, or 75 VdB at institutional structures. For potential structural damage, a significant vibration impact would exist if ground vibration levels exceed:

  - 0.5 PPV, inches per second, for category 1 buildings (reinforced-concrete, steel or timber (no plaster)) – (FTA)
  - 0.3 PPV, inches per second, for category 2 buildings (engineered concrete and masonry (no plaster)) – (FTA)
  - 0.2 PPV, inches per second, for category 3 buildings (non-engineered timber and masonry buildings) – (FTA)
  - 0.12 PPV, inches per second, for category 4 buildings (buildings extremely susceptible to vibration damage) – (FTA).

<u>Operational Impact Thresholds</u>

Metro uses the following operational noise threshold:

From FTA Manual, a significant noise impact would exist if:

- The project noise level would result in a “severe impact” at levels ranging from 55 to 80 dBA depending on existing noise exposure, in accordance with Figure 3.13-1.

The City of Los Angeles uses the following operational noise thresholds:

The L.A. CEQA Thresholds Guide states that a project would normally have a significant impact during operation if:

- The project causes the ambient noise level measured at the property line of affected uses to increase by 3 dBA in CNEL, to or within the “normally unacceptable” or “clearly unacceptable” category, or any 5 dBA CNEL or greater noise increase (see Table 3.13-5).

From the LAMC, a significant noise impact would exist if:

- The project Noise level would result in a significant noise impact with an increase in L_{day} or L_{night} levels over 5 dBA over existing ambient noise levels

Based on the guidance provided above, the applicable operation-related noise thresholds for the Project are:

- **Noise-4:** A project would normally have a significant impact during operation if the project causes the ambient noise level measured at the property line of affected uses to increase by 3 dBA in CNEL, to or within the “normally unacceptable” or “clearly unacceptable” category, or any 5 dBA CNEL or greater noise increase (City: L.A. CEQA Thresholds Guide).

- **Noise-5:** A significant noise impact would exist if the project noise level would result in an increase in L_{day} or L_{night} levels of 5 dBA over existing ambient noise levels (City: LAMC).

- **Noise-6:** A significant noise impact would exist if the project noise level would result in a “severe impact” at levels ranging from 55 to 80 dBA depending on existing noise, in accordance with Figure 3.13-1 above.

3.13.5 Environmental Impacts

This section discusses predicted noise levels and resulting noise impacts for both construction and operation of the Project.

NV-1: Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

3.13.5.1 Construction Noise

This section presents predicted construction noise levels using the methodology developed in the *Noise and Vibration Technical Report* (Appendix M), and potential impacts assessed according to significance thresholds. A list of the noise-sensitive receptors is presented in Table 3.13-11 above.

<u>On-Site Construction Noise</u>

Signifiant and Unavoidable. Noise impacts from Project construction activities would be a function of the noise generated by construction equipment, the location of the equipment, the timing and duration of the noise-generating construction activities, and the relative distance to noise-sensitive receptors. Each phase of construction would involve the use of various types of construction equipment and would, therefore, have its own distinct noise characteristics. Construction noise levels would fluctuate throughout a given workday as construction equipment moves within the various Project component construction sites.

A construction noise impact analysis was conducted, as discussed in the *Noise and Vibration Technical Report* (Appendix M), for each Project component during selected worst-case construction phases, evaluating all NSRs within approximately 500 feet of each Project component site. A distance of 500 feet was selected because noise attenuates with distance and it is estimated that, beyond this distance, construction noise levels would generally be expected to be less than the high daytime ambient noise levels in the Project's urban environment. Therefore, the proposed Project would not impact NSRs beyond 500 feet. An exception was made to the 500-foot distance for the Elysian Park Recreation Center (NSR 19), which is the nearest sensitive land use to the Mesa Lot, and has a lower ambient noise level than most of the Project NSRs. The Elysian Park Recreation Center (NSR 19) is located approximately 615 feet from the Project's construction laydown area.

The construction noise impact analysis analyzed the following phases of construction at each location as follows:

1) Building Demolition at the Broadway Junction
2) Foundations and Columns at all Project components
3) Structural Steel and Gondola Equipment Erection at all Project components
4) Vertical Circulation, Hardscaping, Landscaping, and Interior Work at all Project components
5) Material Laydown at the Mesa Lot

For each construction phase, the worst-case simultaneous equipment mix was analyzed as identified in Appendix B of this Draft EIR and provided in Table 3.13-16. For the Structural Steel and Gondola Equipment Erection construction phase, the available sound barrier mitigation varies over the course of the Structural Steel phase at the Alameda Station and the Broadway Junction. Therefore, as part of this analysis, three different sound barrier mitigation scenarios were analyzed: 1) sound barriers during deck cribbing and shoring; 2) sound barriers once deck cribbing and shoring is complete; and 3) sound barriers during deck removal.

Table 3.13-16: Equipment Rosters for Analyzed Construction Phases

Equipment	L_{eq} at 50 ft	Number of Each Equipment Type for Worst Case per Phase[1]					
		Demo	Foundations and Columns	Structural Steel and Gondola Equipment Erection	Vertical Circulation, Hardscaping, Landscaping, and Interior Work[2]		Mesa Laydown Area
					Stations	Towers	
Backhoe	73.6	1	-	-	1	2	-
Chain Saw	76.7	1	-	-	-	-	-
Compactor (ground)	76.2	-	-	-	1	1	-
Compressor (air)	73.7	-	-	1	-	-	-
Concrete Mixer Truck	74.8	-	2	2	1	1	-

Table 3.13-16: Equipment Rosters for Analyzed Construction Phases

Equipment	L_{eq} at 50 ft	Number of Each Equipment Type for Worst Case per Phase[1]					
		Demo	Foundations and Columns	Structural Steel and Gondola Equipment Erection	Vertical Circulation, Hardscaping, Landscaping, and Interior Work[2]		Mesa Laydown Area
					Stations	Towers	
Concrete Pump Truck	74.4	-	1	-	-	-	-
Concrete Saw	82.6	1	-	-	-	-	-
Crane	72.6	-	1	1	1	-	1
Dozer	77.7	1	-	-	-	-	-
Dump Truck	72.5	5	-	-	1	1	-
Excavator	76.7	2	-	-	-	-	-
Flat Bed Truck	70.3	-	1	1	1	1	1
Gradall	79.4	-	1	1	-	1	2
Hydra Break Ram	80.0	1	-	-	-	-	-
Jackhammer	81.9	1	-	-	-	-	-
Pickup Truck	71.0	2	1	1	1	1	-
Pneumatic Tools	82.2	-	-	2	-	-	-
Vacuum Excavator (Vac-truck)	81.3	-	1	-	-	-	-
Vacuum Street Sweeper	71.6	1	1	1	1	1	-
Ventilation Fan	78.9	-	-	1	-	-	-
Vibrating Hopper	84.0	-	2	-	-	-	-
Warning Horn	70.2	1	3	4	2	2	-
Welder / Torch	70.0	1	1	4	1	-	-
Total:		18	15	19	11	11	4

1: As provided in Appendix B of this Draft EIR, the worst-case equipment for the noise analysis was developed by determining for each construction phase the simultaneous equipment mix that would produce the highest noise 2: Vertical Circulation, Hardscaping, Landscaping, and Interior Work phase had separate equipment lists for station and tower Project locations.

The equipment rosters for all analyzed phases, including RCNM reference values for L_{eq} at 50 feet, are shown in Table 3.13-16.

To determine construction noise impacts, sound-generating equipment was modeled at representative locations within the construction area for each construction phase at each Project component, and the RCNM reference levels were propagated to nearby NSRs to determine their respective sound levels due to construction activity.

Table 3.13-17 shows a summary of the construction analysis, including predicted levels and total impacts, without and with mitigation. The existing noise level (L_{eq}) is provided for each Project component location at the associated NSRs (e.g., NSRs 1 through 3 are associated with the Alameda Station). The predicted noise levels during construction activities are shown, as well as the increase (difference) in noise level from the existing conditions to the construction conditions, and whether that increase is considered an exceedance of a threshold and therefore an impact. Ranges of levels for mitigation results in Table 3.13-17 represent best and worst-case scenarios of mitigation measures (e.g., sound barriers) at the receptor. Specifically, as discussed in Section 3.13.5, during the Structural Steel and Gondola Equipment Erection phase a temporary platform will be installed on which a sound barrier would be placed. However, it is only feasible to have the sound barrier installed during a portion of the Structural Steel and Gondola Equipment Erection phase. Accordingly, Table 3.13-17 and Table 3.13-18 identify the best-case mitigation in this location (e.g., when the sound walls will be installed). For multistory residential NSRs, impacts were modeled at 2 different elevations - ground level (appended "B" in Table 3.13-17) and at the lowest floor at which a sound barrier would be ineffective because it would not block the line-of-sight between the source and receptor (appended "T" in Table 3.13-17). An NSR was considered to have an impact as defined by the L.A. CEQA Thresholds Guide if the sound level due to construction activity exceeded the existing condition by at least 5 dBA L_{eq}, and an NSR was considered to have an impact as defined by FTA if the construction noise exceeds the thresholds outlined in Table 3.13-18. An analysis of the thresholds is provided after the tables below. Table 3.13-20 includes information used to assess construction noise impacts associated with the LAMC Section 112.05 noise limit of 75 dBA at 50 feet, as discussed below.

As previously discussed, analyses were performed for worst-case scenarios for each construction phase. As such, Table 3.13-17 and Table 3.13-18 include L.A. CEQA Thresholds Guide and FTA analyses (respectively) of each construction phase. Additionally, Tables 3.13-19 and 3.13-20 provide a summary of the proposed Project's construction impacts per the L.A. CEQA Thresholds Guide and FTA (respectively). Refer to Appendix M of this Draft EIR for construction noise calculation details.

Table 3.13-17: Proposed Project Construction Noise (L.A. CEQA Threshold Analysis)

Project Component Site	Construction Phase	NSR	Land Use	Existing L_{eq} (dBA)	Without Mitigation: Predicted Construction Noise Levels L_{eq} (dBA)		Without Mitigation: Impacts?	With Mitigation: Predicted Construction Noise Levels L_{eq} (dBA)			With Mitigation: Impacts?
					Level	Increase		Level	Increase	Reduction in Noise Level from Sound Barrier	
Alameda Station	Foundations and Columns	NSR 1 A	Transit Terminal	61.1	81.0	19.9	Yes	79.5	18.4	1.5	Yes
		NSR 1 B	Day-care Center	61.1	67.7	6.6	Yes	65.1	4.0	2.6	No
		NSR 2	Public Park	69.0	90.1	21.1	Yes	81.4	12.4	8.7	Yes
		NSR 3	MFR	68.4	88.9	20.5	Yes	78.9	10.5	10.0	Yes
		NSR 3 T	MFR	68.4	87.4	19.0	Yes	87.3	18.9	0.1	Yes
	Structural Steel and Gondola Equipment Erection	NSR 1 A	Transit Terminal	61.1	79.8	18.7	Yes	77.2 - 79.8	16.1 - 18.7	0.0 - 2.6	Yes
		NSR 1 B	Day-care Center	61.1	64.9	3.8	No	63.8	2.7	1.1	No
		NSR 2*	Public Park	69.0	90.0	21.0	Yes	90.0	21.0	0.0	Yes
		NSR 3	MFR	68.4	92.3	23.9	Yes	84.8 - 87.9	16.4 - 19.5	4.4 - 7.5	Yes
		NSR 3 T**	MFR	68.4	91.8	23.4	Yes	91.8	23.4	0.0	Yes
	Vertical Circulation, Hardscape, Landscape, Interior Work	NSR 1 A	Transit Terminal	61.1	73.0	11.9	Yes	71.0	9.9	2.0	Yes
		NSR 1 B	Day-care Center	61.1	59.0	0.0	No	58.4	0.0	0.0	No
		NSR 2*	Public Park	69.0	91.8	22.8	Yes	91.8	22.8	0.0	Yes
		NSR 3	MFR	68.4	90.6	22.2	Yes	80.6	12.2	10.0	Yes
		NSR 3 T**	MFR	68.4	85.5	17.1	Yes	85.5	17.1	0.0	Yes
Alameda Tower	Foundations and Columns	NSR 4	Office Building	63.6	84.1	20.5	Yes	80.9	17.3	3.2	Yes
	Structural Steel and Gondola Equipment Erection	NSR 4	Office Building	63.6	79.5	15.9	Yes	78.7	15.1	0.8	Yes
	Vertical Circulation, Hardscape, Landscape, Interior Work	NSR 4	Office Building	63.6	78.7	15.1	Yes	72.9	9.3	5.8	Yes

Table 3.13-17: Proposed Project Construction Noise (L.A. CEQA Threshold Analysis)

Project Component Site	Construction Phase	NSR	Land Use	Existing L_{eq} (dBA)	Without Mitigation: Predicted Construction Noise Levels L_{eq} (dBA) – Level	Without Mitigation: Predicted Construction Noise Levels L_{eq} (dBA) – Increase	Without Mitigation: Impacts?	With Mitigation: Predicted Construction Noise Levels L_{eq} (dBA) – Level	With Mitigation: Predicted Construction Noise Levels L_{eq} (dBA) – Increase	With Mitigation: Reduction in Noise Level from Sound Barrier	With Mitigation: Impacts?
Alpine Tower	Foundations and Columns	NSR 5	Future MFR	65.6	82.0	16.4	Yes	77.6	12.0	4.4	Yes
		NSR 5 T	Future MFR	65.6	81.6	16.0	Yes	81.3	15.7	0.3	Yes
		NSR 6	MFR	69.0	81.2	12.2	Yes	77.5	8.5	3.7	Yes
		NSR 6 T**	MFR	69.0	78.9	9.9	Yes	78.9	9.9	0.0	Yes
		NSR 7	Office Building	69.8	84.1	14.3	Yes	80.3	10.5	3.8	Yes
	Structural Steel and Gondola Equipment Erection	NSR 5	Future MFR	65.6	82.0	16.4	Yes	73.8	8.2	8.2	Yes
		NSR 5 T	Future MFR	65.6	81.0	15.4	Yes	79.3	13.7	1.7	Yes
		NSR 6	MFR	69.0	80.3	11.3	Yes	78.4	9.4	1.9	Yes
		NSR 6 T	MFR	69.0	78.3	9.3	Yes	75.1	6.1	3.2	Yes
		NSR 7	Office Building	69.8	80.0	10.2	Yes	77.6	7.8	2.4	Yes
	Vertical Circulation, Hardscape, Landscape, Interior Work	NSR 5	Future MFR	65.6	76.8	11.2	Yes	69.5	3.9	7.3	No
		NSR 5 T**	Future MFR	65.6	76.4	10.8	Yes	76.4	10.8	0.0	Yes
		NSR 6	MFR	69.0	75.9	6.9	Yes	68.3	0.0	6.9	No
		NSR 6 T	MFR	69.0	74.7	5.7	Yes	72.9	3.9	1.8	No
		NSR 7	Office Building	69.8	78.5	8.7	Yes	71.3	1.5	7.2	No
Chinatown/State Park Station	Foundations and Columns	NSR 8T	Future MFR	64.7	82.9	18.2	Yes	78.5	13.8	4.4	Yes
		NSR 8B	Future MFR	64.7	84.9	20.2	Yes	80.5	15.8	4.4	Yes
		NSR 9	MFR	61.1	72.6	11.5	Yes	68.1	7.0	4.5	Yes
		NSR 9 T**	MFR	61.1	72.4	11.3	Yes	72.4	11.3	0.0	Yes
		NSR 10	MFR	61.1	68.9	7.8	Yes	65.4	4.3	3.5	No
		NSR 10 T**	MFR	61.1	66.5	5.4	Yes	66.5	5.4	0.0	Yes
		NSR 11	Restored Mill	63.0	83.2	20.2	Yes	77.2	14.2	6.0	Yes
		NSR 12	MFR	64.7	74.9	10.2	Yes	71.2	6.5	3.7	Yes
		NSR 12 T**	MFR	64.7	74.8	10.1	Yes	74.8	10.1	0.0	Yes
		NSR 13S*	Future MFR	67.7	69.2	1.5	No	69.2	1.5	0.0	No
		NSR 14S	Public Park	58.7	85.8	27.1	Yes	77.7	19.0	8.1	Yes

Table 3.13-17: Proposed Project Construction Noise (L.A. CEQA Threshold Analysis)

Project Component Site	Construction Phase	NSR	Land Use	Existing L_{eq} (dBA)	Without Mitigation			With Mitigation			
					Predicted Construction Noise Levels L_{eq} (dBA)		Impacts?	Predicted Construction Noise Levels L_{eq} (dBA)			Impacts?
					Level	Increase		Level	Increase	Reduction in Noise Level from Sound Barrier	
	Structural Steel and Gondola Equipment Erection	NSR 8T	Future MFR	64.7	80.4	15.7	Yes	79.8	15.1	0.6	Yes
		NSR 8B	Future MFR	64.7	83.2	18.5	Yes	82.7	18.0	0.5	Yes
		NSR 9	MFR	61.1	66.7	5.6	Yes	65.7	4.6	1.0	No
		NSR 9 T**	MFR	61.1	66.6	5.5	Yes	66.6	5.5	0.0	Yes
		NSR 10	MFR	61.1	67.0	5.9	Yes	66.6	5.5	0.4	Yes
		NSR 10 T**	MFR	61.1	65.7	4.6	No	65.7	4.6	0.0	No
		NSR 11	Restored Mill	63.0	75.2	12.2	Yes	73.8	10.8	1.4	Yes
		NSR 12	MFR	64.7	73.3	8.6	Yes	72.4	7.7	0.9	Yes
		NSR 12 T**	MFR	64.7	73.3	8.6	Yes	72.6	7.9	0.7	Yes
		NSR 13S*	Future MFR	67.7	64.0	0.0	No	63.5	0.0	0.0	No
		NSR 14S	Public Park	58.7	77.5	18.8	Yes	76.0	17.3	1.5	Yes
	Vertical Circulation, Hardscape, Landscape, Interior Work	NSR 8T	Future MFR	64.7	74.4	9.7	Yes	68.2	3.5	6.2	No
		NSR 8B	Future MFR	64.7	75.5	10.8	Yes	69.5	4.8	6.0	No
		NSR 9	MFR	61.1	62.6	1.5	No	54.3	0.0	1.5	No
		NSR 9 T**	MFR	61.1	62.4	1.3	No	62.4	1.3	0.0	No
		NSR 10	MFR	61.1	63.8	2.7	No	57.5	0.0	2.7	No
		NSR 10 T**	MFR	61.1	61.1	0.0	No	61.1	0.0	0.0	No
		NSR 11	Restored Mill	63.0	73.6	10.6	Yes	64.7	1.7	8.9	No
		NSR 12	MFR	64.7	67.1	2.4	No	57.1	0.0	2.4	No
		NSR 12 T**	MFR	64.7	67.0	2.3	No	67.0	2.3	0.0	No
		NSR 13S*	Future MFR	67.7	60.3	0.0	No	55.3	0.0	0.0	No
		NSR 14S	Public Park	58.7	78.8	20.1	Yes	68.8	10.1	10.0	Yes

Table 3.13-17: Proposed Project Construction Noise (L.A. CEQA Threshold Analysis)

Project Component Site	Construction Phase	NSR	Land Use	Existing L_{eq} (dBA)	Without Mitigation			With Mitigation			
					Predicted Construction Noise Levels L_{eq} (dBA)		Impacts?	Predicted Construction Noise Levels L_{eq} (dBA)			Impacts?
					Level	Increase		Level	Increase	Reduction in Noise Level from Sound Barrier	
Broadway Junction	Demo	NSR 13S*	Future MFR	67.7	66.1	0.0	No	66.1	0.0	0.0	No
		NSR 13N*	Future MFR	65.8	67.0	1.2	No	67.0	1.2	0.0	No
		NSR 14N	Public Park	53.6	72.6	19.0	Yes	62.6	9.0	10.0	Yes
		NSR 15	Church	65.8	67.7	1.9	No	58.1	0.0	1.9	No
		NSR 16	School	58.7	79.7	21.0	Yes	69.7	11.0	10.0	Yes
		NSR 17N	SFR	56.1	77.3	21.2	Yes	67.3	11.2	10.0	Yes
		NSR 17S	SFR	56.1	90.0	33.9	Yes	80.0	23.9	10.0	Yes
	Foundations and Columns	NSR 13S*	Future MFR	67.7	66.1	0.0	No	66.1	0.0	0.0	No
		NSR 13N*	Future MFR	65.8	67.3	1.5	No	67.3	1.5	0.0	No
		NSR 14N	Public Park	53.6	72.8	19.2	Yes	62.8	9.2	10.0	Yes
		NSR 15	Church	65.8	67.6	1.8	No	61.7	0.0	1.8	No
		NSR 16	School	58.7	78.9	20.2	Yes	68.9	10.2	10.0	Yes
		NSR 17N	SFR	56.1	76.9	20.8	Yes	67.0	10.9	9.9	Yes
		NSR 17S	SFR	56.1	89.2	33.1	Yes	79.2	23.1	10.0	Yes
	Structural Steel and Gondola Equipment Erection	NSR 13S*	Future MFR	67.7	66.0	0.0	No	65.2 - 66	0.0	0.0	No
		NSR 13N*	Future MFR	65.8	65.5	0.0	No	64.9 - 65.5	0.0	0.0	No
		NSR 14N	Public Park	53.6	72.6	19.0	Yes	70.1 - 71.4	16.5 - 17.8	1.2 - 2.5	Yes
		NSR 15	Church	65.8	68.3	2.5	No	67.2 - 67.7	1.4 - 1.9	0.6 - 1.1	No
		NSR 16	School	58.7	72.8	14.1	Yes	70.2 - 72.2	11.5 - 13.5	0.6 - 2.6	Yes
		NSR 17N	SFR	56.1	73.1	17.0	Yes	69.3 - 71.5	13.2 - 15.4	1.6 - 3.8	Yes
		NSR 17S	SFR	56.1	80.7	24.6	Yes	75.1 - 75.1	19.0	5.6	Yes
	Vertical Circulation, Hardscape, Landscape, Interior Work	NSR 13S*	Future MFR	67.7	59.8	0.0	No	59.8	0.0	0.0	No
		NSR 13N*	Future MFR	65.8	60.9	0.0	No	60.9	0.0	0.0	No
		NSR 14N	Public Park	53.6	66.3	12.7	Yes	56.3	2.7	10.0	No
		NSR 15	Church	65.8	61.3	0.0	No	56.6	0.0	0.0	No
		NSR 16	School	58.7	72.4	13.7	Yes	63.1	4.4	9.3	No
		NSR 17N	SFR	56.1	71.9	15.8	Yes	61.9	5.8	10.0	Yes

Table 3.13-17: Proposed Project Construction Noise (L.A. CEQA Threshold Analysis)

Project Component Site	Construction Phase	NSR	Land Use	Existing L_{eq} (dBA)	Without Mitigation			With Mitigation			
					Predicted Construction Noise Levels L_{eq} (dBA)		Impacts?	Predicted Construction Noise Levels L_{eq} (dBA)			Impacts?
					Level	Increase		Level	Increase	Reduction in Noise Level from Sound Barrier	
		NSR 17S	SFR	56.1	82.6	26.5	Yes	72.6	16.5	10.0	Yes
Stadium Tower	Foundations and Columns	NSR 16*	School	58.7	63.7	5.0	Yes	61.0	2.3	2.7	No
		NSR 17N*	SFR	56.1	59.9	3.8	No	57.1	1.0	2.8	No
		NSR 18*	SFR	56.5	53.1	0.0	No	53.1	0.0	0.0	No
	Structural Steel and Gondola Equipment Erection	NSR 16	School	58.7	65.6	6.9	Yes	59.7	1.0	5.9	No
		NSR 17N	SFR	56.1	62.2	6.1	Yes	56.1	0.0	6.1	No
		NSR 18	SFR	56.5	55.7	0.0	No	49.6	0.0	0.0	No
	Vertical Circulation, Hardscape, Landscape, Interior Work	NSR 16	School	58.7	58.5	0.0	No	58.2	0.0	0.0	No
		NSR 17N	SFR	56.1	54.8	0.0	No	54.6	0.0	0.0	No
		NSR 18	SFR	56.5	48.2	0.0	No	48.2	0.0	0.0	No
Stadium Station	Foundations and Columns	NSR 16*	School	58.7	61.0	2.3	No	61.0	2.3	0.0	No
		NSR 18*	SFR	56.5	54.8	0.0	No	54.8	0.0	0.0	No
	Structural Steel and Gondola Equipment Erection	NSR 16*	School	58.7	61.7	3.0	No	61.7	3.0	0.0	No
		NSR 18*	SFR	56.5	56.8	0.3	No	56.8	0.3	0.0	No
	Vertical Circulation, Hardscape, Landscape, Interior Work	NSR 16*	School	58.7	54.4	0.0	No	54.4	0.0	0.0	No
		NSR 18*	SFR	56.5	49.2	0.0	No	49.2	0.0	0.0	No
Mesa Lot	Laydown Yard	NSR 19*	Public Park	57.2	53.8	0.0	No	-	-	-	No

1: Mitigation applied only when a barrier could feasibly be constructed between construction and impacted receptors. Receptors where barriers were found to not be feasible marked with an asterisk (*). Receptors where barriers were found to only be feasible at the bottom floor and not feasible at the top floor marked with a double asterisk (**).
2: Ranges of levels for mitigation results represent best and worst-case scenarios of mitigation measures at the receptor, such as when a barrier will need to be moved partway through a phase.

Table 3.13-18: Proposed Project Construction Noise (FTA Analysis)

Project Component Site	Construction Phase	NSR	Land Use	FTA Impact Threshold	Existing L_{eq} (dBA)	Without Mitigation: Predicted Construction Noise Levels L_{eq} (dBA)		With Mitigation: Predicted Construction Noise Levels L_{eq} (dBA)	
						Level	Impacts?	Level	Impacts?
Alameda Station	Foundations and Columns	NSR 1 A	Transit Terminal	85	61.1	81.0	No	79.5	No
		NSR 1 B	Day-care Center	80	61.1	67.7	No	65.1	No
		NSR 2	Public Park	80	69.0	90.1	Yes	81.4	Yes
		NSR 3	MFR	80	68.4	88.9	Yes	78.9	No
		NSR 3 T	MFR	80	68.4	87.4	Yes	87.3	Yes
	Structural Steel and Gondola Equipment Erection	NSR 1 A	Transit Terminal	85	61.1	79.8	No	77.2 - 79.8	No
		NSR 1 B	Day-care Center	80	61.1	64.9	No	63.8	No
		NSR 2*	Public Park	80	69.0	90.0	Yes	90.0	Yes
		NSR 3	MFR	80	68.4	92.3	Yes	84.8 - 87.9	Yes
		NSR 3 T**	MFR	80	68.4	91.8	Yes	91.8	Yes
	Vertical Circulation, Hardscape, Landscape, Interior Work	NSR 1 A	Transit Terminal	85	61.1	73.0	No	71.0	No
		NSR 1 B	Day-care Center	80	61.1	59.0	No	58.4	No
		NSR 2*	Public Park	80	69.0	91.8	Yes	91.8	Yes
		NSR 3	MFR	80	68.4	90.6	Yes	80.6	Yes
		NSR 3 T**	MFR	80	68.4	85.5	Yes	85.5	Yes
Alameda Tower	Foundations and Columns	NSR 4	Office Building	85	63.6	84.1	No	80.9	No
	Structural Steel and Gondola Equipment Erection	NSR 4	Office Building	85	63.6	79.5	No	78.7	No
	Vertical Circulation, Hardscape, Landscape, Interior Work	NSR 4	Office Building	85	63.6	78.7	No	72.9	No

Table 3.13-18: Proposed Project Construction Noise (FTA Analysis)

Project Component Site	Construction Phase	NSR	Land Use	FTA Impact Threshold	Existing L_{eq} (dBA)	Without Mitigation: Predicted Construction Noise Levels L_{eq} (dBA)		With Mitigation: Predicted Construction Noise Levels L_{eq} (dBA)	
						Level	Impacts?	Level	Impacts?
Alpine Tower	Foundations and Columns	NSR 5	Future MFR	80	65.6	82.0	Yes	77.6	No
		NSR 5 T	Future MFR	80	65.6	81.6	Yes	81.3	Yes
		NSR 6	MFR	80	69.0	81.2	Yes	77.5	No
		NSR 6 T**	MFR	80	69.0	78.9	No	78.9	No
		NSR 7	Office Building	85	69.8	84.1	No	80.3	No
	Structural Steel and Gondola Equipment Erection	NSR 5	Future MFR	80	65.6	82.0	Yes	73.8	No
		NSR 5 T	Future MFR	80	65.6	81.0	Yes	79.3	No
		NSR 6	MFR	80	69.0	80.3	Yes	78.4	No
		NSR 6 T	MFR	80	69.0	78.3	No	75.1	No
		NSR 7	Office Building	85	69.8	80.0	No	77.6	No
	Vertical Circulation, Hardscape, Landscape, Interior Work	NSR 5	Future MFR	80	65.6	76.8	No	69.5	No
		NSR 5 T**	Future MFR	80	65.6	76.4	No	76.4	No
		NSR 6	MFR	80	69.0	75.9	No	68.3	No
		NSR 6 T	MFR	80	69.0	74.7	No	72.9	No
		NSR 7	Office Building	85	69.8	78.5	No	71.3	No
Chinatown/State Park Station	Foundations and Columns	NSR 8T	Future MFR	80	64.7	82.9	Yes	78.5	No
		NSR 8B	Future MFR	80	64.7	84.9	Yes	80.5	Yes
		NSR 9	MFR	80	61.1	72.6	No	68.1	No
		NSR 9 T**	MFR	80	61.1	72.4	No	72.4	No
		NSR 10	MFR	80	61.1	68.9	No	65.4	No
		NSR 10 T**	MFR	80	61.1	66.5	No	66.5	No
		NSR 11	Restored Mill	85	63.0	83.2	No	77.2	No

Table 3.13-18: Proposed Project Construction Noise (FTA Analysis)

Project Component Site	Construction Phase	NSR	Land Use	FTA Impact Threshold	Existing L_{eq} (dBA)	Without Mitigation: Predicted Construction Noise Levels L_{eq} (dBA)		With Mitigation: Predicted Construction Noise Levels L_{eq} (dBA)	
						Level	Impacts?	Level	Impacts?
		NSR 12	MFR	80	64.7	74.9	No	71.2	No
		NSR 12 T**	MFR	80	64.7	74.8	No	74.8	No
		NSR 13S*	Future MFR	80	67.7	69.2	No	69.2	No
		NSR 14S	Public Park	80	58.7	85.8	Yes	77.7	No
	Structural Steel and Gondola Equipment Erection	NSR 8T	Future MFR	80	64.7	80.4	Yes	79.8	No
		NSR 8B	Future MFR	80	64.7	83.2	Yes	82.7	Yes
		NSR 9	MFR	80	61.1	66.7	No	65.7	No
		NSR 9 T**	MFR	80	61.1	66.6	No	66.6	No
		NSR 10	MFR	80	61.1	67.0	No	66.6	No
		NSR 10 T**	MFR	80	61.1	65.7	No	65.7	No
		NSR 11	Restored Mill	85	63.0	75.2	No	73.8	No
		NSR 12	MFR	80	64.7	73.3	No	72.4	No
		NSR 12 T**	MFR	80	64.7	73.3	No	72.6	No
		NSR 13S*	Future MFR	80	67.7	64.0	No	63.5	No
		NSR 14S	Public Park	80	58.7	77.5	No	76.0	No
	Vertical Circulation, Hardscape, Landscape, Interior Work	NSR 8T	Future MFR	80	64.7	74.4	No	68.2	No
		NSR 8B	Future MFR	80	64.7	75.5	No	69.5	No
		NSR 9	MFR	80	61.1	62.6	No	54.3	No
		NSR 9 T**	MFR	80	61.1	62.4	No	62.4	No
		NSR 10	MFR	80	61.1	63.8	No	57.5	No
		NSR 10 T**	MFR	80	61.1	61.1	No	61.1	No
		NSR 11	Restored Mill	85	63.0	73.6	No	64.7	No

Table 3.13-18: Proposed Project Construction Noise (FTA Analysis)

Project Component Site	Construction Phase	NSR	Land Use	FTA Impact Threshold	Existing L_{eq} (dBA)	Without Mitigation: Predicted Construction Noise Levels L_{eq} (dBA)		With Mitigation: Predicted Construction Noise Levels L_{eq} (dBA)	
						Level	Impacts?	Level	Impacts?
		NSR 12	MFR	80	64.7	67.1	No	57.1	No
		NSR 12 T**	MFR	80	64.7	67.0	No	67.0	No
		NSR 13S*	Future MFR	80	67.7	60.3	No	55.3	No
		NSR 14S	Public Park	80	58.7	78.8	No	68.8	No
Broadway Junction	Demo	NSR 13S*	Future MFR	80	67.7	66.1	No	66.1	No
		NSR 13N*	Future MFR	80	65.8	67.0	No	67.0	No
		NSR 14N	Public Park	80	53.6	72.6	No	62.6	No
		NSR 15	Church	80	65.8	67.7	No	58.1	No
		NSR 16	School	80	58.7	79.7	No	69.7	No
		NSR 17N	SFR	80	56.1	77.3	No	67.3	No
		NSR 17S	SFR	80	56.1	90.0	Yes	80.0	No
	Foundations and Columns	NSR 13S*	Future MFR	80	67.7	66.1	No	66.1	No
		NSR 13N*	Future MFR	80	65.8	67.3	No	67.3	No
		NSR 14N	Public Park	80	53.6	72.8	No	62.8	No
		NSR 15	Church	80	65.8	67.6	No	61.7	No
		NSR 16	School	80	58.7	78.9	No	68.9	No
		NSR 17N	SFR	80	56.1	76.9	No	67.0	No
		NSR 17S	SFR	80	56.1	89.2	Yes	79.2	No
	Structural Steel and Gondola Equipment Erection	NSR 13S*	Future MFR	80	67.7	66.0	No	65.2 - 66	No
		NSR 13N*	Future MFR	80	65.8	65.5	No	64.9 - 65.5	No
		NSR 14N	Public Park	80	53.6	72.6	No	70.1 - 71.4	No
		NSR 15	Church	80	65.8	68.3	No	67.2 - 67.7	No

Table 3.13-18: Proposed Project Construction Noise (FTA Analysis)

Project Component Site	Construction Phase	NSR	Land Use	FTA Impact Threshold	Existing L_{eq} (dBA)	Without Mitigation		With Mitigation	
						Predicted Construction Noise Levels L_{eq} (dBA)		Predicted Construction Noise Levels L_{eq} (dBA)	
						Level	Impacts?	Level	Impacts?
		NSR 16	School	80	58.7	72.8	No	70.2 - 72.2	No
		NSR 17N	SFR	80	56.1	73.1	No	69.3 - 71.5	No
		NSR 17S	SFR	80	56.1	80.7	Yes	75.1 - 75.1	No
	Vertical Circulation, Hardscape, Landscape, Interior Work	NSR 13S*	Future MFR	80	67.7	59.8	No	59.8	No
		NSR 13N*	Future MFR	80	65.8	60.9	No	60.9	No
		NSR 14N	Public Park	80	53.6	66.3	No	56.3	No
		NSR 15	Church	80	65.8	61.3	No	56.6	No
		NSR 16	School	80	58.7	72.4	No	63.1	No
		NSR 17N	SFR	80	56.1	71.9	No	61.9	No
		NSR 17S	SFR	80	56.1	82.6	Yes	72.6	No
Stadium Tower	Foundations and Columns	NSR 16*	School	80	58.7	63.7	No	61.0	No
		NSR 17N*	SFR	80	56.1	59.9	No	57.1	No
		NSR 18*	SFR	80	56.5	53.1	No	53.1	No
	Structural Steel and Gondola Equipment Erection	NSR 16	School	80	58.7	65.6	No	59.7	No
		NSR 17N	SFR	80	56.1	62.2	No	56.1	No
		NSR 18	SFR	80	56.5	55.7	No	49.6	No
	Vertical Circulation, Hardscape, Landscape, Interior Work	NSR 16	School	80	58.7	58.5	No	58.2	No
		NSR 17N	SFR	80	56.1	54.8	No	54.6	No
		NSR 18	SFR	80	56.5	48.2	No	48.2	No

Table 3.13-18: Proposed Project Construction Noise (FTA Analysis)

Project Component Site	Construction Phase	NSR	Land Use	FTA Impact Threshold	Existing L_{eq} (dBA)	Without Mitigation: Predicted Construction Noise Levels L_{eq} (dBA)		With Mitigation: Predicted Construction Noise Levels L_{eq} (dBA)	
						Level	Impacts?	Level	Impacts?
Stadium Station	Foundations and Columns	NSR 16*	School	80	58.7	61.0	No	61.0	No
		NSR 18*	SFR	80	56.5	54.8	No	54.8	No
	Structural Steel and Gondola Equipment Erection	NSR 16*	School	80	58.7	61.7	No	61.7	No
		NSR 18*	SFR	80	56.5	56.8	No	56.8	No
	Vertical Circulation, Hardscape, Landscape, Interior Work	NSR 16*	School	80	58.7	54.4	No	54.4	No
		NSR 18*	SFR	80	56.5	49.2	No	49.2	No
Mesa Lot	Laydown Yard	NSR 19*	Public Park	80	57.2	53.8	No	-	-

1: Mitigation applied only when a barrier could feasibly be constructed between construction and impacted receptors. Receptors where barriers were found to not be feasible marked with an asterisk (*). Receptors where barriers were found to only be feasible at the bottom floor and not feasible at the top floor marked with a double asterisk (**).
2: Ranges of levels for mitigation results represent best and worst-case scenarios of mitigation measures at the receptor, such as when a barrier will need to be moved partway through a phase.

Table 3.13-19: Summary of Proposed Project Construction Impacts (L.A. CEQA Thresholds Guide Analysis)

Project Component Site	NSR	Impacts Without Mitigation?	Impacts With Mitigation
Alameda Station	NSR 1A	**Yes**	**Yes**
	NSR 1B	**Yes**	No
	NSR 2	**Yes**	**Yes**
	NSR 3	**Yes**	**Yes**
Alameda Tower	NSR 4	**Yes**	**Yes**
Alpine Tower	NSR 5	**Yes**	**Yes**
	NSR 6	**Yes**	**Yes**
	NSR 7	**Yes**	**Yes**
Chinatown/State Park Station	NSR 8	**Yes**	**Yes**
	NSR 9	**Yes**	**Yes**
	NSR 10	**Yes**	**Yes**
	NSR 11	**Yes**	**Yes**
	NSR 12	**Yes**	**Yes**
	NSR 13S	No	No
	NSR 14S	**Yes**	**Yes**
Broadway Junction	NSR 13S	No	No
	NSR 13N	No	No
	NSR 14N	**Yes**	**Yes**
	NSR 15	No	No
	NSR 16	**Yes**	**Yes**
	NSR 17N	**Yes**	**Yes**
	NSR 17S	**Yes**	**Yes**
Stadium Tower	NSR 16	**Yes**	No
	NSR 17N	**Yes**	No
	NSR 18	No	No
Stadium Station	NSR 16	No	No
	NSR 18	No	No
Mesa Laydown Area	NSR 19	No	No

Table 3.13-20: Summary of Proposed Project Construction Impacts (FTA Analysis)

Project Component Site	NSR	Impacts Without Mitigation?	Impacts With Mitigation?
Alameda Station	NSR 1A	No	No
	NSR 1B	No	No
	NSR 2	**Yes**	**Yes**
	NSR 3	**Yes**	**Yes**
Alameda Tower	NSR 4	No	No
Alpine Tower	NSR 5	**Yes**	**Yes**
	NSR 6	**Yes**	No
	NSR 7	No	No
Chinatown/State Park Station	NSR 8	**Yes**	**Yes**
	NSR 9	No	No
	NSR 10	No	No
	NSR 11	No	No
	NSR 12	No	No
	NSR 13S	No	No
	NSR 14S	**Yes**	No
Broadway Junction	NSR 13S	No	No
	NSR 13N	No	No
	NSR 14N	No	No
	NSR 15	No	No
	NSR 16	No	No
	NSR 17N	No	No
	NSR 17S	**Yes**	No
Stadium Tower	NSR 16	No	No
	NSR 17N	No	No
	NSR 18	No	No
Stadium Station	NSR 16	No	No
	NSR 18	No	No
Mesa Laydown Area	NSR 19	No	-

L.A. CEQA Thresholds Guide (City)

According to the L.A. CEQA Thresholds Guide, a significant noise impact would occur if construction activities lasting more than 10 days in a three-month period would exceed existing ambient exterior noise levels by 5 dBA $L_{eq(day)}$ or more at a noise-sensitive use. As shown in Table 3.13-17, construction activities would exceed the existing exterior noise levels by 5 dBA L_{eq} or more at several noise-sensitive uses, as described below for each Project component.

Alameda Station

NSR 1A (Los Angeles Union Station), NSR 1B (First Five LA), NSR 2 (El Pueblo), and NSR 3 (Mozaic Apartments) would experience a significant noise impact during construction activities of the Alameda Station. Construction activities would result in the greatest increase over existing noise levels for this Project location at NSR 3 during the Structural Steel and Gondola Equipment Erection phase (23.9 dBA over existing). Construction noise levels at NSR 1A and NSR 1B would be greatest during the Foundations and Columns phase (19.9 dBA over existing and 6.6 dBA over existing, respectively), while construction noise levels at NSR 2 would be greatest during the Vertical Circulation, Hardscaping, Landscaping, and Interior Work phase (22.8 dBA over existing).

Alameda Tower

NSR 4 (The California Endowment) would experience a significant noise impact during construction activities of the Alameda Tower. Construction activities would result in the greatest increase over existing noise levels for NSR 4 during the Foundations and Columns phase (20.5 dBA over existing). This impact would be significant.

Alpine Tower

NSR 5 (Future Residential Development), NSR 6 (Chinatown Senior Lofts), and NSR 7 (Homeboy Industries) would experience a significant noise impact during construction activities of the Alpine Tower. Construction activities would result in the greatest increase over existing noise levels for this Project location at NSR 5 during both the Foundations and Columns phase and the Structural Steel and Gondola Equipment Erection phase (16.4 dBA over existing). Construction noise levels at NSR 6 and NSR 7 would be greatest during the Foundations and Columns phase (12.2 dBA over existing and 14.3 dBA over existing, respectively).

Chinatown/State Park Station

NSR 8 (Future Residential Development), NSR 9 (Blossom Plaza), NSR 10 (Future Residential Development), NSR 11 (Capitol Milling), NSR 12 (Llewellyn Apartments), and NSR 14S (Los Angeles State Historic Park – South) would experience a significant noise impact during construction activities of the Chinatown/State Park Station. Construction activities would result in the greatest increase over existing noise levels for this Project location at NSR 14S during the Foundations and Columns phase (27.1 dBA over existing). Construction noise levels at NSR 8, NSR 9, NSR 10, NSR 11, and NSR 12 would be greatest during the Foundations and Columns phase (20.2 dBA over existing, 11.5 dBA over existing, 7.8 dBA over existing, 20.2 dBA over existing, and 10.2 dBA over existing, respectively).

The construction activities of the Chinatown/State Park Station would not result in impacts at NSR 13S (Buena Vista S).

Broadway Junction

NSR 14N (Los Angeles State Historic Park – North), NSR 16 (Cathedral High School), NSR 17N (Low-Rise Residential on Savoy Street – North), and NSR 17S (Low-Rise Residential on Savoy Street – South) would experience a significant noise impact during construction activities of the Broadway Junction. Construction activities would result in the greatest increase over existing noise levels for this Project location at NSR 17S during the Demolition phase (33.9 dBA over existing). Construction noise levels at NSR 14N would be greatest during the Foundations and Columns phase (19.2 dBA over existing), while construction noise levels at NSR 16 and 17N would be greatest during the Demolition phase (21 and 21.2 dBA over existing, respectively).

The construction activities of the Broadway Junction would not result in impacts at NSR 13S (Buena Vista S), NSR 13N (Buena Vista N), and NSR 15 (St. Peter's Church).

Stadium Tower

NSR 16 (Cathedral High School) and NSR 17N (Low-Rise Residential on Savoy Street – North) would experience a significant noise impact during construction activities of the Stadium Tower. Construction activities would result in the greatest increase over existing noise levels for this Project location at NSR 16 during the Structural Steel and Gondola Equipment Erection phase (6.9 dBA over existing). Construction noise levels at NSR 17N would be greatest during the Structural Steel and Gondola Equipment Erection phase (6.1 dBA over existing).

The construction activities of the Stadium Tower would not result in impacts at NSR 18.

Dodger Stadium Station

The construction activities of the Dodger Stadium Station would not result in impacts at any NSRs, including NSR 16 (Cathedral High School) and NSR 18 (Solano Canyon Neighborhood),

Mesa Laydown Lot

The construction activities of the Mesa Laydown Lot would not result in impacts at any NSRs, including NSR 19 (Elysian Park Recreation Center).

LAMC (City)

According to the LAMC, a significant noise impact would exist if noise from construction equipment generates noise levels greater than 75 dBA at a distance of 50 feet from the source between 7:00 AM and 10:00 PM.

LAMC Section 112.05 establishes that the maximum allowable noise level for construction equipment within 500 feet of any residential zone is 75 dBA when measured at 50 feet from the noise source. For purposes of analyzing construction impacts in this Draft EIR, this LAMC standard is expanded to include sensitive uses in addition to a "residential zone." Typical noise levels at 50 feet from the equipment that would be used during Project construction are listed in Table 3.13-16, Equipment Rosters for Analyzed Construction Phases. As provided in Table 3.13-16, the majority of equipment that would be used for the Project exceeds 75 dBA at 50 feet. In addition, during construction multiple pieces of equipment may operate simultaneously, generating overall noise levels at 50 feet that are higher than the noise levels shown in Table 3.13-16. Therefore, construction equipment would generate noise greater than 75 dBA at a distance of 50 feet resulting in a significant and unavoidable impact for all construction phases.

The noise levels generated at specific sensitive receptors by construction phase are provided in Table 3.13-17.

FTA Manual (Metro)

According to the FTA Manual, a significant noise impact could occur if construction noise levels would exceed the values presented in Table 3.13-1, primarily 80 dBA $L_{eq(day)}$ at residential properties, churches, parks, and schools and 85 dBA $L_{eq(day)}$ at commercial properties. As shown in Table 3.13-18, construction activities would exceed the appropriate FTA threshold at several noise-sensitive uses, as described below for each Project component.

Alameda Station

NSR 2 (El Pueblo) and NSR 3 (Mozaic Apartments) would experience noise levels that exceed the appropriate FTA impact threshold during construction activities of the Alameda Station. This impact would be significant.

The construction activities of the Alameda Station would not result in FTA impacts at NSR 1A (Los Angeles Union Station) and NSR 1B (First Five LA).

Alameda Tower

The construction activities of the Alameda Tower would not result in FTA impacts at any NSRs.

Alpine Tower

NSR 5 (Future Residential Development) and NSR 6 (Chinatown Senior Lofts) would experience noise levels that exceed the appropriate FTA impact threshold during construction activities of the Alpine Tower. This impact would be significant.

The construction activities of the Alpine Tower would not result in FTA impacts at NSR 7 (Homeboy Industries).

Chinatown/State Park Station

NSR 8 (Future Residential Development), and NSR 14S (Los Angeles State Historic Park – South) would experience noise levels that exceed the appropriate FTA impact threshold during construction activities of the Chinatown/State Park Station. This impact would be significant.

The construction activities of the Chinatown/State Park Station would not result in FTA impacts at NSR 9 (Blossom Plaza), NSR 10 (Future Residential Development), NSR 11 (Capitol Milling), NSR 12 (Llewellyn Apartments), and NSR 13S (Buena Vista S).

Broadway Junction

NSR 17S (Low-Rise Residential on Savoy Street – South) would experience noise levels that exceed the appropriate FTA impact threshold during construction activities of the Broadway Junction. This impact would be significant.

The construction activities of the Broadway Junction would not result in FTA impacts at NSR 13S (Buena Vista S), NSR 13N (Buena Vista N), NSR 14N (Los Angeles State Historic Park - North), NSR 15 (St. Peter's Church), NSR 16 (Cathedral High School), and NSR 17N (Low-Rise Residential on Savoy Street – North).

Stadium Tower

The construction activities of the Stadium Tower would not result in FTA impacts at any NSRs, including NSR 16 (Cathedral High School), NSR 17N (Low-Rise Residential on Savoy Street – North), and NSR 18 (Solano Canyon Neighborhood), and no mitigation measures would be required to address FTA impacts.

Dodger Stadium Station

The construction activities of the Dodger Stadium Station would not result in FTA impacts at any NSRs, including NSR 16 (Cathedral High School) and NSR 18 (Solano Canyon Neighborhood), and no mitigation measures would be required to address FTA impacts.

Mesa Laydown Lot

The construction activities of the Mesa Laydown Lot would not result in FTA impacts at any NSRs, including NSR 19 (Elysian Park Recreation Center), and no mitigation measures would be required to address FTA impacts.

Off-Site Construction Noise Impact Analysis

Less than Significant. In addition to on-site construction activities, noise would be generated off-site by construction-related traffic traveling via off-site construction traffic routes. The noise impacts of construction trucks traveling on these construction traffic routes were analyzed using the Traffic Noise Model (TNM) to create a conceptual scenario representative of the Project area. Off-site construction noise impacts can be assessed by determining the relative increase of traffic noise levels as a result of additional project-related traffic, especially the addition of heavy trucks using public roadways.

The haul routes for heavy trucks servicing the Project areas were determined by the traffic consultant. These roadways and segments are listed in Table 3.13-21. Existing traffic noise levels in $L_{eq(1\text{-hour})}$ were estimated using existing traffic volume data for area roadways as provided by the Project's traffic consultant and calculated at typical receptor distances of 50 and 100 feet from the roadway centerline. Existing plus project traffic noise was calculated with TNM using the same estimated existing traffic volumes plus an additional 16 heavy truck trips (8 round trips) per hour along the haul routes based upon input included in Appendix B of this Draft EIR. The additional 16 truck trips per hour would account for a variety of heavy truck types that would travel on the designated off-site haul routes during different phases of the Project, such as dump trucks that would remove excavated material during excavation activities, concrete mixer trucks that would deliver concrete mix during concrete pours, and flatbed trucks that would deliver other construction materials and supplies during other Project phases. A lesser number of additional smaller pickup trucks and automobiles would also be assumed for worker trips, but these would contribute an insignificant amount of additional traffic noise compared to the larger dump trucks and concrete mixer trucks. The estimated increase in off-site noise levels due to the additional 16 heavy truck trips during construction by roadway segment are shown in Table 3.13-21. The greatest increase is 0.6 dBA (below a barely perceptible increase). Therefore, the noise generated by off-site construction activities would not represent a significant increase in noise that would exceed the threshold of a 5-dBA increase over existing ambient noise levels as per LAMC and the L.A. CEQA Thresholds Guide.

Table 3.13-21: Proposed Project Construction Traffic Noise

Roadway	Segment	50 ft from Roadway center line ($L_{eq(h)}$dBA)			100 ft from Roadway center line ($L_{eq(h)}$dBA)		
		Existing	Ext + Proj	Increase	Existing	Ext + Proj	Increase
Alameda Street	Los Angeles Street to Cesar E. Chavez Avenue	71.1	71.4	0.3	67.3	67.6	0.3
Alameda Street	Cesar E. Chavez Avenue to Bauchet Street/Main Street	71.2	71.5	0.3	67.4	67.7	0.3
Alameda Street	Bauchet Street/Main Street to Alpine Street	72.7	72.9	0.2	69.1	69.3	0.2
Alameda Street	Alpine Street to College Street	71.5	71.8	0.3	68.0	68.2	0.2
Spring Street	College Street to Ann Street	71.1	71.3	0.2	67.9	68.1	0.2
Spring Street	Ann Street to Avenue 18	71.8	72.0	0.2	68.5	68.7	0.2
Broadway	Avenue 18 to Bishops Road	72.3	72.4	0.1	68.8	69.0	0.2
Bishops Road	N. Broadway to SR-110	62.3	62.9	0.6	59.0	59.6	0.6

Overall, estimated off-site construction traffic noise impacts would not exceed significance thresholds at the proposed off-site haul routes. Therefore, off-site construction traffic noise impacts would be less than significant.

3.13.5.2 Operational Noise

Less than Significant. This section presents predicted operational noise levels using the methodology developed in the *Noise and Vibration Technical Report* (Appendix M) (including noise from the equipment and mechanical operations of the stations, junction, and towers, as well as noise from cabins and passengers waiting to board in stations), and potential impacts assessed according to significance thresholds.

<u>Operational Noise Scenarios</u>

The proposed Project would operate under a variety of different operating scenarios to respond to a varying demand. The different operating scenarios would have different line speeds, cabins per hour, and queueing numbers that affect system and passenger noise levels.

For purposes of the operational noise analysis, the worst-case scenario was selected, which represents a Dodger Game Day. The Dodger Game Day scenario would include the highest line speed, cabins per hour, and queueing numbers, and would include nighttime operations, all of which contribute to this scenario resulting in the worst-case condition. The assumptions for the Dodger Game Day scenario using the 2042 horizon year are:

- Maximum Line Speed: 6.0 meters per second/19.7 feet per second
- Maximum Cabins: 156/hour
- Includes nighttime operations
- Maximum Queueing: 603 people

<u>Operational Noise Predicted Levels and Impacts</u>

As discussed in Section 3.13.1, several impact thresholds were used to analyze the potential for operational noise impacts, including FTA impact criteria, the L.A. CEQA Thresholds Guide, and

LAMC noise standards, each applied to the worst-case scenario. The FTA impact criteria thresholds range from 55 to 80 dBA depending on existing noise exposure and the analysis compares these thresholds to either the worst-hour L_{eq} from the Project or the Project L_{dn}, depending on the FTA land use category of the NSR. The L.A. CEQA impact criteria thresholds range from 50 to 80 dBA depending on the City of Los Angeles Guidelines for Noise Compatible Land Use category of the NSR and the analysis compares these thresholds to the project CNEL level. To determine impacts based on LAMC impact criteria, the analysis compares the existing ambient $L_{eq(day)}$ and $L_{eq(night)}$ levels with Project $L_{eq(day)}$ and $L_{eq(night)}$ levels, with an increase of 5 dBA over existing ambient levels considered a significant impact. L.A. CEQA Thresholds Guide (City)

As shown in Table 3.13-22, the highest increase in noise levels during Project operation would be 4.0 dBA, which would occur at NSR 14N (Los Angeles State Historic Park) under the worst-case scenario. The increases in noise levels resulting from operation of the proposed Project would be below the applicable L.A. CEQA Thresholds Guide significance threshold at all NSRs based on the NSRs' land use category per Table 3.13-5, and no operational impacts would occur under the worst-case scenario. Since no operational impacts would occur under the worst-case scenario, the remaining operational scenarios, which result in less noise as a result of changes to the line speed, cabins per hour, or queueing numbers, would also not result in significant noise impacts.

LAMC (City)

According to the LAMC, significant noise impact would exist if the project noise level would result in an increase in $L_{eq(day)}$ or $L_{eq(night)}$ levels of 5 dBA over existing ambient noise levels. Existing and predicted $L_{eq(day)}$ and $L_{eq(night)}$ levels for the 2042 - Weekday, High – Dodger Event scenario are presented below in Table 3.13-23.

Table 3.12-22: L.A. CEQA Thresholds Guide Operational Noise Impact Analysis, 2042 Dodger Game Day (dBA)

NSR ID	Land Use	Existing CNEL	Project CNEL	Existing +Project	Allowable Increase	Increase	Impact?
NSR 1A	Transit Terminal	65.1	53.1	65.3	5	0.3	No
NSR 1B	Day-care Center	65.1	53.1	65.3	5	0.3	No
NSR 2	Public Park	72.9	57.9	73.0	3	0.1	No
NSR 3	MFR	72.7	63.1	73.2	3	0.5	No
NSR 4	Office Building	68.0	46.3	68.0	5	0.0	No
NSR 5	Future MFR	71.6	54.4	71.7	3	0.1	No
NSR 6	MFR	72.0	49.4	72.0	3	0.0	No
NSR 7	Office Building	72.9	48.5	72.9	3	0.0	No
NSR 8	Future MFR	71.0	61.8	71.5	3	0.5	No
NSR 9	MFR	64.3	53.0	64.6	5	0.3	No
NSR 10	Future MFR	64.3	53.0	64.6	5	0.3	No
NSR 11	Commercial	66.9	51.1	67.0	5	0.1	No
NSR 12	Future MFR	71.0	61.8	71.5	3	0.5	No
NSR 13N	Future MFR	69.0	49.4	69.0	5	0.0	No
NSR 13S	Future MFR	71.2	49.8	71.3	3	0.0	No
NSR 14N	Public Park	56.7	58.6	60.8	5	4.0	No
NSR 14S	Public Park	62.6	58.5	64.0	5	1.4	No
NSR 15	Church	69.0	49.4	69.0	5	0.0	No
NSR 16	School	61.8	60.5	64.2	5	2.4	No
NSR 17N	SFR	59.3	58.9	62.1	5	2.8	No
NSR 17S	MFR	59.3	58.9	62.1	5	2.8	No
NSR 18	SFR	59.6	41.6	59.6	5	0.1	No

Increase values were rounded to the closest 0.1 dBA

Table 3.13-23 LAMC Operational Noise Impact Analysis, 2042 Weekday Dodger Game Day (dBA)

NSR ID	Land Use	Existing		Project		Existing + Project		Increase over Existing		Impact?	
		$L_{eq(day)}$	$L_{eq(night)}$	$L_{eq(day)}$	$L_{eq(night)}$	$L_{eq(day)}$	$L_{eq(night)}$	$L_{eq(day)}$	$L_{eq(night)}$	$L_{eq(day)}$	$L_{eq(night)}$
NSR 1A	Transit Terminal	61.1	57.7	49.3	45.2	61.4	57.9	0.3	0.2	No	No
NSR 1B	Daycare Center	61.1	57.7	49.3	45.2	61.4	57.9	0.3	0.2	No	No
NSR 2	Public Park	69.0	65.5	54.0	50.1	69.1	65.6	0.1	0.1	No	No
NSR 3	MFR	68.4	65.5	59.3	55.3	68.9	65.9	0.5	0.4	No	No
NSR 4	Office Building	63.6	60.7	42.2	38.3	63.6	60.7	0.0	0.0	No	No
NSR 5	Future MFR	65.6	64.9	50.2	46.4	65.7	65.0	0.1	0.1	No	No
NSR 6	MFR	69.0	64.1	45.2	41.4	69.0	64.1	0.0	0.0	No	No
NSR 7	Office Building	69.8	65.1	44.3	40.5	69.8	65.1	0.0	0.0	No	No
NSR 8	Future MFR	64.7	64.4	57.8	53.8	65.5	64.8	0.8	0.4	No	No
NSR 9	MFR	61.1	56.5	49.1	45.0	61.4	56.8	0.3	0.3	No	No
NSR 10	Future MFR	61.1	56.5	49.1	45.0	61.4	56.8	0.3	0.3	No	No
NSR 11	Commercial	63.0	59.5	47.3	43.1	63.1	59.6	0.1	0.1	No	No
NSR 12	MFR	64.7	64.4	57.8	53.8	65.5	64.8	0.8	0.4	No	No
NSR 13N	Future MFR	65.8	60.9	45.5	41.3	65.8	60.9	0.0	0.0	No	No
NSR 13S	Future MFR	67.7	63.6	45.9	41.7	67.7	63.6	0.0	0.0	No	No
NSR 14N	Public Park	53.6	48.7	54.6	50.6	57.1	52.8	3.5	4.1	No	No
NSR 14S	Public Park	58.7	55.2	54.5	50.5	60.1	56.5	1.4	1.3	No	No
NSR 15	Church	65.8	60.9	45.5	41.3	65.8	60.9	0.0	0.0	No	No
NSR 16	School	58.7	53.8	56.5	52.4	60.7	56.2	2.0	2.4	No	No
NSR 17N	SFR	56.1	51.2	55.1	50.8	58.6	54.0	2.5	2.8	No	No
NSR 17S	MFR	56.1	51.2	55.1	50.8	58.6	54.0	2.5	2.8	No	No
NSR 18	SFR	56.5	51.6	37.1	33.9	56.5	51.7	0.0	0.1	No	No

Increase values were rounded to the closest 0.1 dBA

As shown in Table 3.13-23, the highest increase in noise levels for operation of the proposed Project would be 4.1 dBA $L_{eq(night)}$ at NSR 14N (Los Angeles State Historic Park) under the worst-case scenario. As such, the increases in noise levels resulting from operation of the proposed Project would be below the 5 dBA L_{eq} LAMC threshold at all NSRs, and no operational impact would occur under the worst-case scenario. Since no operational impacts would occur under the worst-case scenario, the remaining operational scenarios, which result in less noise as a result of changes to line speed, cabins per hour, or queuing number, would also not result in significant noise impacts. Therefore, Project operation would not result in noise levels above the applicable LAMC thresholds, and impacts would be less than significant.

FTA Manual (Metro)

According to the FTA Manual, a significant noise impact could result if the project noise level would result in a “severe impact” at levels ranging from 55 to 80 dBA depending on existing noise, in accordance Figure 3.13-1.

The FTA has different impact threshold metrics and levels based on the type of land use at the receptor location and the existing noise exposure. Impact thresholds range from 55 to 80 dBA depending on existing noise exposure and the analysis compares these thresholds to either the worst-hour L_{eq} from the Project or the Project L_{dn}, depending on the FTA land use category of the NSR. Table 3.13-24 summarizes the existing noise levels, the applicable impact thresholds, the noise levels from the Project, and whether the Project would result in a significant impact. Project noise levels account for noise from the stations/junction, towers, and passenger queuing, as well as the distance from these sources to the analyzed NSR.

Table 3.13-24: FTA Operational Noise Impact Analysis, 2042 Dodger Game Day (dBA)

NSR ID	Land Use	FTA Land Use Category	Impact Metric[1]	Existing Level (L_{eq}-WH or L_{dn})	Impact Threshold	Project Level	Severe Impact?
NSR 1A	Transit Terminal	Category 3	L_{eq}-WH[2]	61.1	64	53.1	No
NSR 1B	Day-care Center	Category 3	L_{eq}-WH	61.1	64	53.1	No
NSR 2	Public Park	Category 3	L_{eq}-WH	69.0	69	59.6	No
NSR 3	MFR	Category 2	L_{dn}	72.5	71	62.5	No
NSR 4	Office Building	Category 3	L_{eq}-WH	63.6	65	44.1	No
NSR 5	Future MFR	Category 2	L_{dn}	65.6	66	52.3	No
NSR 6	MFR	Category 2	L_{dn}	71.6	70	48.6	No
NSR 7	Office Building	Category 3	L_{eq}-WH	69.8	69	46.3	No
NSR 8	Future MFR	Category 2	L_{dn}	70.8	70	61.0	No
NSR 9	MFR	Category 2	L_{dn}	63.9	65	52.3	No
NSR 10	Future MFR	Category 2	L_{dn}	63.9	65	52.3	No
NSR 11	Commercial	Category 3	L_{eq}-WH	63.0	71	48.4	No
NSR 12	MFR	Category 2	L_{dn}	70.8	70	61.0	No
NSR 13N	Future MFR	Category 2	L_{dn}	68.5	68	48.6	No
NSR 13S	Future MFR	Category 2	L_{dn}	70.9	66	49.1	No
NSR 14N	Public Park	Category 3	L_{eq}-WH	53.6	60	56.3	No
NSR 14S	Public Park	Category 3	L_{eq}-WH	58.7	62	56.2	No

NSR ID	Land Use	FTA Land Use Category	Impact Metric[1]	Existing Level (L_{eq}-WH or L_{dn})	Impact Threshold	Project Level	Severe Impact?
NSR 15	Church	Category 3	L_{eq}-WH	65.8	66	46.8	No
NSR 16	School	Category 3	L_{eq}-WH	58.7	63	58.1	No
NSR 17N	SFR	Category 2	L_{dn}	58.9	63	58.2	No
NSR 17S	MFR	Category 2	L_{dn}	58.9	63	58.2	No
NSR 18	SFR	Category 2	L_{dn}	59.1	63	40.9	No

[1] The impact metric being used depends on the FTA Land Use Category of the analysed NSR. Category 1 and 3 land uses are analysed with respect to Project worst hour noise levels. Category 2 land uses are analysed with respect to Project L_{dn} levels.
[2] WH = worst hour (Predicted L_{eq} for hour with anticipated highest level of Project activity)

As shown in Table 3.13-24 above, operation of the proposed Project would not increase noise levels in exceedance of the FTA impact threshold (ranging from 55 to 80 dBA depending on existing noise exposure) under the worst-case scenario. As such, no operational impact would occur under the worst-case scenario. Since no operational impacts would occur under the worst-case scenario, the remaining operational scenarios that result in less noise as a result of changes to line speed, cabins per hour, or queuing numbers, would also not result in significant noise impacts. Therefore, Project operation would not result in noise levels above the applicable FTA thresholds, and impacts would be less than significant.

Gondola Cabin Noise

In addition to the primary operational noise levels from the stations, junction, towers and passengers at stations discussed above, which also included gondola cabin noise (as is explained below), an analysis was conducted to evaluate the noise from the gondola cabins as they travel between the stations, towers and junction in proximity to receptor locations.

Cabin noise might be expected from the people traveling inside the cabin and any heating, ventilation and air conditioning (HVAC) equipment associated with the cabin. The Project would implement project design feature NOI-PDF-A in Section 3.13.6 that provides specifications regarding the interior-to-exterior noise reduction of the gondola cabins as well as the sound power level of the HVAC system. For purpose of the analysis, the assumed nighttime noise level is the measured noise level at the receptor location minus an additional 5 dBA where the gondola cabin would be at an elevation of 35 feet or greater above street level. As shown in Table 3.13-25, with implementation of project design feature NOI-PDF-A, noise from the gondola cabins would be at least 10 dBA less than the existing nighttime noise level at noise-sensitive uses. In fact, in many cases the noise levels from the gondola cabins would be over 20 dBA less than the existing nighttime noise level at noise-sensitive uses. Due to decibel mathematics, combining two sound levels that differ by 10 dB or more results in a sound level identical to the higher value of the two. Because the gondola noise would be at least 10 dBA less than the existing nighttime noise level, cabin noise will not contribute to the overall operational noise levels at any NSRs and impacts from gondola cabin noise would be less than significant.

A summary of this analysis is presented in Table 3.13-25.

Table 3.13-25: Proposed Gondola Cabin Noise

Rec. ID[1]	Cabin to NSR Dist. (ft)	Nighttime Existing Level (L_{eq}, dBA)	Cabin Noise with NOI-PDF-A	Cabin Noise Level Below Nighttime Existing Level (L_{eq}, dBA)
NSR 3	44	65.5	41.2	24.3
NSR 5	104	64.9	33.9	31.0
NSR 6	76	64.1	36.6	27.5
NSR 7	114	65.1	33.1	32.0
NSR 8	35	64.4	43.4	21.0
NSR 9	183	56.5	29.0	27.5
NSR 13 S	150	63.6	30.7	32.9
NSR 14 S	115	55.2	33.1	22.1
NSR 17 N	45	51.2	41.2	10

[1] The NSRs included in this evaluation were conservatively selected as those most likely to be impacted by the cabins either because of the distance from the NSR to the cabin or the existing nighttime noise levels. Impacts at all other NSRs would be less than those analyzed here.

Operational Noise Impact Summary

Table 3.13-26 summarizes operational noise impacts for the worst-case operational scenario (2042 Dodger Game Day). This includes potential impacts from cabin noise as the gondolas travel between and within the stations, towers, and junction. The cabin noise is not expected to result in a contribution to cumulative noise levels because project design feature NOI-PDF-A ensures that the cabins would be designed such that they would generate noise levels of at least 10 dBA below the current background levels. Therefore, operational impacts would be less than significant, and no mitigation would be required.

Table 3.13-26: Operational Noise Impact Summary

Noise Standard	Operational Noise Impact from Stations, Towers, and Queuing	Operational Noise Impacts from Cabins	Cumulative Operational Noise Impacts
L.A. CEQA Thresholds Guide	none	none	none
L.A. Municipal Code	none	none	none
FTA	none	none	none

NV-2: Would the Project result in generation of excessive ground-borne vibration or ground-borne noise levels?

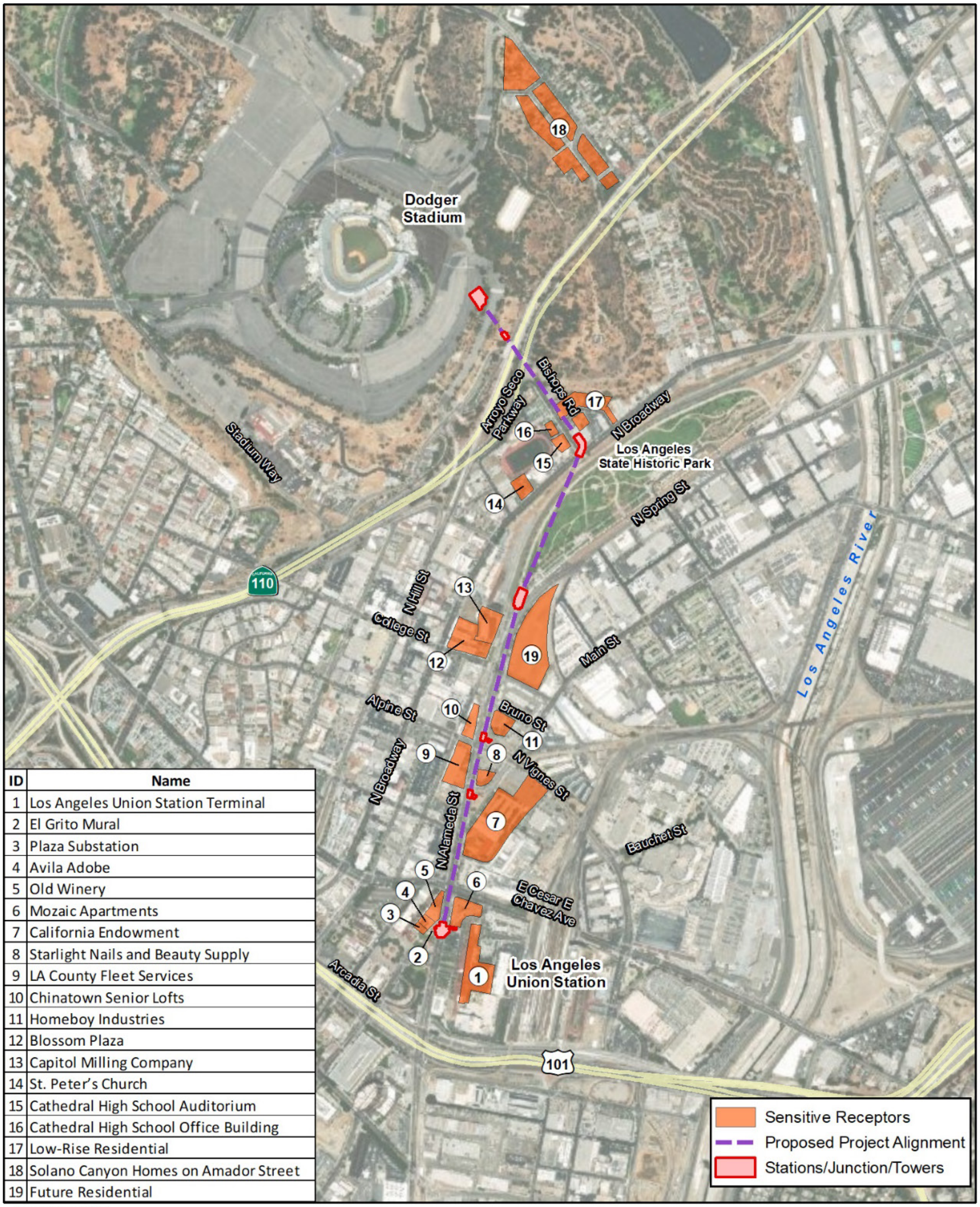
3.13.5.3 Vibration-Sensitive Receptors

A construction vibration impact analysis was conducted for those vibration-sensitive receptors (VSRs) that were located within approximately 200 feet of each Project component site. This distance was chosen because vibration attenuates with distance and, at 200 feet, vibration levels for the highest vibration-producing equipment for construction of the proposed Project (vibratory rollers) would be less than the most restrictive vibration level (0.12 in/sec PPV), and, therefore, the Project would not impact VSRs beyond 200 feet.

A list of the VSRs in the Project Area including their building type and potential damage and annoyance thresholds, is presented in Table 3.13-27 and Figure 3.13-6 below. Human annoyance and damage thresholds are referenced from the FTA Manual (see Tables 3.13-2, 3.13-3 and 3.13-4).

Table 3.13-27: Vibration-Sensitive Receptors

ID	Name	Building Type	Impact threshold	
			Damage (PPV in in/sec)	Annoyance (VdB)
VSR-1	Los Angeles Union Station Terminal	II Engineered	0.3	75
VSR-2	Plaza Substation	III Non-Engineered	0.2	75
VSR-3	El Grito Mural	III Non-Engineered	0.2	NA
VSR-4	a. Avila Adobe (original 1818 structure)	“Extremely Fragile”	0.12	75
	b. Avila Adobe (1970s addition)	III Non-Engineered	0.2	75
VSR-5	Old Winery	III Non-Engineered	0.2	75
VSR-6	Mozaic Apartments	I Reinforced	0.5	72
VSR-7	The California Endowment	I Reinforced	0.5	75
VSR-8	Starlight Nail and Beauty Supply	III Non-Engineered	0.2	75
VSR-9	LA County Fleet Services	I Reinforced	0.5	75
VSR-10	Chinatown Senior Lofts	II Engineered	0.3	72
VSR-11	Homeboy Industries	I Reinforced	0.5	75
VSR-12	Blossom Plaza	I Reinforced	0.5	72
VSR-13	Capitol Milling Company	III Non-Engineered	0.2	75
VSR-14	St. Peter's Church	III Non-Engineered	0.2	75
VSR-15	Cathedral High School Auditorium	I Reinforced	0.5	72
VSR-16	Cathedral High School Office Building	II Engineered	0.3	75
VSR-17	Low-Rise Residential (on Savoy Street)	III Non-Engineered	0.2	72
VSR-18	Solano Canyon Homes on Amador Street	III Non-Engineered	0.2	72
VSR-19	Future Residential	I Reinforced	0.5	72



Source: Esri, 2022

0 750 1,500 Feet

Vibration Sensitive Receptors Map

Figure 3.13-6: Vibration Sensitive Receptors Map

The following analysis discusses predicted vibration levels and resulting vibration impacts for both construction and operation of the proposed Project.

3.13.5.4 Construction Vibration

This section presents predicted construction vibration levels using the methodology developed in the *Noise and Vibration Technical Report* (Appendix M), and potential impacts assessed according to significance thresholds. A list of the vibration-sensitive receptors, including their building type and potential damage and annoyance thresholds, is presented above in Table 3.13-27.

On-Site Construction Activity

Significant and Unavoidable. A construction vibration impact analysis was conducted, as discussed in the *Noise and Vibration Technical Report* (Appendix M). Construction vibration levels were calculated as per the methodology presented in Section 3.13.3 above. While a variety of vibration-producing equipment was considered, the worst-case scenario was generally associated with the use of vibratory rollers. The vibratory rollers have a reference vibration level of 0.21 PPV in/sec (94 VdB) at a distance of 25 feet, which was considered for the closest construction activities. The summary results for predicted vibration levels are presented in Table 3.13-28.

Table 3.13-28: FTA Construction Vibration Impact Analysis

Structures			Impact Threshold		Without Mitigation				With Mitigation	
					Vibration Velocity& Level		Potential Impact		Potential Impact	
Project Component Site	ID	Vibration-Sensitive Receptor	Damage, PPV, in/sec	Annoyance, VdB	PPV, in/sec	VdB	Damage	Annoyance	Damage	Annoyance
Alameda Station	VSR-5	Old Winery	0.2	75	0.13	90	No	**Yes**	No	Yes
	VSR-4	Avila Adobe (original 1818 structure)	0.12	75	0.06	83	No	**Yes**	No	Yes
	VSR-4	Avila Adobe (1970s addition)	0.2	75	0.08	87	No	**Yes**	No	Yes
	VSR-3	Plaza Substation	0.2	75	0.09	87	No	**Yes**	No	Yes
	VSR-2	El Grito Mural	0.2	N/A	0.13	90	No	N/A[a]	No	N/A
	VSR-6	Mozaic Apartments – Alameda Façade	0.5	72	0.10	88	No	**Yes**	No	Yes
	VSR-6	Mozaic Apartments – LAUS Façade	0.5	72	0.09	87	No	**Yes**	No	Yes
	VSR-1	Los Angeles Union Station Terminal	0.3	75	0.04	81	No	**Yes**	No	Yes
Alameda Station (Vertical Circulation/Hardscape/Landscape/Interior work - East)	VSR-6	Mozaic Apartments	0.5	72	0.40	100	No	**Yes**	No	Yes
	VSR-1	Los Angeles Union Station Terminal	0.3	75	0.04	81	No	**Yes**	No	Yes
Alameda Station (Forecourt Hardscape)	VSR-1	Los Angeles Union Station Terminal	0.3	75	0.04	81	No	**Yes**	No	Yes
Alameda Station (Vertical Circulation Hardscape/Landscape/Interior work-West)	VSR-5	Old Winery	0.2[b]	75	7.24	125	**Yes**	**Yes**	No	Yes
	VSR-4	Avila Adobe (original 1818 structure)	0.12[b]	75	0.06	83	No	**Yes**	No	Yes
	VSR-4	Avila Adobe (1970s addition)	0.2	75	7.24	125	**Yes**	**Yes**	No	Yes
	VSR-3	Plaza Substation	0.2	75	0.09	87	No	**Yes**	No	Yes
	VSR-2	El Grito Mural	0.2	N/A	1.58	112	**Yes**	N/A[b]	No	N/A
Alameda Tower (Excavation work)	VSR-7	California Endowment	0.5	75	0.06	83	No	**Yes**	No	Yes
	VSR-8	Starlight Nail and Beauty Supply	0.2	75	0.16	92	No	**Yes**	No	Yes
	VSR-9	LA County Fleet Services	0.5	75	0.07	85	No	**Yes**	No	Yes

Table 3.13-28: FTA Construction Vibration Impact Analysis

Structures			Impact Threshold		Without Mitigation				With Mitigation	
					Vibration Velocity& Level		Potential Impact		Potential Impact	
Project Component Site	**ID**	**Vibration-Sensitive Receptor**	**Damage, PPV, in/sec**	**Annoyance, VdB**	**PPV, in/sec**	**VdB**	**Damage**	**Annoyance**	**Damage**	**Annoyance**
Alameda Tower (Street work)	VSR-7	California Endowment	0.5	75	0.06	83	No	**Yes**	No	Yes
	VSR-8	Starlight Nail and Beauty Supply	0.2	75	0.16	92	No	**Yes**	No	Yes
	VSR-9	LA County Fleet Services	0.5	75	0.07	85	No	**Yes**	No	Yes
Alpine Tower	VSR-10	Chinatown Senior Lofts	0.3	72	0.09	87	No	**Yes**	No	Yes
	VSR-11	Homeboy Industries	0.5	75	0.16	92	No	**Yes**	No	Yes
Chinatown/ State Park Station	VSR-19	Future Residential	0.5	72	0.17	97	No	**Yes**	No	Yes
	VSR-12	Blossom Plaza	0.3	72	0.01	68	No	No	No	No
	VSR-13	Capitol Milling Company	0.2	75	0.09	87	No	**Yes**	No	Yes
Broadway Junction	VSR-15	Cathedral High School Auditorium	0.5	72	0.27	97	No	**Yes**	No	Yes
	VSR-16	Cathedral High School Office Building	0.3	75	0.13	90	No	**Yes**	No	Yes
	VSR-17	451 Savoy Street	0.2	72	0.14	91	No	**Yes**	No	Yes
	VSR-17	437 Savoy Street	0.2	72	0.09	87	No	**Yes**	No	Yes
	VSR-17	438 Savoy Street.	0.2	72	0.17	93	No	**Yes**	No	Yes
	VSR-14	St. Peter's Church	0.2	75	0.01	68	No	No	No	No
Stadium Tower	VSR-16	Cathedral High School Office Building	0.3	75	0.01	66	No	No	No	No
Dodger Stadium Station	VSR-18	Solano Canyon Homes on Amador Street	0.2	72	0.00	57	No	No	No	No

[a] An annoyance impact is not applicable to this resource as it is an artwork and does not have human occupants such as the other receptors.

[b] Note that for the Vertical Circulation/Hardscape/Landscape/Interior work-West Phase for VSRs-4 and -5 (Avia Adobe and Old Winery), a one-foot distance from the structures was conservatively assumed for the vibration analysis. It should be noted that Mitigation Measure VIB-B requires use of non-vibrating equipment or hand tools for ground compaction or excavation/drilling operations within 26 feet of these structures.

According to the FTA Manual, a significant vibration impact would exist for human annoyance if ground-borne vibration levels exceed 72 VdB at residential structures, or 75 VdB at institutional structures. For potential structural damage, a significant vibration impact would exist if ground-borne vibration levels exceed:

- 0.5 PPV, inches per second, for Category 1 buildings (reinforced-concrete, steel or timber (no plaster)) – (FTA)
- 0.3 PPV, inches per second, for Category 2 buildings (engineered concrete and masonry (no plaster)) – (FTA)
- 0.2 PPV, inches per second, for Category 3 buildings (non-engineered timber and masonry buildings) – (FTA)
- 0.12 PPV, inches per second, for Category 4 buildings (buildings extremely susceptible to vibration damage) – (FTA).

Potential construction vibration impacts were evaluated for vibration-generating construction equipment that would be used for the Project, including vibratory rollers, loaded trucks, plate compactors, excavators and drill rigs. All vibration-generating equipment was evaluated as detailed in Appendix M, which determined that the worst-case vibration-generating equipment are vibratory rollers and loaded trucks depending upon the type of construction activity occurring in proximity to the sensitive use. Table 3.13-28 presents the worst-case vibration levels for each sensitive receptor.

As shown in Table 3.13-28, construction activities would result in potential vibration impacts for several vibration-sensitive uses, as described below for each Project component.

For human annoyance, the analysis determined that a vibratory roller would generate an impact when it is located within 135 feet of a residential use and 107 feet of an institutional use. Because construction sites (stations and towers) are generally in or near rights-of-way that are fronted by residential and institutional uses that are within these distances, they would be subject to this impact. For example, the proposed Alameda Station would be constructed above Alameda Street south of E. Cesar Chavez Avenue approximately 50 feet from the corner of Mozaic Apartments (VSR-6), a residential use. In addition, for human annoyance, the analysis determined that a loaded truck would generate an impact when it is located within 73 feet of a residential use and 58 feet of an institutional use. Project haul routes are fronted by residential and institutional uses and therefore would be subject to this impact. For example, one of the Project's haul route segments is Alameda Street from Los Angeles Street to E. Cesar Chavez Avenue. Two of the southbound lanes of this segment are within 50 feet of institutional uses—Villa Adobe (VSR-4) and Old Winery (VSR-5), and the northbound lanes are within 60 feet of the edge of the Mozaic Apartments (VSR-6).

<u>Alameda Station</u>

Human Annoyance

Construction of the Alameda Station would exceed the vibration annoyance thresholds (72 VdB at residential structures or 75 VdB at other land uses) for all of the vibration-sensitive receptors near this component location, including the LAUS Terminal (VSR-1), El Plaza Substation (VSR-3), Avila Adobe (VSR-4), Old Winery (VSR-5), and Mozaic Apartments (VSR-6). The human annoyance threshold is so low that many typical activities, such as trucks passing within 73 feet of residential buildings or within 58 feet of institutional buildings, can generate vibrations that are perceptible to occupants and exceed this limit. As noted above, for example, the Mozaic Apartments (VSR-6) are located within 60 feet of the northbound lanes of Alameda Street, a Project haul route. It should be noted that activities such as trucks passing by would be relatively brief and intermittent in nature. Nevertheless, this impact would be significant.

Building Damage

The use of vibration-generating equipment in close proximity to structures at El Pueblo associated with installation of the vertical circulation elements for the Alameda Station would exceed the vibration damage threshold of 0.2 PPV inches per second at the Old Winery (VSR-5), El Grito Mural (VSR-2), and Avila Adobe -1970s addition (VSR-4b). This impact would be significant.

Construction activities for the Alameda Station would not exceed the vibration damage thresholds at LAUS Terminal (VSR-1), El Plaza Substation (VSR-3), the original 1818 Avila Adobe structure (VSR-4), and Mozaic Apartments (VSR-6). Therefore, this impact would be less than significant.

<u>Alameda Tower</u>

Human Annoyance

Construction of the Alameda Tower would exceed the annoyance threshold (75 VdB) for all of the vibration-sensitive receptors near this component location, including The California Endowment (VSR-7), Starlight Nail and Beauty Supply (VSR-8), and LA County Fleet Services (VSR-9). This impact would be significant.

Building Damage

Construction activities for the Alameda Tower would not exceed the vibration damage thresholds at any vibration-sensitive receptors. Therefore, this impact would be less than significant.

<u>Alpine Tower</u>

Human Annoyance

Construction of the Alpine Tower would exceed the annoyance thresholds (72 VdB at residential structures or 75 VdB at other land uses) for all of the vibration-sensitive receptors near this component location, including Homeboy Industries (VSR-11) and Chinatown Senior Lofts (VSR-10). This impact would be significant.

Building Damage

Construction activities for the Alpine Tower would not exceed the vibration damage thresholds at any vibration-sensitive receptors. Therefore, this impact would be less than significant.

<u>Chinatown/State Park Station</u>

Human Annoyance

Construction of the Chinatown/State Park Station would exceed the annoyance threshold of 75 VdB at the Capitol Milling Company (VSR-13), and 72 VdB at the College Station future residential development (VSR-19). This impact would be significant.

Construction activities for the Chinatown/State Park Station would not exceed the annoyance threshold at Blossom Plaza (VSR-12); therefore, human annoyance impacts at VSR-12 would be less than significant.

Building Damage

Construction activities for the Chinatown/State Park Station would not exceed the vibration damage thresholds at any vibration-sensitive receptors. Therefore, this impact would be less than significant.

<u>Broadway Junction</u>

Human Annoyance

Construction of the Broadway Junction would exceed the annoyance threshold (72 VdB) at the Cathedral High School Auditorium (VSR-15), Cathedral High School Office Building (VSR-16) 451 Savoy Street, 437 Savoy Street, and the Other Homes on Savoy Street (VSR-17). This impact would be significant.

Building Damage

Construction activities for the Broadway Junction would not exceed the vibration damage thresholds at any vibration-sensitive receptors. Therefore, this impact would be less than significant.

<u>Stadium Tower</u>

Human Annoyance

Construction activities for the Stadium Tower would not exceed the vibration annoyance thresholds at any vibration-sensitive receptors. Therefore, this impact would be less than significant.

Building Damage

Construction activities for the Stadium Tower would not exceed the vibration damage thresholds at any vibration-sensitive receptors. Therefore, this impact would be less than significant.

<u>Dodger Stadium Station</u>

Human Annoyance

Construction activities for the Dodger Stadium Station would not exceed the vibration annoyance thresholds at any vibration-sensitive receptors. Therefore, this impact would be less than significant.

Building Damage

Construction activities for the Dodger Stadium Station would not exceed the vibration damage thresholds at any vibration-sensitive receptors. Note that Dodger Stadium is located approximately 640 feet west of the Dodger Stadium Station site. At this distance, Dodger Stadium would not be susceptible to vibration impacts during construction activities. Therefore, this impact would be less than significant, and no mitigation measures would be required.

Summary of On-Site Construction Vibration

As indicated by Table 3.13-28 above, the Project would result in human annoyance vibration impacts. Therefore, these impacts would be significant.

Off-Site Construction Vibration

Significant and Unavoidable. In addition to on-site construction vibration impacts, potential vibration from loaded heavy trucks operating on local haul routes (primarily sections of Alameda Street, Spring Street, North Broadway, and Bishops Road) was also analyzed to determine construction vibration impacts. To analyze impacts, a reference level of 0.076 in/sec PPV and 86 VdB at 25 feet was used for loaded heavy trucks, which would translate to levels of 0.03 in/sec and 77 VdB at 50 feet and 0.01 in/sec and 68 VdB at 100 feet. Overall, these construction vibration levels would remain below the minimum potential damage threshold of 0.12 in/sec PPV. These construction vibration levels have the potential to result in some annoyance impacts for people within occupied structures that exist within 73 feet of the roadway for residential buildings or within 58 feet of the roadway for institutional buildings. However, it should be noted that all of these roadways currently carry a significant number of heavy trucks, and any such annoyance threshold is already being exceeded many times each day. Nevertheless, Project-related off-site construction vibration would exceed the human annoyance threshold, and impacts would be significant.

3.13.5.5 Operational Vibration

Less Than Significant Impact. None of the proposed Project operations are anticipated to produce perceptible vibration beyond the Project footprint. Some of the equipment within the stations, towers, and junction, such as motors or cable guidance systems, may produce a small amount of vibration during normal operations that may be perceptible within the station or junction structure, but these components would be isolated and balanced as part of their basic design and maintenance for proper operation such that they would not produce perceptible vibration levels outside of the station or junction footprint. In addition, vertical circulation devices, such as escalators and elevators, would, similarly, not generate perceptible vibration levels beyond the Project footprint. In addition, ground-borne vibration attenuates rapidly as a function of distance from a vibration source. Therefore, operation of the proposed Project would not increase the existing vibration levels in the immediate vicinity of the Project component sites, and as such, vibration impacts associated with the operation of the proposed Project would be less than significant.

NV-3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed Project alignment is not located within the vicinity of a private airstrip, an area covered by an airport land use plan, or within two miles of a public airport or public use airport (as further described in Chapter 5, Other CEQA Considerations). The closest public airport is the Hollywood Burbank Airport, located approximately 12 miles northwest of the proposed Project alignment. As such, the Project would not expose people residing or working in the Project area to excessive noise levels related to the operation of a private airstrip or public airport. Therefore, no impact would occur.

3.13.6 Project Design Features

NOI-PDF-A: Gondola Cabin Noise Control Features. The Project's gondola cabins shall include the following features:

1) Gondola cabins shall be designed with an interior-to-exterior noise reduction rating of no less than Sound Transmission Class (STC) 35.

2) If heating, ventilation, and air conditioning (HVAC) units are included in the gondola cabin design, they shall be designed with a sound power level of no more than 71 dBA.

In addition, the following project design features CUL-PDF-A through CUL-PDF-E related to cultural resources (Section 3.5), provide a robust protection plan for VSR-2 (El Grito Mural) and VSR-5 (Old Winery).

CUL-PDF-A Pre-Construction Documentation of The Winery.

CUL-PDF-B Post-Construction Documentation of The Winery.

CUL-PDF-C Pre-Construction Documentation of El Grito (The Cry) Mural.

CUL-PDF-D Protection During Adjacent Construction of El Grito (The Cry) Mural.

CUL-PDF-E Construction Monitoring Plan (Built Resources)

These project design features, which are included in the Project, require pre-construction surveys to document existing conditions at El Grito Mural and Old Winery, post-construction inspections to document any construction-related damage, and retention of an experienced professional or professionals qualified to carry out the repairs within 12 months of completion of the Project. Any required repairs would conform to the Secretary of Interior's Standards for the Treatment of Historic Properties (36 CFR Part 68).

3.13.7 Mitigation Measures

Noise

Potential noise impacts resulting from the proposed Project are associated only with construction of the Project. No noise impacts were identified for operation of the proposed Project. The following mitigation measures are recommended to be implemented during construction of the proposed Project.

NOI-A: Prior to the issuance of grading permits for the proposed Project, the Project Sponsor shall design a Construction Noise Management Plan to minimize the construction-related noise impacts to off-site noise-sensitive receptors. The Construction Noise Management Plan shall include the following measures to reduce noise levels:

- **Noise Barriers**: Temporary construction noise barriers between the Project construction area and affected receptors shall be installed as identified below. The noise barriers shall be designed to have a sound transmission class (STC) rating of at least 25 and should have the ability to provide a range of noise reduction between 5 dBA and 15 dBA when the construction equipment is located below the elevation level of the noise barrier and there is no line-of-sight between the construction equipment and the noise-sensitive receptors. Specific locations and heights for the temporary noise barriers shall include the following by Project components:

- Alameda Station
  - For the entire duration of construction, the Project shall provide a 24-foot-tall temporary noise barrier between the Project construction site and NSR 3 [Mozaic Apartments].
  - For the entire duration of construction, the Project shall provide an 8-foot temporary noise barrier between the Project construction site and NSR 1A [Union Station] and NSR 1B [First Five LA].
  - During the Foundations and Columns phase, the Project shall provide a 10-foot temporary noise barrier between the Project construction activities occurring within Alameda Street and NSR 1A [Union Station], NSR 1B [First Five LA], NSR 2 [El Pueblo], and NSR 3 [Mozaic Apartments].
  - During a portion of the Structural Steel and Gondola Equipment Erection phase and during a portion of the Vertical Circulation, Hardscaping, Landscaping, and Interior Work phase, temporary platforms will be installed to facilitate construction activities. While the temporary platforms are installed, the Project shall provide a 10-foot temporary noise barrier on the temporary platforms between the Project construction site and NSR 3.
- Alameda Tower
  - For the entire duration of construction, the Project shall provide an 8-foot temporary noise barrier between the Project construction site and NSR 4 [The California Endowment].
  - During a portion of the Structural Steel and Gondola Equipment Erection phase, temporary platforms will be installed to facilitate construction activities. While the temporary platforms are installed, the Project shall provide a 10-foot temporary noise barrier on the temporary platforms between the Project construction site and NSR 4.
- Alpine Tower
  - For the entire duration of construction, the Project shall provide an 8-foot temporary noise barrier between the Project construction site and NSR 6 [Chinatown Senior Lofts] and NSR 7 [Homeboy Industries].
  - During a portion of the Structural Steel and Gondola Equipment Erection phase, temporary platforms will be installed to facilitate construction activities. While the temporary platforms are installed, the Project shall provide a 10-foot temporary noise barrier on the temporary platforms between the Project construction site and NSR 6 and NSR 7.

    - NSR 5 [Future Residential] is currently an undeveloped City-owned parking lot and is proposed for future multi-family residential uses. If NSR 5 is occupied by residential units at the time of Project construction, the following noise barriers shall be provided:
        - For the entire duration of construction, the Project shall provide an 8-foot temporary noise barrier between the Project construction site and NSR 5.
        - During the Foundations and Columns and Structural Steel and Gondola Equipment Erection phases, the Project shall provide a 24-foot temporary noise barrier between the Project construction site and occupied residential units at NSR 5 [Future Residential].
        - During a portion of the Structural Steel and Gondola Equipment Erection phase, temporary platforms will be installed to facilitate construction activities. While the temporary platforms are installed, the Project shall provide a 10-foot temporary noise barrier on the temporary platforms between the Project construction site and NSR 5.
- Chinatown/State Park Station
    - For the entire duration of construction, the Project shall provide an 8-foot temporary noise barrier between the Project construction site and NSR 9 [Blossom Plaza], NSR 10 [Future Residential Development], NSR 11 [Capitol Milling], and NSR 14S [Los Angeles State Park]. The noise barrier will include a gate that may be temporarily opened for access during construction hours along Spring Street for construction access.
    - For the entire duration of construction, the Project shall provide a 10-foot temporary noise barrier between the Chinatown / State Park Station and NSR 8 [College Station] and NSR 12 [Future Residential Development].
    - During a portion of the Structural Steel and Gondola Equipment Erection phase, temporary platforms will be installed to facilitate construction activities. While the temporary platforms are installed, the Project shall provide a 10-foot temporary noise barrier on the temporary platforms between the Project construction site and NSR 8, NSR 12, and NSR 14S.
- Broadway Junction
    - For the entire duration of construction, the Project shall provide a 24-foot temporary noise barrier between the Project construction site and NSR 13 [Future Development], NSR 14N [Los Angeles State Historic Park], and NSR 17 [Low Rise Residential].
    - During the Demolition phase and the Foundations and Columns phase, the Project shall provide a 24-foot temporary noise barrier between the Project construction site and NSR 16 [Cathedral High School].

  - During the Structural Streel and Gondola Equipment Erection phase and the Vertical Circulation, Hardscaping, Landscaping, and Interior Work phase, the Project shall provide an 8-foot temporary noise barrier between the Project construction site and NSR 16 [Cathedral High School]
  - During a portion of the Structural Steel and Gondola Equipment Erection phase and during a portion of the Vertical Circulation, Hardscaping, Landscaping, and Interior Work phase, temporary platforms will be installed to facilitate construction activities. While the temporary platforms are installed, the Project shall provide a 10-foot temporary noise barrier on the temporary platforms between the Project construction site and NSR 13, NSR 14 N, NSR 16, and NSR 17.
- Stadium Tower
  - During the Foundations and Columns phase, the Project shall provide an 8-foot temporary noise barrier between the Project construction site and NSR 16 [Cathedral High School] and NSR 17 [Low Rise Residential].
  - During a portion of the Structural Steel and Gondola Equipment Erection phase, temporary platforms will be installed to facilitate construction activities. While the temporary platforms are installed, the Project shall provide a 10-foot temporary noise barrier on the temporary platforms between Project construction and NSR 16 and NSR 17.

- **Equipment Maintenance**: Construction equipment shall be properly maintained per manufacturers' specifications to prevent noise due to worn or improperly maintained parts and shall be fitted with the best available noise suppression devices (i.e., mufflers, lagging, and/or motor enclosures). All impact tools shall be shrouded or shielded, and all intake and exhaust ports on power equipment shall be muffled or shielded.

- **Electrical Sources:** When possible, on-site electrical sources shall be used to power equipment rather than diesel generators.

- **Sensitive Uses:** Fixed and/or stationary equipment (e.g., generators, compressors, concrete mixers) shall be located away from noise-sensitive receptors.

- **Community Outreach:** The following shall be implemented to reduce impacts to the local community related to disturbances from construction noise:

  - Noise Disturbance Coordinator: A noise and vibration disturbance coordinator shall be established. The noise disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The noise and vibration disturbance coordinator shall determine the cause of the complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures to address the complaint. Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding property owners to contact the job superintendent if necessary. In the event a complaint is received, appropriate corrective actions shall be implemented, and a report of the action provided to the reporting party.

  - Construction Notice: The construction contractor shall provide a construction notice to residents within 500 feet of the construction site for each Project component prior to initiation of construction activities. The construction site notice shall include job site address, anticipated equipment to be used and duration of construction activities, permit number, name and phone number of the job superintendent, construction hours, and the City telephone number where violations can be reported. The notice will also include the phone number of the noise disturbance coordinator.

- **Limit Idling Equipment**: Construction equipment shall not idle for longer than 5 minutes, as required by section 2485 of the California Code of Regulations.

Vibration

Potential vibration impacts resulting from the proposed Project are associated only with construction of the project. No vibration impacts were identified for operation of the proposed Project.

The following mitigation measures are recommended for the construction phase of the proposed Project to address potential building damage resulting from vibration. Since the human annoyance threshold is exceeded by common occurrences such as vehicle pass-bys during construction, there is no feasible method for mitigating human annoyance impacts. It should be noted that because the human annoyance threshold is so low it is already exceeded on roadways by existing truck trips. Accordingly, the mitigation measures below, VIB-A Vibration Monitoring and VIB-B Force-Adjustable Ground Compaction Devices, are designed to address potential building damage. As discussed above, relevant protective measures are also included in Section 3.5, Cultural Resources, with CUL-PDF-A through CUL-PDF-E, which require pre-construction surveys to document existing conditions at El Grito Mural (VSR-2) and Old Winery (VSR-5), post-construction inspections to document any construction-related damage, and retention of an experienced professional or professionals qualified to carry out the repairs within 12 months of completion of the Project. Any required repairs would conform to the Secretary of Interior's Standards for the Treatment of Historic Properties (36 CFR Part 68).

VIB-A: **Vibration Monitoring:** Prior to the issuance of grading permits for the proposed Project, the Project Sponsor shall design a Vibration Monitoring Plan. The Plan shall provide for:

- Vibration Monitoring Equipment: the placement of vibration monitoring equipment at least 26 feet away from the Avila Adobe (1970s addition), El Grito mural wall, and The Old Winery by a qualified professional for real-time vibration monitoring for construction work at the Alameda Station requiring heavy equipment or ground compaction devices.

- Modification of Vibration Equipment: the monitoring devices shall notify the construction crew if vibration levels are within 0.1 PPV, in/sec, of the vibration damage threshold. The construction crew shall modify the construction equipment to ensure that the vibration damage threshold is not exceeded.

VIB-B: **Force-Adjustable Ground Compaction Devices:** For construction work occurring at the Alameda Station in proximity to the Avila Adobe (1970s addition), El Grito Mural, and The Old Winery:

- At a distance of 26 feet or more from the Avila Adobe (1970s addition), El Grito Mural and The Old Winery, any ground compacting equipment, including vibratory rollers and plate compactors, shall be calibrated onsite prior to use to ensure vibration levels remain below the assumed reference level of 0.21 PPV, in/sec, at 25 feet. If the ground compacting equipment cannot achieve the assumed reference level, equipment with less vibration (less than 0.21 PPV, in/sec, at 25 feet), non-vibrating equipment, or hand tools shall be required for ground compaction activities.

- Any ground compaction or excavation/drilling operations within 26 feet of the Avila Adobe (1970s addition), El Grito Mural or The Old Winery structures must be completed with non-vibrating equipment or hand tools.

3.13.8 Level of Significance after Mitigation

Impacts regarding noise and vibration during construction were determined to be potentially significant.

3.13.8.1 Noise

Mitigation Measure NOI-A would reduce construction noise impacts through the use of noise barriers, maintenance of equipment, avoidance of unnecessary equipment idling, the use of electrical equipment where practicable, and locating equipment as far from noise-sensitive receptors to the extent feasible. Noise barriers were designed and placed in collaboration with the construction contractor based on the location of noise producing equipment in relation to the sensitive receptors, as well as the physical constraints of the Project site and the Project phase. These barriers would reduce noise levels to the extent that construction activities are shielded (i.e., below the height of sound barriers) or not within line-of-sight of noise-sensitive receptors (e.g., upper stories of residential buildings). However, because construction of stations and towers at different phases will occur at elevations above the tops of sound barriers or in some cases within line-of-sight of noise-sensitive receptors, even with implementation of these measures, significant impacts from noise levels due to construction activities would remain. For the LAMC analysis, with implementation of Mitigation Measure NOI-A, construction equipment would generate noise greater than 75 dBA at a distance of 50 feet, resulting in a significant and unavoidable impact for all construction phases. The noise levels generated at specific sensitive receptors by construction phase with mitigation are provided in Table 3.13-17. In addition, for the L.A. CEQA Thresholds Guide analysis and the FTA Manual analysis, the significant impacts would remain at the following locations:

Alameda Station

L.A. CEQA Thresholds Guide

With implementation of Mitigation Measure NOI-A, the construction noise impact at NSR 1B (First 5 LA) would be reduced to less than significant. Implementation of Mitigation Measure NOI-A would be required to minimize the impact at NSR 1A (Los Angeles Union Station), NSR 2 (El Pueblo) and NSR 3 (Mozaic Apartments); however, the construction impact at these receptors would remain significant and unavoidable during all construction phases.

FTA Manual

With the implementation of Mitigation Measure NOI-A, the construction noise impact during the Foundations and Columns phase at NSR 3 (Mozaic Apartments) would be reduced to less than significant. Implementation of Mitigation Measure NOI-A would be required to minimize the impact at NSR 2 (El Pueblo) and NSR 3 (Mozaic Apartments) during the Structural Steel and Gondola Equipment Erection and the Vertical Circulation, Hardscape, Landscape, and Interior Work phases, as well as the Foundations and Columns phase for NSR 2; however, the construction impact at NSR 2 and NSR 3 would remain significant and unavoidable during these construction phases.

Alameda Tower

L.A. CEQA Thresholds Guide

Implementation of Mitigation Measure NOI-A would be required to minimize the impact at NSR 4 (The California Endowment); however, the construction impact at NSR 4 would remain significant and unavoidable during all construction phases.

Alpine Tower

L.A. CEQA Thresholds Guide

With the implementation of Mitigation Measure NOI-A, the construction noise impact during the Vertical Circulation, Hardscape, Landscape, and Interior Work phase at NSR 6 (Chinatown Senior Lofts) and NSR 7 (Homeboy Industries) would be reduced to less than significant. Implementation of Mitigation Measure NOI-A would be required to minimize impacts at NSR 5 (Future Residential Development), NSR 6 (Chinatown Senior Lofts), and NSR 7 (Homeboy Industries) during the Foundations and Columns and Structural Steel and Gondola Equipment Erection phases, and the Vertical Circulation, Hardscape, Landscape, and Interior Work phase at NSR 5; however, construction impacts at NSR 5, NSR 6, and NSR 7 would remain significant and unavoidable during these construction phases.

FTA Manual

With the implementation of Mitigation Measure NOI-A, the construction noise impact at NSR 6 (Chinatown Senior Lofts) would be reduced to less than significant for all construction phases.

Implementation of Mitigation Measure NOI-A would be required to minimize the impact at NSR 5 (Future Residential Development) during the Foundations and Columns and Structural Steel and Gondola Equipment Erection phases; however, the construction impact would remain significant and unavoidable at NSR 5 during the Foundations and Columns phase.

Chinatown/State Park Station

L.A. CEQA Thresholds Guide

With the implementation of Mitigation Measure NOI-A, the construction noise impact at NSR 8 (Future Residential Development), NSR 9 (Blossom Plaza), NSR 10 (Future Residential Development), NSR 11 (Capitol Milling), NSR 12 (Residential Development) and NSR 14S (Los Angeles State Historic Park – South) would be reduced to less than significant during the Vertical Circulation, Hardscape, Landscape, and Interior Work phase.

Implementation of Mitigation Measure NOI-A would be required to minimize impacts during the Foundations and Columns and Structural Steel and Gondola Equipment Erection phases; however, construction impacts at NSR 8 (Future Residential Development), NSR 9 (Blossom Plaza), NSR 10 (Future Residential Development), NSR 11 (Capitol Milling), NSR 12 (Residential Development), and NSR 14S (Los Angeles State Historic Park – South) would remain significant and unavoidable during these construction phases.

FTA Manual

With the implementation of Mitigation Measure NOI-A, the construction noise impact at NSR 14S (Los Angeles State Historic Park – South) would be reduced to less than significant during all construction phases, as well as at NSR 8 (Future Residential Development) during the Vertical Circulation, Hardscape, Landscape, and Interior Work phase.

Implementation of Mitigation Measure NOI-A would be required to minimize the impact during the Foundations and Columns and the Structural Steel and Gondola Equipment Erection phases at NSR 8 (Future Residential Development); however, the construction impact would remain significant and unavoidable at NSR 8 during these phases.

Broadway Junction

L.A. CEQA Thresholds Guide

With the implementation of Mitigation Measure NOI-A, the construction noise impact at NSR 14N (Los Angeles State Historic Park – North) would be reduced to less than significant during the Vertical Circulation, Hardscape, Landscape, and Interior Work phase; however, construction impacts would remain significant and unavoidable at this receptor during the Demolition, Foundations and Columns, and Structural Steel and Gondola Equipment Erection construction phases.

Implementation of Mitigation Measure NOI-A would be required to minimize impacts during all construction phases at NSR 16 (Cathedral High School), NSR 17 N (Low-Rise Residential – North), and NSR 17 S (Low-Rise Residential – South); however, construction impacts at NSR 16, NSR 17N, and NSR 17S would remain significant and unavoidable during all construction phases.

FTA Manual

With the implementation of Mitigation Measure NOI-A, the construction noise impact at NSR 17S (Low-Rise Residential – South) would be reduced to less than significant during all construction phases.

Stadium Tower

L.A. CEQA Thresholds Guide

With the implementation of Mitigation Measure NOI-A, the construction noise impact at NSR 16 (Cathedral High School) during the Foundations and Columns phase and NSR 17N (Low-Rise Residential – North) during the Foundations and Columns and Structural Steel and Gondola Equipment Erection phases would be reduced to less than significant.

3.13.8.2 Operations

Noise and vibration impacts from operations would be less than significant without mitigation. Therefore, no mitigation measures for operations would be required, and impacts would remain less than significant.

3.13.8.3 Vibration

Building Damage

Potential damage thresholds could be exceeded at three locations, including the Avila Adobe - 1970s addition (VSR-4b), the Old Winery (VSR-5), and El Grito Mural (VSR-3) due to construction activity associated with the installation of vertical circulation elements for the Alameda Station. With implementation of Mitigation Measures VIB-A and VIB-B, vibration damage impacts at these structures would be less than significant.

Human Annoyance

Significant human annoyance impacts would occur at Alameda Station (VSR-1, -2, -3 -4, -5, and -6), Alameda Tower (VSR-7, -8 and -9), Alpine Tower (VSR-10 and -11), Chinatown/State Park Station (VSR-13 and VSR-19), Broadway Junction (VSR-14, -15, -16, and -17) and along the Project's haul route. However, no feasible mitigation measures are available to reduce the vibration annoyance impacts identified for vibration-sensitive receptors from on-site construction activities, as well as along the Project alignment for off-site construction activities. This is because the human annoyance threshold is exceeded by common occurrences such as vehicle pass-bys during construction. Such equipment is needed to build the Project and there is no alignment or haul route option that would create sufficient separation from adjacent uses to eliminate the human impact. As a result, vibration annoyance impacts would remain significant and unavoidable.

3.14 POPULATION AND HOUSING

The analysis in this section uses population and housing information to determine the potential for the proposed Project to cause substantial population growth, or accelerate growth that exceeds projected or planned levels, as well as to determine whether implementation of the proposed Project would displace substantial numbers of existing people or housing.

3.14.1 Regulatory Setting

State

Ellis Act, California Government Code Section 7060-7060.7

Under the Ellis Act, a property owner may recover possession of a rental unit to either demolish a rental unit or to remove the rental unit permanently from rental housing use. This act ensures that all tenants evicted as a result of a unit being removed from the rental market are guaranteed rights and are entitled to proper eviction notices.

Regional

Southern California Association of Governments Regional Transportation Plan/ Sustainable Communities Strategy

The proposed Project alignment is within the jurisdiction of the Southern California Association of Governments (SCAG), a Joint Powers Agency established under California Government Code Section 6502 et seq. Pursuant to federal and State law, SCAG serves as a Council of Governments, a Regional Transportation Planning Agency, and the Metropolitan Planning Organization for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties. SCAG's mandated responsibilities include developing plans and policies with respect to the region's population growth, transportation programs, air quality, housing, and economic development.

On September 3, 2020, SCAG adopted its 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), known as Connect SoCal, which is an update to the previous 2016 RTP/SCS. Connect SoCal builds upon and expands the land use and transportation strategies from the previous RTP/SCSs to increase mobility options and achieve a more sustainable growth pattern. The plan provides a vision for transportation throughout the region for the next 25 years. It considers the role of transportation in the broader context of economic, environmental, technology, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The goals of Connect SoCal fall into four core categories: economy, mobility, environment, and healthy/complete communities. The plan explicitly lays out goals related to housing, transportation technologies, equity, and resilience to adequately reflect the increasing importance of these topics in the region.

Local

City of Los Angeles General Plan, Housing Element

The City of Los Angeles General Plan is a comprehensive, long-range declaration of the purposes, policies, and programs for the development of the City. With regard to population and housing, the most applicable goals, objectives, and policies are stated in the Housing Element 2021-2029.[1] The following policies from the Housing Element are applicable to the proposed Project, considering the proposed infrastructure improvements:

- Policy 1.1.4: Plan for and provide sufficient services and amenities to support the existing and planned population.
- Policy 3.1.2: Promote new development that furthers Citywide Housing Priorities in balance with the existing architectural and cultural context.
- Policy 3.1.5: Develop and implement environmentally sustainable urban design standards and pedestrian-centered improvements in development of a project within the public and private realm such as shade trees, parkways and comfortable sidewalks.

Additionally, as part of the City of Los Angeles General Plan, each Community Plan has a specific Land Use Element that outlines goals, objectives, and policies regarding land use in the area. The Project components are in the Central City, Central City North, and Silver Lake-Echo Park-Elysian Valley Community Plans. The City of Los Angeles is currently in the process of updating the Central City and Central City North Community Plans through the Downtown Los Angeles 2040 Draft Community Plan.

Central City Community Plan

The following Central City Community Plan policies are applicable to the proposed Project:

- Policy 2-1.2: To maintain a safe, clean, attractive, and lively environment.
- Policy 4-4.1: Improve Downtown's pedestrian environment in recognition of its important role in the efficiency of Downtown's transportation and circulation systems and in the quality of life for its residents, workers, and visitors.

Central City North Community Plan

The following Central City North Community Plan policy is applicable to the proposed Project:

- Policy 1-1.2: Protect the quality of the residential environment through attention to the appearance of communities, including attention to building and site design.

Silver Lake-Echo Park-Elysian Valley Community Plan

The following Silver Lake-Echo Park-Elysian Valley Community Plan policies are applicable to the proposed Project:

- Policy 1-3.2: Preserve existing views in hillside areas.
- Policy 1-5.1: Protect and enhance the historic and architectural legacy of the Plan area's neighborhoods.
- Policy 1-6.1: Limit development according to the adequacy of the existing and assured street circulation system within the Plan area and surrounding areas.

[1] Los Angeles City Department of Planning, City of Los Angeles General Plan Housing Element 2021-2029, adopted November 24, 2021.

- Policy 1-6.3: Consider the steepness of the topography and suitability of the geology in any proposal for development within the Plan area.
- Policy 1-6.4: Ensure that any proposed development be designed to enhance and be compatible with adjacent development.

Proposed DTLA 2040 Community Plan

The City is currently working on an update to the Downtown Community Plan, known as DTLA 2040, which would consolidate the Central City Community Plan and Central City North Community Plan areas. The proposed DTLA 2040 Community Plan includes updates to land use designations within the proposed community plan area. Because it is unknown when the new community plan would be adopted and its EIR certified, the analysis in this section is based on the current applicable land use and zoning designations.

Alameda District Specific Plan

The Alameda District Specific Plan (ADP) establishes planning and zoning provisions to the area bounded generally by Alameda Street, North Main Street, Vignes Street, and the Santa Ana Freeway (Interstate 5 [I-5]/US Highway 101 [US 101]). The following purposes of the ADP are applicable to the proposed Project:

- Section 2A: Provide regulatory controls and incentives for the systematic and incremental execution of that portion of the General Plan which relates to this geographic area and to provide for public needs, convenience and general welfare as the development of such area necessitates;
- Section 2b: Assure orderly development and appropriate capacity of public facilities for the intensity and design of development by establishing general procedures for development within the Specific Plan area;
- Section 2C: Provide continued and expanded development of the site both as a major transit hub for the region, and as a mixed-use development providing office, hotel, retail, entertainment, tourism, residential and related uses within the Specific Plan area, in conformance with the goals and objectives of local and regional plans and policies; and
- Section 2D: To expand the economic base of the City, by providing additional employment opportunities and additional revenues to the region.

Cornfield Arroyo Seco Specific Plan (CASP)

The Cornfield Arroyo Seco Specific Plan (CASP) establishes planning and zoning provisions to a portion of the Central City North, Silver Lake-Echo Park-Elysian Valley, and Northeast LA Community Plans. The following purposes of the CASP are applicable to the proposed Project:

- 1.1 Administration B. Purpose 2: Transform an underserved and neglected vehicular-oriented industrial and public facility area into a cluster of mixed-use, pedestrian-oriented, and aesthetically pleasing neighborhoods.
- 1.1 Administration B. Purpose 10: Lessen dependence on automobiles, and thereby reduce vehicle emissions, while enhancing the personal health of residents, employees and visitors.
- 2.4 Open Space A. Purpose 2: Increase recreational opportunities for residents,

employees, and visitors.

- 2.5 Parking and Access A. Purpose 3: Increase pedestrian, bicycle, and transit use, and reduce vehicular trips to, through, and within the area.
- 3.1 Streets A. Purpose 4: Provide residents, employees, and visitors with a variety of transportation alternatives that result in a more efficient use of transportation resources.
- 3.1 Streets A. Purpose 7: Build linkages to the neighboring Chinatown, Lincoln Heights, Cypress Park, Elysian, and Heritage Square neighborhoods to nearby regional park amenities such as Elysian Park, etc.

The Los Angeles City Planning Department is currently evaluating and amending the CASP to strengthen the original vision and intent of the plan. City Planning would make targeted revisions to the plan, including its incentive zoning system, and identify additional areas that may allow for affordable or mixed-income housing development.[2]

City of Los Angeles Municipal Code

Under City of Los Angeles Municipal Code (LAMC) Section 151.09.A.10, the City provides protections for tenants when landlords seek in good faith to recover possession of their rental units to either demolish the rental unit or remove it permanently from the rental market. LAMC Section 151.09.A.10 requires landlords to comply with LAMC Sections 151.22 through 151.28, which implement the Ellis Act. Among other protections, the Ellis Act and LAMC Sections 151.22 through 151.28 ensure all tenants evicted as a result of a unit being removed from the rental market are guaranteed rights, and are entitled to proper eviction notices.

3.14.2 Environmental Setting

The environmental setting for this section presents the baseline population, housing conditions, and employment in the vicinity of the Project area, which includes those areas immediately surrounding the proposed Project alignment. Baseline conditions also include a presentation of information related to Los Angeles County as a whole, which is used to contextualize the information presented for the area surrounding the proposed Project. Because population and housing impacts can accrue to areas outside of a Project's direct footprint, this section's Project Study Area includes a 0.5-mile buffer around the proposed Project alignment for this analysis (see Figure 3.14-1). The Project components are located in the City of Los Angeles, and are discussed in the Central City, Central City North, and Silver Lake-Echo Park-Elysian Valley Community Plans. The environmental setting is based on these geographies, depending on the availability of data from SCAG, the California Department of Finance, and the U.S. Census Bureau.

Population

According to the California Department of Finance, in Los Angeles, the total population for the City and County in 2020 was approximately 3,923,341 residents and 10,044,458 residents, respectively.[3] Table 3.14-1 illustrates the population growth forecast for the City of Los Angeles and Los Angeles County for 2045 from SCAG's Connect SoCal. The average annual growth rate for the City of Los Angeles from 2010 to 2020 was approximately 0.3 percent; however, in 2020,

---

2 Cornfield Arroyo Seco Specific Plan (CASP) Update. n.d. Los Angeles City Planning. Available at: https://planning.lacity.org/plans-policies/casp-update#about. Accessed April 2022.

3 Total population as of January 1, 2021.

the annual growth rate indicated negative growth at approximately -1.3 percent.[4] The average annual growth rate is higher than Los Angeles County's average annual growth rate from 2010 to 2020 (0.42 percent); however, Los Angeles County's 2020 annual growth rate of -0.9 percent suggests that even though people were leaving the area, the rate of people leaving the City was greater than the County.[5] SCAG projections estimate an average annual rate of growth of 0.6 percent from 2016 to 2045 for the region (which comprises Los Angeles, Imperial, Orange, Riverside, San Bernardino, and Ventura Counties).[6] The average annual growth rate for the City of Los Angeles in the last 10 years at 0.3 percent is more consistent with the SCAG region than Los Angeles County. Los Angeles County is growing at a lower rate than anticipated (0.2 percent). The SCAG Connect SoCal anticipates a 15.3 percent increase in population from 2020 to 2045, and a 14.8 percent increase in population for Los Angeles County during the same period.

Table 3.14-1
Population Growth Forecast for the City and County of Los Angeles

Location	2020[1]	Average Annual Growth Rate[2]	2045[3]	% Change 2020-2045
City of Los Angeles	3,923,341	0.3%	4,771,300	21.6%
Los Angeles County	10,044,458	0.2%	11,674,000	16.2%

[1] 2020 population data (as of 1/1/2021) from the California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark, May 2021.
[2] Average Annual Growth Rate from 2010 to 2020 based on California Department of Finance population data (as of 1/1/2021).
[3] SCAG projection for 2045 from Connect SoCal, adopted September 2020.

4 State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark, May 2021. Available at: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/. Accessed April 2022.

5 *Ibid*.

6 Southern California Association of Governments, Connect SoCal, Demographics and Growth Forecast, adopted September 2020.

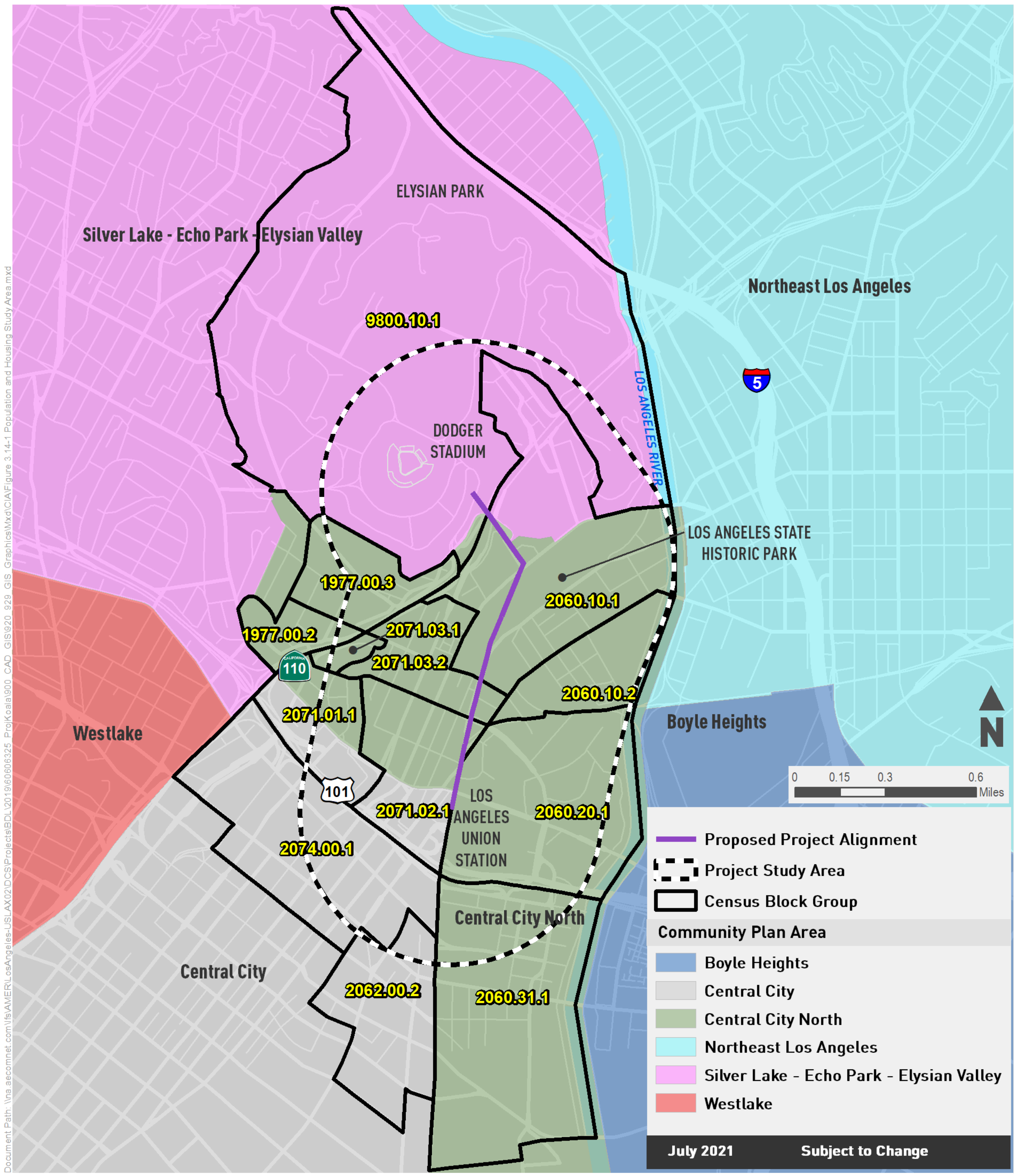


Figure 3.14-1 Population and Housing Study Area

Table 3.14-2 presents the 2019 population for the census block groups that compose the Project Study Area. The total population for the Project Study Area in 2019, according to the U.S. Census Bureau, was approximately 33,108 residents, compared to the total City population of 3,986,031 residents. Census block group 2060.20.1 had the largest population in the Project Study Area, with 8,947 people representing 27.0 percent of the total Project Study Area population.[7]

Table 3.14-2
Population for the Project Study Area (2019)

Census Block Group	2019 Population	% of Project Study Area
1977.00.2	1,293	3.9%
1977.00.3	1,469	4.4%
2060.10.1	2,660	8.0%
2060.10.2	1,461	4.4%
2060.20.1	8,947	27.0%
2060.31.1	3,271	9.9%
2062.00.2	3,337	10.1%
2071.01.1	3,717	11.2%
2071.02.1	2,926	8.8%
2071.03.1	701	2.1%
2071.03.2	1,692	5.1%
2074.00.1	1,539	4.6%
9800.10.1	95	0.3%
Project Study Area Total	**33,108**	**100.00%[1]**
City of Los Angeles	**3,986,031**	**N/A**

[1] Total does not add to 100 percent due to rounding.
Note: The ACS estimates are based on a sample of the total population and can only be controlled to official Census Bureau population and total housing units at the county level. Therefore, the ACS data for small statistical areas (such as census tracts) have no control totals, which may lead to errors in the population and housing unit estimates. Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization. (U.S. Census Bureau, 2020, *Using and Understanding American Community Survey Data: What the Business Community Needs to Know*. Available at: https://www.census.gov/programs-surveys/acs/guidance/handbooks/business.html. Accessed April 2022.
Source: U.S. Census Bureau. *Using and Understanding American Community Survey Data: What the Business Community Needs to Know*. Available at: https://www.census.gov/programs-surveys/acs/guidance/handbooks/business.html. Accessed April 2022.

Housing Units

Table 3.14-3 illustrates the housing growth forecast for the City of Los Angeles and Los Angeles County for 2045 from SCAG's Connect SoCal. Housing is typically calculated in terms of housing units, which can include a house, an apartment, a group of rooms, or a single room occupied or intended for occupancy as separate living quarters.[8] In 2020, the number of housing units was 1,535,606 in the City of Los Angeles, and over 3.6 million in Los Angeles County as a whole. By 2045, the number of housing units in the City and County of Los Angeles are projected to be 1,793,000 and over 4.1 million, respectively.[9] This anticipates a 16.8 percent increase in housing

7 U.S. Census Bureau, American Community Survey 2019 5-Year Estimates Total Population Data for Census Block Groups in Project Study Area, Table B01003. Available at: www.data.census.gov/. Accessed April 2022.

8 U.S. Census Bureau. Definitions and Explanations. Available at: https://www.census.gov/housing/hvs/definitions.pdf. Accessed April 2022.

9 Southern California Association of Governments, Connect SoCal, Demographics and Growth Forecast, adopted September 2020.

units for the City of Los Angeles, and a 13.9 percent increase for Los Angeles County over the 25-year period.

Table 3.14-3
Housing Growth Forecast for the City and County of Los Angeles

Location	2020[1]	Average Annual Growth Rate[2]	2045[3]	% Change 2020-2045
City of Los Angeles	1,535,606	0.77%	1,793,000	16.8%
Los Angeles County	3,614,809	0.44%	4,119,000	13.9%

[1] 2020 housing data (as of 1/1/2021) from the California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark, May 2021.
[2] Average Annual Growth Rate from 2010 to 2020 based on California Department of Finance housing data (as of 1/1/2021).
[3] SCAG projection for 2045 from Connect SoCal, adopted September 2020.

Table 3.14-4 presents the estimated number of housing units for the census block groups that compose the Project Study Area. The total number of housing units for the Project Study Area in 2019, according to the U.S. Census Bureau, was 11,846. Within the Project Study Area, census block groups 2060.31.1 and 2062.00.2 had the largest number of housing units, with 2,217 units and 2,180 units, respectively, representing 37.1 percent of the housing units in the Project Study Area.[10]

Table 3.14-4
Housing Units for the Project Study Area (2019)

Census Block Group	2019	% of Project Study Area
1977.00.2	508	4.3%
1977.00.3	639	5.4%
2060.10.1	799	6.7%
2060.10.2	487	4.1%
2060.20.1	313	2.6%
2060.31.1	2,217	18.7%
2062.00.2	2,180	18.4%
2071.01.1	1,871	15.8%
2071.02.1	1,355	11.4%
2071.03.1	256	2.2%
2071.03.2	731	6.2%
2074.00.1	434	3.7%
9800.10.1	56	0.5%
Project Study Area Total	**11,846**	**100.0%**
City of Los Angeles	**1,500,222**	**N/A**

Note: The ACS estimates are based on a sample of the total population and can only be controlled to official Census Bureau population and total housing units at the county level. Therefore, the ACS data for small statistical areas (such as census tracts) have no control totals, which may lead to errors in the population and housing unit estimates. Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization. (U.S. Census Bureau, 2020, *Using and Understanding American Community Survey Data: What the Business Community Needs to Know*, Available at: https://www.census.gov/programs-surveys/acs/guidance/handbooks/business.html, accessed April 2022).

[10] U.S. Census Bureau, American Community Survey 2019 5-Year Estimates Data for Census Block Groups in Project Study Area, B25001. Available at: www.data.census.gov/. Accessed April 2022.

Source: U.S. Census Bureau, American Community Survey 2019 5-Year Estimates Total Population Data for Census Block Groups in Project Study Area, Table B25001. Available at: www.data.census.gov/. Accessed April 2022.

As shown in Table 3.14-5, the City of Los Angeles had nearly 1.5 million housing units in 2019, of which 92 percent were occupied. Of those occupied units, an estimated 36.8 percent were occupied by the owner. Los Angeles County had over 3.5 million housing units, of which 93.0 percent were occupied. The rate of owner occupancy for the County was 45.4 percent.[11]

Table 3.14-5
Estimated Housing Tenure (2019)

Location	Total Housing Units	Occupied		Owner-Occupied		Renter-Occupied	
		Housing Units	%	Housing Units	%	Housing Units	%
City of Los Angeles	1,493,108	1,383,869	92.7%	509,504	36.8%	874,365	63.2%
Los Angeles County	3,579,423	3,328,398	93.0%	1,511,628	45.4%	1,816,770	54.6%

Source: U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates Detailed Housing Units Table B25001 and Occupied Housing Units Table B25003. Available at: www.data.census.gov/. Accessed April 2022.

Employment

Table 3.14-6 illustrates the employment (i.e., full- and part-time employees) growth forecast for the City of Los Angeles and Los Angeles County for 2045 from SCAG's Connect SoCal. In 2019, the number of people employed was 2,155,700 in the City of Los Angeles and 5,313,215 in Los Angeles County as a whole.[12] By 2045, the number of people employed in the City and Los Angeles County is projected to be 2,135,900 and 5,382,000, respectively.[13] This anticipates a 0.9 percent decrease in employment for the City of Los Angeles, and a 1.3 percent increase for Los Angeles County over the 26-year period.

Table 3.14-6
Employment Growth Forecast for the City and County of Los Angeles

Location	2019[1]	Average Annual Growth Rate[2]	2045[3]	% Change 2019-2045
City of Los Angeles	2,155,700	0.96%	2,135,900	-0.9%
Los Angeles County	5,313,215	0.77%	5,382,000	1.3%

[1] 2019 employment data from U.S. Census Bureau 2019 ACS 5-Year Estimates Employment Status for the Population 16 Years and Over, B23025, available at: www.data.census.gov/. Accessed April 2022.
[2] Average Annual Growth Rate from 2011 to 2019 based off ACS 5-Year Estimates for Employment Status data.
[3] SCAG projections for 2045 from the Connect SoCal, adopted September 2020.

Table 3.14-7 presents the employment status for the census block groups that compose the Project Study Area. The total number of people employed in the Project Study Area in 2019,

[11] U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates Detailed Housing Units Table B25001 and Occupied Housing Units Table B25003. Available at: www.data.census.gov/. Accessed April 2022.
[12] U.S. Census Bureau, American Community Survey 2019 5-Year Estimates for Employment Status for the Population 16 Years and Over Table B23025. Available at: www.data.census.gov/. Accessed April 2022.
[13] Southern California Association of Governments, Connect SoCal, Demographics and Growth Forecast, adopted September 2020.

according to the U.S. Census Bureau, was 30,695. Within the Project Study Area, census block group 2060.20.1 had the largest number of people employed, with 8,941 people (99.9 percent of the community block group population), representing 29.1 percent of the Project Study Area employment.[14]

Table 3.14-7
Employment for the Project Study Area (2019)

Census Block Group	# of People Employed in 2019	2019 Population	% of Population Employed	% of Project Study Area
1977.00.2	1,155	1,293	89.3%	3.8%
1977.00.3	1,360	1,469	92.6%	4.4%
2060.10.1	2,330	2,660	87.6%	7.6%
2060.10.2	1,153	1,461	78.9%	3.8%
2060.20.1	8,941	8,947	99.9%	29.1%
2060.31.1	3,091	3,271	94.5%	10.1%
2062.00.2	3,186	3,337	95.5%	10.4%
2071.01.1	3,172	3,717	85.3%	10.3%
2071.02.1	2,637	2,926	90.1%	8.6%
2071.03.1	624	701	89.0%	2.0%
2071.03.2	1,456	1,692	86.1%	4.7%
2074.00.1	1,499	1,539	97.4%	4.9%
9800.10.1	91	95	95.8%	0.3%
Project Study Area Total	**30,695**	**33,108**	**92.7%**	**100.0%**
City of Los Angeles	**3,237,966**	**3,986,031**	**81.2%**	**N/A**

Source: U.S. Census Bureau, American Community Survey 2019 5-Year Estimates Data for Census Block Groups in Project Study Area, B23025. Available at: www.data.census.gov/. Accessed April 2022.

Table 3.14-8 compares the typical means of commuting for the people residing in the Project Study Area to the City of Los Angeles in 2019. Although private vehicles are the main means of commuting, both for residents in the Project Study Area, and overall City of Los Angeles, residents in the Project Study Area use public transportation and walking (14.6 percent and 8.3 percent, respectively) more than the overall City of Los Angeles population (8.7 percent and 3.5 percent, respectively).[15]

[14] U.S. Census Bureau, American Community Survey 2019 5-Year Estimates for Employment Status for the Population 16 Years and Over, Table B23025 Data for Census Block Groups in Project Study Area. Available at: www.data.census.gov/. Accessed April 2022.

[15] U.S. Census Bureau, American Community Survey 2019 5-Year Estimates Means of Transportation to Work, Table B08301 Data for Census Block Groups in Project Study Area. Available at: www.data.census.gov/. Accessed April 2022.

Table 3.14-8
Means of Transportation to Work in Project Study Area and City of Los Angeles (2019)

Means of Transportation	Residents in Project Study Area	% of Residents Project Study Area	City of Los Angeles	% of City of Los Angeles
Car, Truck, Van, Taxicab, or Motorcycle	8,135	66.8%	1,605,063	79.4%
Public Transportation	1,622[1]	13.3%	177,099[2]	8.8%
Bicycle	96	0.8%	16,554	0.8%
Walked	1,137	9.3%	68,244	3.4%
Other Means	126	1.0%	23,692	1.2%
Worked at Home	1,070	8.8%	130,409	6.5%
Total	**12,186**	**100.0%**	**2,021,061**	**100.0%**[3]

[1] Approximately 64% of public transportation use is by bus, 33% by subway or rail, and the remaining 3% by long-distance train or streetcar.
[2] Approximately 82% of public transportation use is by bus, 11% by subway or rail, and the remaining 7% by streetcar, railroad, or ferryboat.
[3] Total does not add to 100% due to rounding.
Source: U.S. Census Bureau, American Community Survey 2019 5-Year Estimates Means of Transportation to Work, Table B08301 Data for Census Block Groups in Project Study Area. Available at: www.data.census.gov/. Accessed April 2022.

3.14.3 Methodology

The assessment of impacts concerning population and housing is based on data collected from SCAG, the California Department of Finance, and the U.S. Census Bureau. The data are used in correlation with the federal, State, and local regulations concerning population and housing to assess the level of impact the proposed Project may have on the Project Study Area.

Thresholds of Significance

For the purposes of this Draft Environmental Impact Report (EIR), the checklist questions contained in Appendix G of the California Environmental Quality Act (CEQA) Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on population and housing if it would:

- Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or

- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

3.14.4 Environmental Impacts

POP-1: Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Construction Impacts

Less than Significant Impact. Construction of the proposed Project would require approximately 100 total workers at one time during the peak period of construction, depending on the number of active construction crews working on various Project components at the same time.[16] These personnel would work on the construction of the stations, junction, and towers, including foundations and columns, concrete, steel erection, and ancillary activities. Because the Aerial Rapid Transit (ART) system is a highly specialized system, there are a limited number of ART specialists worldwide that are trained in the installation of the ART system, and the pulling of the ropeway cables between the stations, junction, and towers. During the proposed Project's later phases of construction, a limited number of ART manufacturer and cable specialists would be on site during the construction phases that involve the installation of the ART system and the cable pulling. However, these specialized personnel would be considered "people in transitory locations" according to U.S. Census residence rules, because they would be expected to leave when construction is completed. This workforce population is expected to use existing hotels, motels, and other seasonal accommodations in the vicinity of the Project site.

Given the temporary nature of construction industry jobs, the relatively large regional construction industry, and the total number of construction workers needed during any construction phase, it is likely that the labor force from within the region would be sufficient to complete the majority of project construction without a substantial influx of new workers and their families. Any such relocation within the region would be minimal. Although specialized personnel, including ART manufacturer and cable specialists, would be on site during construction phases involving the installation of the ART system and cable pulling, they are expected to use existing seasonal accommodations and leave once construction is completed. Accordingly, construction employment generated by the proposed Project would not impact population in the heavily populated Los Angeles region. As a first/last mile transit connection to Dodger Stadium, construction of the proposed Project would not induce substantial population growth either directly or indirectly. Impacts related to induced population growth during the construction of the proposed Project would be less than significant.

Operational Impacts

Less Than Significant Impact. No housing units are proposed as part of the proposed Project, a first/last mile transit connection to Dodger Stadium. Therefore, the proposed Project would not result in a direct population increase from construction of new homes. The proposed Project would require approximately 20 employees for operations and maintenance on a typical day. The Project would include approximately 740 square feet of concessions, operated by the Los Angeles State Historic Park, near the Chinatown/State Park Station. Employees are expected to be drawn from the local labor force, and would not induce substantial unplanned population growth.

[16] It is assumed that the foundations and columns construction phase of the Alameda Station, Chinatown/State Park Station, Broadway Junction, and Dodger Stadium Station would be concurrent, and require approximately 25 workers on site at each location.

The proposed Project would improve mobility and accessibility for people in the area by providing an ART to the regional transit system at Los Angeles Union Station (LAUS) for existing residents, workers, park visitors, and visitors to Los Angeles.

The proposed Project would also enhance community connectivity to areas that have historically been underserved. The Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first- and last-mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. The Dodger Stadium Station may include a potential mobility hub, where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program and individual bike lockers, to access Elysian Park and other nearby neighborhoods, including Solano Canyon. The Dodger Stadium Station would also include a pedestrian connection to Dodger Stadium.

Dodger Stadium is the largest Major League Baseball stadium in terms of capacity, with approximately 56,000 seats. Dodger Stadium draws large regional crowds, with approximately 100 baseball games and other events each year. The vast majority of visitors drive their personal vehicles to access the venue. These vehicles create congestion on the surface streets leading up to and around the Stadium, including Sunset Boulevard/Cesar E. Chavez from LAUS, and throughout the surrounding communities. In addition to traffic delays in and around local streets, congestion occurs on the nearby freeways, including SR-110, I-5, and US 101. As the region's population grows and resulting travel needs continue to increase, the local and regional roadway system is likely to experience greater congestion.

Although Dodger Stadium is one of the region's most visited venues, there are no permanent transit connections to the venue. The proposed Project would link with the growing Metro network to meet existing and future travel demands, and provide access via transit to Dodger Stadium and the densely populated Solano Canyon, Elysian Park, Chinatown, and Angelino Heights neighborhoods surrounding Dodger Stadium. In addition, the proposed Project would meet existing and future travel demands and provide access to the Mission Junction neighborhood. The proposed Project also would provide access to the Los Angeles State Historic Park and Elysian Park.

Accordingly, the proposed Project would provide infrastructure through an ART system within highly urbanized downtown Los Angeles, and would thereby support the attainment of mobility, access, and land use objectives stated in the applicable regional and local policies, including SCAG's Connect SoCal; the City of Los Angeles General Plan's Housing Element; and the Central City, Central City North, and Silver Lake-Echo Park-Elysian Valley Community Plans, as well as the ADP and the CASP. The ART system would increase connectivity in downtown Los Angeles, and provide direct linkages to major residential, employment, and tourist destinations such as LAUS, El Pueblo/Olvera Street, Chinatown, Los Angeles State Historic Park, Dodger Stadium, and Elysian Park. In the Project Study Area, approximately 25 percent of the residents use either public transportation or walking for commuting to work. Implementation of the proposed Project would provide additional access and mobility by providing a transit option to/from LAUS and Chinatown, and other employment areas in downtown Los Angeles, that would avoid congested local roadways, and also provide a transit option to Dodger Stadium on game days and for special events that would bypass typical vehicle traffic.

By facilitating access to existing transit systems and increasing connectivity in downtown Los Angeles, the proposed Project may increase the attractiveness of the corridor for living and conducting business, resulting in increased activity near the proposed stations. The proposed Project would potentially provide long-term employment opportunities that would likely be filled by the local population, or would not require employees to move to the surrounding Project area. In addition, the proposed Project is designed to meet the area's transit needs and improve the efficiency of the existing transportation network. As described above, the proposed Project would provide an additional mode of transportation for nearby communities to readily access LAUS, Chinatown, the Los Angeles State Historic Park, and Elysian Park. Moreover, the proposed Project would provide an additional transit option in an area where the City has sought to concentrate housing. Additionally, during games and events at Dodger Stadium, the proposed Project would travel between LAUS and Dodger Stadium, providing for additional connectivity along the proposed Project alignment, as well as a transit option that is not vehicle-focused. Should any future development occur in the surrounding proposed Project area, as discussed in Section 3.11, Land Use and Planning, such development would be in keeping with City of Los Angeles Community Plan policies encouraging development near transit stations and corridors.

Accordingly, the proposed Project would support the City's goals from the Housing Element and Community Plans of providing transit near residential development. Nevertheless, the proposed Project is not anticipated to substantially generate new development beyond what is already planned within the area. The proposed Project alignment would extend a linear distance of approximately 1.2 miles, commencing adjacent to LAUS and El Pueblo, and terminating at Dodger Stadium, providing an intermediate station in Chinatown proximate to the Metro L Line's (Gold) Chinatown Station that would provide an additional transit option for surrounding residents. The proposed Project area is being developed with various mixed-use developments, which include both residential units and commercial spaces. The approved College Station seven-story mixed-use development project at the intersection of College Street and Spring Street will have up to 725 multi-family residential units and 51,600 square feet of commercial uses. The approved Harmony project at 942 N. Broadway will include a 27-story tower with 178 residential units and two floors of office and retail space with below-grade parking. The under-construction 200 Mesnager project at 200 N. Mesnager Street includes a seven-story building and 278 residential units. The recently constructed Blossom Plaza project at 900 N. Broadway includes a five-story building and 237 residential units with 334 parking spaces. The constructed Llewellyn project at 1101 N. Main Street includes a seven-story building with 318 residential units atop a 526-car parking garage, one block east of Metro L Line's (Gold) Chinatown Station. These planned or recently constructed high-density developments contribute to the existing housing supply and encourage development near transit-supported areas.

The Dodger Stadium Station is in agricultural-zoned property and is subject to a Conditional Use Permit, which allows for the operation of a Major League Baseball stadium and various ancillary structures and uses, including "mass transportation service" to the site. Dodger Stadium would continue to operate under the Conditional Use Permit once the ART is operational. Additionally, the portion of the Project alignment at the Dodger Stadium property is developed with a paved surface parking lot and drive aisle. Additional approvals requiring further environmental review would be necessary for intensification to occur along the proposed Project alignment. CEQA does not require the analysis of such speculative impacts. Further, the proposed Project area contains the Los Angeles State Historic Park and is adjacent to Elysian Park, neither of which are likely to be developed for commercial and residential uses in the foreseeable future. For additional discussion of zoning and land uses or recreational uses, refer to Section 3.11, Land Use and Planning, or Section 3.16 Recreation, respectively.

Therefore, the proposed Project is not anticipated to stimulate development to a level inconsistent with applicable planned local land use designations. Operation of the proposed Project would not induce substantial population growth, either directly or indirectly. Impacts related to induced population growth during operation of the proposed Project would be less than significant.

POP-2: Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Construction Impacts

Less Than Significant Impact. Construction of the proposed Project would be temporary in duration. It is anticipated that construction workers would commute to the Project area and would not relocate their households permanently from other regions. During the later phases of proposed Project construction, a limited number of ART manufacturer and cable specialists would be on site during the phases of construction that involve the installation of the ART system and the cable pulling. However, these workforce personnel would use existing hotels, motels, and other seasonal accommodations in the Project site vicinity, and would be expected to leave once construction is completed.

The proposed Project would provide high-capacity ART connecting the regional transit system at LAUS, Dodger Stadium, the Los Angeles State Historic Park, Elysian Park, and the surrounding communities, and does not include any component that would displace existing people or housing. The proposed Project would be constructed primarily over the public right-of-way (ROW), over the Los Angeles State Historic Park, certain privately owned properties, and on privately owned property consisting of an office building, a hillside, and the Dodger Stadium parking lot. Therefore, impacts related to displacing substantial numbers of existing people or housing would be less than significant during Project construction.

Operational Impacts

Less Than Significant Impact. Following construction of the proposed Project components, the proposed Project would operate primarily over the public ROW, the Los Angeles State Historic Park, certain private properties, or on privately owned property consisting of an office building, a hillside, and the Dodger Stadium parking lot. Operation over private properties would not result in the displacement of existing residences, as the Project would maintain appropriate clearances pursuant to applicable codes and standards. Given the planned development in the Project area and the residential development currently under way in the Project area, operation of the proposed Project as a transit service in the public ROW, Los Angeles State Historic Park, or on privately owned property would not substantially alter the existing residential land uses along the proposed Project alignment at the time of Project operation. Additionally, the proposed Project would provide benefits to the surrounding community, because it is anticipated to provide transit service to and from Dodger games and events at the Stadium for employees and attendees; tourists or others who want to ride the proposed Project; visitors to the Los Angeles State Historic Park and Elysian Park; and commuters or residents in adjacent neighborhoods, including El Pueblo, Chinatown, Mission Junction, Elysian Park, and Solano Canyon. Therefore, operation of the proposed Project would not substantially displace existing people or housing, and would not necessitate the construction of replacement housing elsewhere. Impacts related to displacing substantial numbers of existing people or housing would be less than significant during Project operation.

3.14.5 Mitigation Measures

The proposed Project would result in less than significant impacts to population and housing. No mitigation measures are required.

3.14.6 Level of Significance after Mitigation

The proposed Project would result in less than significant impacts to population and housing.

3.15 PUBLIC SERVICES

This section addresses the proposed Project's impacts to existing and planned public services and facilities, including fire and police protection, schools, and other public facilities such as libraries, senior centers, homeless shelters, and daycare facilities. Parks and recreational facilities are discussed in Section 3.16, Parks and Recreational Facilities.

3.15.1 Regulatory Setting

National

National Fire Protection Association Standard for Fixed Guideway and Passenger Rail Systems

The National Fire Protection Association (NFPA) is an international nonprofit devoted to developing codes and standards aimed at eliminating death, injury, and property and economic loss due to fire, electrical, and related hazards.[1] NFPA 130 is a standard that covers life safety from fire and fire protection requirements for fixed guideway transit and passenger rail systems, including, but not limited to, stations, trainways, emergency ventilation systems, vehicles, emergency procedures, communications, and control systems. NFPA 130 also provides guidance for the access/egress for transit systems. The California Building Code (California Code of Regulations, Title 24, Part 2) adopts NFPA 130 along with California-specific amendments to the standard.

American National Standards Institute Standard for Passenger Ropeways – Aerial Tramways, Aerial Lifts, Surface Lifts, Tows and Conveyors – Safety Requirements

The American National Standards Institute (ANSI) is a non-profit organization that administers and coordinates the U.S. voluntary standards and conformity assessment system.[2] ANSI B77.1-2017, American National Standard for Passenger Ropeways – Aerial Tramways, Aerial Lifts, Surface Lifts, Tows and Conveyors – Safety Requirements, establishes a standard for the design, manufacture, construction, operation, and maintenance of passenger ropeways. ANSI B77.1-2017 forms much of the basis for commercially available passenger ropeways, and includes the required clearance envelopes for operating aerial gondola systems such as the proposed Project.

State

California Occupational Safety and Health Administration

In accordance with Title 19 of the California Code of Regulations, the State Fire Marshal (Division 1) and the California Governor's Office of Emergency Services (Division 2) establish minimum standards for the prevention of fire, and for the protection of life and property against fire, explosion, panic, and emergency response procedures. In accordance with Title 8 of the California Code of Regulations, Subchapter 6.1, a permit to operate and submission of plans, as well as notification of intent to install a tramway, shall be submitted. Aerial passenger tramways shall be inspected at least two times each year. These regulations are modified versions of an earlier version of an ANSI B77.1 standard, and are applicable to all passenger tramways operated

1 Available at: https://www.nfpa.org/overview. Accessed April 2022.
2 Available at: https://www.ansi.org/about/introduction. Accessed April 2022.

within the State. The California Occupational Safety and Health Administration (Cal/OSHA), however, generally recognizes that the current Passenger Tramway Safety Orders may be improved on by incorporating the more recent versions of ANSI B77.1.

California Fire Code

The California Fire Code (CFC) (California Code of Regulations, Title 24, Part 9) contains regulations related to construction, maintenance, and use of buildings, and regulations consistent with nationally recognized and accepted practices for safeguarding life and property from the hazards of fire and explosion. The purpose of the CFC is to provide minimum standards to increase the ability of a building to resist fire. Topics addressed in the CFC include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The CFC also contains specialized technical regulations related to fire and life safety. Appendix D of the CFC details specific provisions as they relate to minimum access requirements, grade, and overhead obstructions.

The International Fire Code (IFC) sets forth minimum requirements for maintaining the life safety of building occupants and protection of emergency responders. The CFC adopts, with amendments, the IFC, which includes, in Chapters 7-9, 10, and 33, requirements for fire-resistive construction, interior finish, fire protection systems, means of egress, and construction safeguards. In the City of Los Angeles, the CFC is enforceable by the fire code official, which is the Los Angeles Fire Department (LAFD).

California Penal Code

All law enforcement agencies in the State of California are organized and operated in accordance with the applicable provisions of the California Penal Code. This code sets forth the authority, rules of conduct, and training for peace officers. Under State law, all sworn municipal and county officers are State peace officers.[3]

For activities in Los Angeles State Historic Park, State Park Peace Officers have full peace officer powers pursuant to Penal Code Section 830.2(f), provided that the primary duty of the State Park Peace Officer shall be enforcement of the law set forth in Section 5008 of the Public Resources Code.[4]

Local

City of Los Angeles Emergency Operations Plan (2017)

The City of Los Angeles Emergency Management Department develops the City's emergency response and recovery plans, including the Emergency Operations Plan, which serves as the City's overall plan for emergency management, emergency planning, preparedness, response, and response activities. The plan includes the key roles and responsibilities of City departments, offices, boards, commissions, councils, and authorities. The Emergency Operations Center management function is performed by the director, who is initially represented by either the Fire

---

[3] Cal. Penal Code § 830(f).

[4] California Department of Parks and Recreation. 2022. State Park Peace Officer (Ranger). Available at: https://www.parks.ca.gov/?page_id=851. Accessed August 2022.

or Police Department, depending on the nature of the emergency. If the emergency is a civil disturbance, other criminal behavior, or a major public event, the Los Angeles Police Department (LAPD) will serve as the initial lead agency. For all other events and incidents, the LAFD will serve as the initial lead agency. The Fire Suppression and Rescue Division conducts fire suppression and rescue operations; provides emergency medical services; controls incidents involving explosives and hazardous materials; petroleum and chemical pipeline accidents; assists in safe demolition of buildings; and radiological defense. The Police Division maintains peace and order, preserves life and property, and enforces all state and local laws. Additionally, the LAPD provides security in disaster areas, as well as the actual policing functions normally associated with law enforcement activities; maintains an orderly flow of traffic in, out, and around all areas affect by a disaster, with priority given to provide ingress/egress for emergency vehicles responding to any disaster; and is responsible for managing evacuation routes, directing evacuees to an evacuation center, and escorting emergency vehicles (as needed) during a disaster. [5]

City of Los Angeles Fire Protection and Prevention Plan

Fire prevention, fire protection, and emergency medical services in the City of Los Angeles are operated under the Fire Protection and Prevention Plan, an element of the City of Los Angeles General Plan. The fire protection and prevention plan serves as a guide for the construction, maintenance, and operation of fire protection facilities in the City.[6] The plan sets forth policies and standards for fire station distribution and location, fire suppression water flow (or fire flow), fire hydrant standards and locations, firefighting equipment access, emergency ambulance services, and fire prevention activities. The LAFD also considers population, density, nature of on-site land uses, and traffic flow in evaluating the adequacy of fire protection services for a specific area or land use.

Los Angeles Fire Code

Article 7 – Fire Code of the City of Los Angeles Municipal Code establishes the minimum requirements consistent with nationally recognized good practice for providing a reasonable level of life safety and property protection from the hazards of fire, explosion, panic, or dangerous conditions in new and existing buildings, structures and premises. It also provides a reasonable level of safety to fire fighters and emergency responders during emergency operations.

Los Angeles Fire Department Strategic Plan 2018-2020

The LAFD Strategic Plan 2018-2020, also known as A Safer City 2.0, serves as a guide to creating the optimal LAFD to meet its mission of preserving life and property, promoting public safety, fostering economic growth through a commitment to prevention, preparedness, and response and recovery as an all-risk life safety response provider. A Safer City includes the following five goals:

1. Provide exceptional public safety and emergency service.

2. Embrace a healthy, safe, and productive work environment.

---

5 City of Los Angeles Emergency Management Department. 2018. Emergency Operations Plan. Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-04/comprehensive_emergency_operations_plan_eop-_2018.pdf. Accessed April 2022.

6 City of Los Angeles. 1995. Los Angeles Citywide General Plan Framework EIR. Available at: https://planning.lacity.org/odocument/6aa45676-e431-43ab-8621-dd493e64d2ea/FrameworkFEIR.pdf. Accessed April 2022.

3. Implement and capitalize on advanced technology.
4. Enhance LAFD sustainability and community resiliency.
5. Increase opportunities for personal growth and professional development.[7]

City of Los Angeles General Plan Framework Element

The City of Los Angeles General Plan Framework Element is a strategy for long-term growth that sets a Citywide context to guide the update of the community plan and Citywide elements. Chapter 9, Infrastructure and Public Services, of the Framework Element includes goals, objectives, and policies addressing public services. Elements of the proposed Project would be subject to the goals, objectives, and policies listed in Table 3.15-1.

Table 3.15-1: City of Los Angeles General Plan Framework Element Goals and Objectives

GOAL	OBJECTIVE
Fire	
Goal 9J. Every neighborhood has the necessary level of fire protection service, emergency medical service (EMS) and infrastructure.	• Objective 9.16. Monitor and forecast demand for existing and projected fire facilities and service. • Objective 9.17. Assure that all areas of the City have the highest level of fire protection and EMS, at the lowest possible cost, to meet existing and future demand. • Objective 9.18. Phase the development of new fire facilities with growth. • Objective 9.19. Maintain the Los Angeles Fire Department's ability to assure public safety in emergency situations.
Police	
Goal 9I. Every neighborhood in the City has the necessary police services, facilities, equipment, and manpower required to provide for the public safety needs of that neighborhood.	• Objective 9.13. Monitor and forecast demand for existing and projected police service and facilities. - Policy 9.13.1. Monitor and report police statistics, as appropriate, and population projections for the purpose of evaluating police service based on existing and future needs. • Objective 9.14. Protect the public and provide adequate police services, facilities, equipment and personnel to meet existing and future needs. - Policy 9.14.1. Work with the Police Department to maintain standards for the appropriate number of sworn police officers to service the needs of residents, businesses, and industries. - Policy 9.14.7. Participate fully in the planning of activities that assist in defensible space design and utilize the most current law enforcement technology affecting physical development. • Objective 9.15. Provide for adequate public safety in emergency situations.

7 Los Angeles Fire Department (LAFD). 2020. Los Angeles Fire Department Strategic Plan 2018-2020. Available at: https://issuu.com/lafd/docs/strategic_plan_final_2018.02.09?e=17034503/59029441. Accessed April 2022.

Table 3.15-1: City of Los Angeles General Plan Framework Element Goals and Objectives

GOAL	OBJECTIVE
Schools	
GOAL 9N. Public schools that provide a quality education for all of the City's children, including those with special needs, and adequate school facilities to serve every neighborhood in the City so that students have an opportunity to attend school in their neighborhoods.	• Objective 9.31. Work constructively with the Los Angeles Unified School District (LAUSD) to monitor and forecast school service demand based upon actual and predicted growth. • Objective 9.32. Work constructively with LAUSD to promote the siting and construction of adequate school facilities phased with growth. • Objective 9.33. Maximize the use of local schools for community use and local open space and parks for school use.
Libraries	
	• Objective 9.21. Ensure library services for current and future residents and businesses.

City of Los Angeles General Plan Safety Element

The Emergency Operations Organization (EOO) is the City agency that implements the Safety Element. The EOO is a “department without walls” that is composed of all agencies of the City’s government. It is a chain of command and protocols that integrate the City’s emergency operations and centralize command and information coordination to enable the chain of command to operate efficiently and effectively in deploying resources.[8] The Emergency Operations Board (EOB) supervises the EOO emergency preparedness, response, and recovery. The Chief of Police is chair of the EOB.

The Safety Element addresses only natural hazard issues. Therefore, it does not address police matters, except in relation to natural disasters such as traffic safety during or following a disaster. One of the goals of the Safety Element related to emergency response is: [A] city that responds with the maximum feasible speed and efficiency to disaster events so as to minimize injury, loss of life, property damage and disruption of the social and economic life of the City and its immediate environs.

City of Los Angeles Community Plans

Portions of the proposed Project would be in the Central City North Community Plan, the Central City Community Plan, and the Silver Lake-Echo Park-Elysian Park Community Plan. The City of Los Angeles is currently in the process of updating the Central City and Central City North Community Plans through the Downtown Los Angeles 2040 Draft Community Plan. Because it is unknown when the new community plan would be adopted and its EIR certified, the analysis in this section is based on the current Community Plans.

[8] City of Los Angeles Department of City Planning. 1996. *Safety Element of the General Plan*. Available at: https://planning.lacity.org/odocument/31b07c9a-7eea-4694-9899-f00265b2dc0d/Safety_Element.pdf. Accessed April 2022.

The goals, objectives, and policies related to public services in the above-listed Community Plans that would be applicable to the proposed Project are listed in Table 3.15-2.[9, 10, 11]

Table 3.15-2: City of Los Angeles Community Plans

COMMUNITY PLAN	GOAL/OBJECTIVE/POLICY
Central City Community Plan	
Fire Protection	• Objective 6-1. To ensure that fire facilities and protective services are sufficient for the existing and future population and land uses of Central City. - Policy 6-1.1. Coordinate with the Fire Department as part of the review of significant development projects and General Plan Amendments affecting land use to determine the impact on service demands.
Police Protection	• Objective 5-1. To provide adequate police facilities and personnel to correspond with population and service demands in order to provide adequate police protection. - Policy 5-1.1. Consult with the Police Department as part of the review of new development projects and proposed land use changes to determine law enforcement needs and demands. - Policy 5-1.2. Promote the establishment of Police facilities and programs which provide police protection at a neighborhood level. • Objective 5-2. To inform developers, design professionals, and the public of the possible reduction of criminal opportunities when crime prevention principles are developed during the initial planning stages of a development. - Policy 5-2.1. Promote the safety and security of personal property through proper design and effective use of the built environment which can lead to a reduction in the incidence and fear of crime, reduction in calls for police service, and to an increase in the quality of life.
Central City North Community Plan	
Fire Protection	Goal 9. Protect the community through a comprehensive fire and life safety program. • Objective 9-1. Ensure that fire facilities and protective services are sufficient for the existing and future population and land uses of Central City North. - Policy 9-1.1. Coordinate with the Fire Department as part of the review of significant development projects and General Plan Amendments affecting land use to determine the impact on service demands.

9 City of Los Angeles Department of City Planning. 2000. Central City North Community Plan. Available at: https://planning.lacity.org/odocument/e06434a6-341a-48ed-97dc-8f6a85780951/Central_City_North_Community_Plan.pdf. Accessed April 2022.

10 City of Los Angeles Department of City Planning. 2003. Central City Community Plan. Available online at: https://planning.lacity.org/odocument/2ddbdde0-a8fb-46e3-a151-f52fd09cc084/Central_City_Community_Plan.pdf. Accessed August 2022.

11 City of Los Angeles Department of City Planning. 2004. Silver Lake-Echo Park-Elysian Park Community Plan. Available at: https://planning.lacity.org/odocument/e87507ac-8c40-49a0-aa1c-21df963f2298/Silver_Lake-Echo_Park- Elysian_Valley_Community_Plan.pdf. Accessed April 2022.

Table 3.15-2: City of Los Angeles Community Plans

COMMUNITY PLAN	GOAL/OBJECTIVE/POLICY
Police Protection	Goal 8. A community with adequate police facilities and services to protect the community's residents from criminal activity, reduce the incidence of crime and provide other necessary law enforcement services. • Objective 8-1. To provide adequate police facilities and personnel to correspond with population and service demands in order to provide adequate police protection. - Policy 8-1.1. Consult with the Police Department as part of the review of new development projects and proposed land use changes to determine law enforcement needs and demands. • Objective 8-2. To increase the community's and the Police Department's ability to minimize crime and provide security. - Policy 8-2.1. Support and encourage community based crime prevention efforts (such as Neighborhood Watch and the Senior Lead Officer Program), through regular interaction and coordination with existing community based policing, foot and bicycle patrols, watch programs, assistance in the formation of new neighborhood watch groups, and regular communication with neighborhood and civic organizations. - Policy 8-2.2. Insure that landscaping around buildings be placed so as not to impede visibility. - Policy 8-2.3. Insure adequate lighting around residential, commercial, and industrial buildings in order to improve security.
Schools	Goal 6. Appropriate locations and adequate facilities for schools to serve the needs of the existing and future population. • Objective 6-1. To site schools in locations complementary to existing land uses, recreational opportunities and community identity.
Silver Lake-Echo Park-Elysian Park Community Plan	
Fire Protection	Goal 9. Protect the community through a comprehensive fire and life safety program. • Objective 9-1. Ensure that fire facilities and protective services are sufficient for the existing and future population and land uses. - Policy 9-1.1. Coordinate with the Fire Department as part of the review of significant development projects and General Plan Amendments affecting land use to determine the impact on service demands.
Police Protection	Goal 8. A community with adequate police facilities and services to protect the community’s residents from criminal activity, reduce the incidence of crime and provide other necessary law enforcement services. • Objective 8-1. To provide adequate police facilities and personnel to correspond with population and service demands. - Policy 8-1.1. Coordinate with the Police Department as part of the review of significant development projects and General Plan Amendments affecting land use to determine the impact on service demands.

Table 3.15-2: City of Los Angeles Community Plans

COMMUNITY PLAN	GOAL/OBJECTIVE/POLICY
Schools	Goal 6. Public schools that provide a quality education for all of the City's children, including those with special needs, and adequate school facilities to serve every neighborhood in the City. • Objective 6-1. Work constructively with the LAUSD to promote the siting and construction of adequate school facilities phased with growth.
Libraries	Goal 7. Ensure adequate library facilities and services are provided to the area's residents. • Objective 7-1. Encourage the City's Library Department to provide adequate library service which responds to the needs of the community.

3.15.2 Environmental Setting

The environmental setting for this section presents the baseline public services conditions in the vicinity of the Project area, which includes those areas immediately surrounding the proposed Project alignment. The proposed Project would be in the City of Los Angeles' urbanized and developed communities of downtown, El Pueblo, Chinatown, Mission Junction, and Elysian Park. The surrounding land uses in the proposed Project area include- high and medium-density residential, commercial, retail, institutional, transit-related infrastructure, parks and open space, and public facilities uses. The proposed Project alignment would generally be in the public right-of-way (ROW). The Los Angeles State Historic Park would be served by the proposed Project via an intermediate station, Chinatown/State Park Station, adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park. The southern portion of the station would be on City ROW, while the northern portion of the station would be within the southern boundary of the Los Angeles State Historic Park. Because impacts to public services can occur to areas outside of a Project's direct footprint, a 0.25-mile buffer around the proposed Project alignment has been established for this analysis, and will be characterized as the "Project Study Area."

Fire Protection

The LAFD provides fire protection services to the Project Study Area. LAFD includes 106 neighborhood fire stations, and provides Class-1 fire protection, rescue, and emergency medical services across its 469-square-mile jurisdiction. LAFD has 381 non-sworn cadets who provide technical and administrative support, and 3,435 uniformed firefighters, including 1,108 firefighters who are always on duty at LAFD facilities Citywide. Every day, the LAFD responds to approximately 1,368 emergency incidents. Department Rescue Ambulances transport about 591 people to area hospitals each day.[12]

The LAFD facilities that service the Project Study Area are included in Table 3.15-3, and shown in Figure 3.15-3. The closest fire station to the Project Study Area is Fire Station 4, located at 450 E Temple Street, approximately 0.5 mile southeast of the proposed location for the Alameda Station. The service area for Fire Station 4 includes the portion of the Project Study Area that extends from LAUS to the southern boundary of the Los Angeles State Historic Park. In 2021, Fire Station 4 had an average operational response time of 7 minutes 5 seconds for Emergency Medical Service (EMS) calls. This accounts for the when first contact is made (either through 911

12 LAFD. 2022. Our Mission. Available at: https://www.lafd.org/about/about-lafd/our-mission. Accessed April 2022.

or the fire dispatch center) and ends when the first unit arrives on scene. In 2021, the response time for Critical Advanced Life Support (ALS) incidents was 6 minutes 33 seconds, and the response time for structure fire incidents (where a building or structure is reported to be actively burning) was an average of 5 minutes 11 seconds.[13]

Table 3.15-3: Fire Stations Servicing the Project Study Area

Fire Station No.	Address
1	2230 Pasadena Avenue, Los Angeles, CA, 90031
3	108 North Fremont Avenue, Los Angeles, CA 90012
4	450 East Temple Street, Los Angeles, CA 90012
20	2144 West Sunset Boulevard, Los Angeles, CA 90026

Fire Station 1, at 2230 Pasadena Avenue, is 1 mile east of the proposed location for the Dodger Stadium Station, and services the portion of the Project Study Area that extends from the southern boundary of Los Angeles State Historic Park to the proposed location of the Dodger Stadium Station. In 2021, Fire Station 1 had an average operational response time of 7 minutes 24 seconds for EMS calls, 6 minutes 29 seconds for Critical ALS incidents, and 5 minutes 52 seconds for structure fire incidents.[14]

Fire Station 3, at 108 North Fremont Avenue, is 0.9 mile west of the proposed location for the Alameda Station, and services the portion of the Project Study Area west of Hill Street. In 2021, Fire Station 3 had an average operational response time of 6 minutes 53 seconds for EMS calls, 5 minutes 32 seconds for Critical ALS calls, and 4 minutes 54 seconds for structure fire incidents.[15]

Fire Station 20, at 2144 West Sunset Boulevard, is 1.6 miles northwest of the proposed location for the Dodger Stadium Station, and services the portion of the Project Study Area in the Dodger Stadium property. In 2021, Fire Station 20 had an average operational response time of 6 minutes 37 seconds for EMS calls, 5 minutes 40 seconds for Critical ALS incidents, and 4 minutes 26 seconds for structure fire incidents.[16]

Comparatively, the City-wide average operational response times in 2021 were 6 minutes 55 seconds for EMS calls, 5 minutes 58 seconds for Critical ALS incidents, and 5 minutes 9 seconds for structure fire incidents.

Police Protection and Law Enforcement

The LAPD is the local law enforcement agency responsible for providing police protection services to the Project Study Area. LAPD headquarters is at 100 West 1st Street in downtown Los Angeles. The entire Project Study Area is under the jurisdiction of the Central Bureau, and is served by the Central Community Police Station and the Northeast Community Police Station. In 2020, LAPD received 921,598 calls, of which the Central Bureau had the third highest count with 223,780 calls,

13 LAFD. 2022. FireStatLA. Available at: https://www.lafd.org/fsla/stations-map. Accessed April 2022.
14 Ibid.
15 Ibid.
16 Ibid.

or 24 percent of the total calls for service.[17] The LAPD facilities that service the Project Study Area are included in Table 3.15-4, and shown in Figure 3.15-1.

The Central Community Police Station is at 251 E. 6th Street, approximately 1 mile southwest of the proposed location for the Alameda Station. The Central Community Police Station is staffed by approximately 400 sworn and civilian members of the LAPD, and is responsible for all police operations in downtown Los Angeles. The area served by the Central Community Police Station has a population of 40,000 people, and covers approximately 4.5 square miles. The station's service area includes Bunker Hill/Historic Core, Central City East, Chinatown, Civic Center, Downtown Los Angeles, Fashion District, Jewelry District, Little Tokyo, Old Bank District, Solano Canyon, South Park-Entertainment, and Toy District.[18] Of the total calls LAPD received in 2020, the area served by the Central Community Police Station had the third highest count, with 51,542 calls, or six percent of the total calls for service.[19]

Table 3.15-4: Police Protection and Law Enforcement Stations Servicing the Project Study Area

Police Station		Address
1	LAPD Central Community Police Station	251 E. 6th Street, Los Angeles, CA 90014
2	LAPD Northeast Community Police Station	3353 N San Fernando Road, Los Angeles, CA 90065
3	LAPD Air Support Division Hooper Heliport	555 Ramirez Street, Space 475, Los Angeles, CA 90012

Source: Los Angeles Police Department 2021 and ESRI 2021

The Northeast Community Police Station is at 3353 North San Fernando Road, approximately 3.2 miles north of the proposed location for the Dodger Stadium Station. The Northeast Community Police Station serves an area of approximately 29 square miles, including the communities of Atwater, Cypress Park, Eagle Rock, East Hollywood, Echo Park, Elysian Park, Elysian Valley, Glassell Park, Griffith Park, Highland Park, Los Feliz, Mt. Washington, and Silver Lake.[20] The Northeast Community Police Station serves a population of about 250,000 people.

The LAPD Air Support Division uses the City-owned Hooper Heliport atop the C. Erwin Piper Technical Center, at 555 Ramirez Street, approximately 0.38 mile east of the proposed location for Alameda Station.[21] The Hooper Heliport is discussed further in Chapter 5.0, Other CEQA Considerations.

---

17 Los Angeles Police Department (LAPD). 2020. Use of Force Year-End Review 2020. Available at: https://lapdonlinestrgeacc.blob.core.usgovcloudapi.net/lapdonlinemedia/2021/05/year-2020-uof-review.pdf. Accessed April 2022.

18 LAPD. 2022. About: Central Area. Available at: https://www.lapdonline.org/lapd-contact/central-bureau/central-community-police-station/. Accessed April 2022.

19 LAPD. 2020. Use of Force Year-End Review 2020. Available at: https://lapdonlinestrgeacc.blob.core.usgovcloudapi.net/lapdonlinemedia/2021/05/year-2020-uof-review.pdf. Accessed April 2022.

20 LAPD. 2022. Your LAPD by Division: Northeast Community Police Station. Available at: https://www.lapdonline.org/lapd-contact/central-bureau/northeast-community-police-station/. Accessed August 2022.

21 Verbal confirmation from LAPD Air Support Division, Officer Coley Madigan, February 2021.

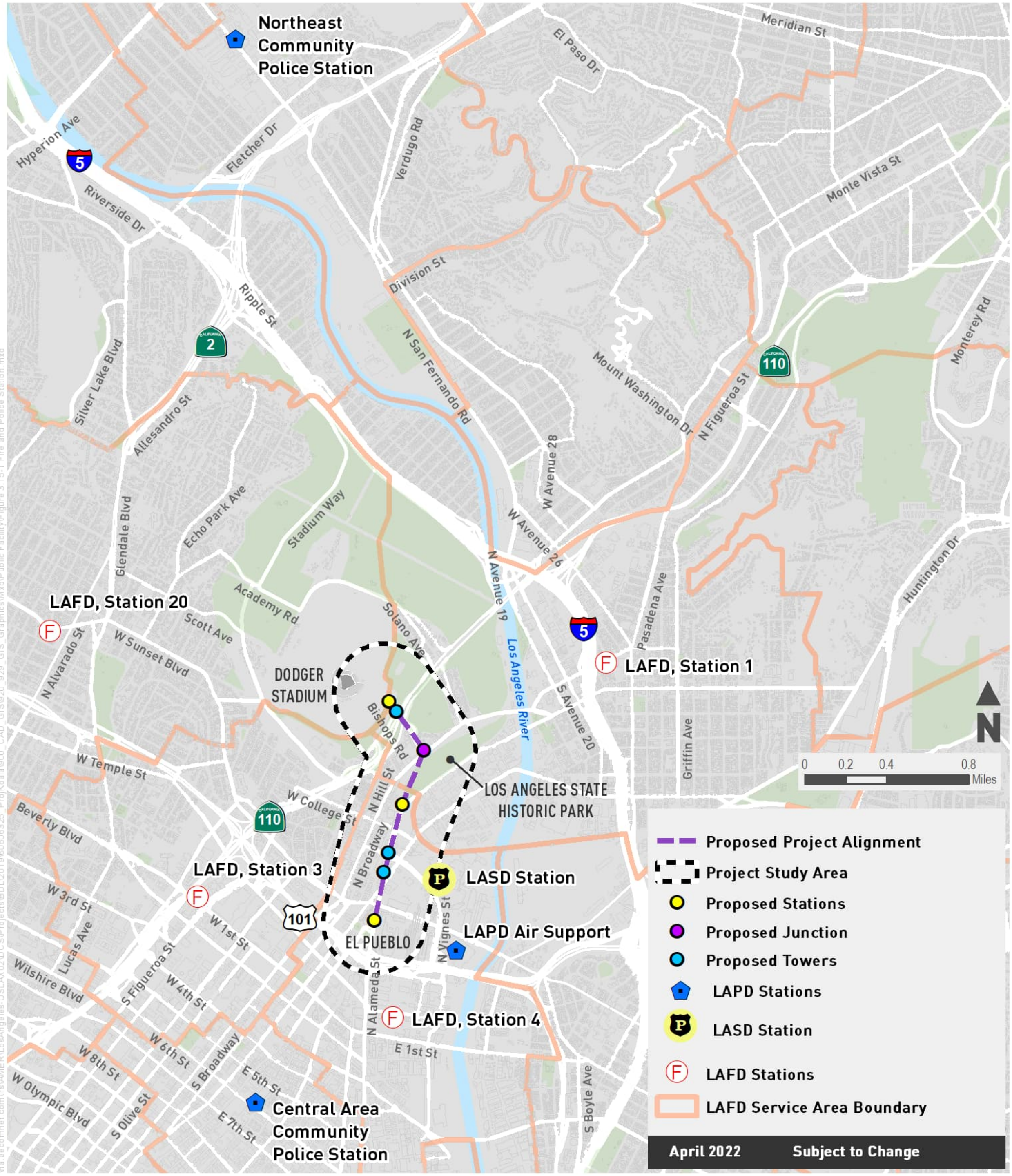


Figure 3.15-1. Fire and Police/Law Enforcement Stations Servicing the Project Study Area

In addition to the LAPD, State Park Peace Officers oversee law enforcement and visitor services functions in the State Park system, including the Los Angeles State Historic Park. State Park Peace Officers have full peace officer powers pursuant to California Penal Code Section 830.2, and perform the full range of peace officer duties and responsibilities in accomplishing their assignments pursuant to Public Resources Code section 5008(b). Peace officer duties include, but are not limited to: patrol (vehicle, boat, foot, etc.), issuing citations, writing reports, making physical arrests, conducting investigations, taking command in emergencies, performing search and rescue activities, and providing emergency medical aid. Performing these duties requires the use of protective equipment (e.g., firearms, electronic control weapons, batons, chemical agents, and handcuffs), and regular training and testing in physical defensive tactics and firearms use.[22]

Schools

The Los Angeles Unified School District (LAUSD) is the primary operator of public schools in the City. LAUSD covers an area totaling 710 square miles, including most of the City of Los Angeles, along with all or portions of 26 cities and unincorporated areas of Los Angeles County. More than 550,000 students in kindergarten through 12th grade, and another 100,000 students in other affiliated schools are enrolled at over 1,400 schools.[23] In addition to the LAUSD schools, there are also private schools in the Project Study Area. LAUSD and private schools in the Project Study Area are shown in Figure 3.15-2, and listed in Table 3.15-5.

Both the Chinese Consolidated School and Castelar Elementary School are approximately 0.22 mile northwest of the proposed location of the Alpine Tower, and 0.22 mile southwest of the proposed location of the Chinatown/State Park Station. The two schools are adjacent to one another. Ann Street Elementary School is approximately 0.24 mile southeast of the proposed location of the Chinatown/State Park Station. Cathedral High School, a private school, is the closest school to the Project alignment, adjacent to and directly west of the proposed location of the Broadway Junction.

Table 3.15-5
Schools within the Project Study Area

School Name	Address
Ann Street Elementary School	126 E Bloom Street, Los Angeles, CA 90012
Castelar Elementary School	840 Yale Street, Los Angeles, CA 90012
Cathedral High School	1253 Bishops Road, Los Angeles, CA 90012
Chinese Consolidated School	816 Yale Street, Los Angeles, CA 90012

22 California Department of Parks and Recreation. 2022. State Park Peace Officer (Ranger). Available at: https://www.parks.ca.gov/?page_id=851. Accessed August 2022.

23 Los Angeles Unified School District. 2022. Fingertip Facts 2021-2022. Available at: https://achieve.lausd.net/cms/lib/CA01000043/Centricity/Domain/280/Fingertip_Facts_2021_2022.pdf. Accessed August 2022.

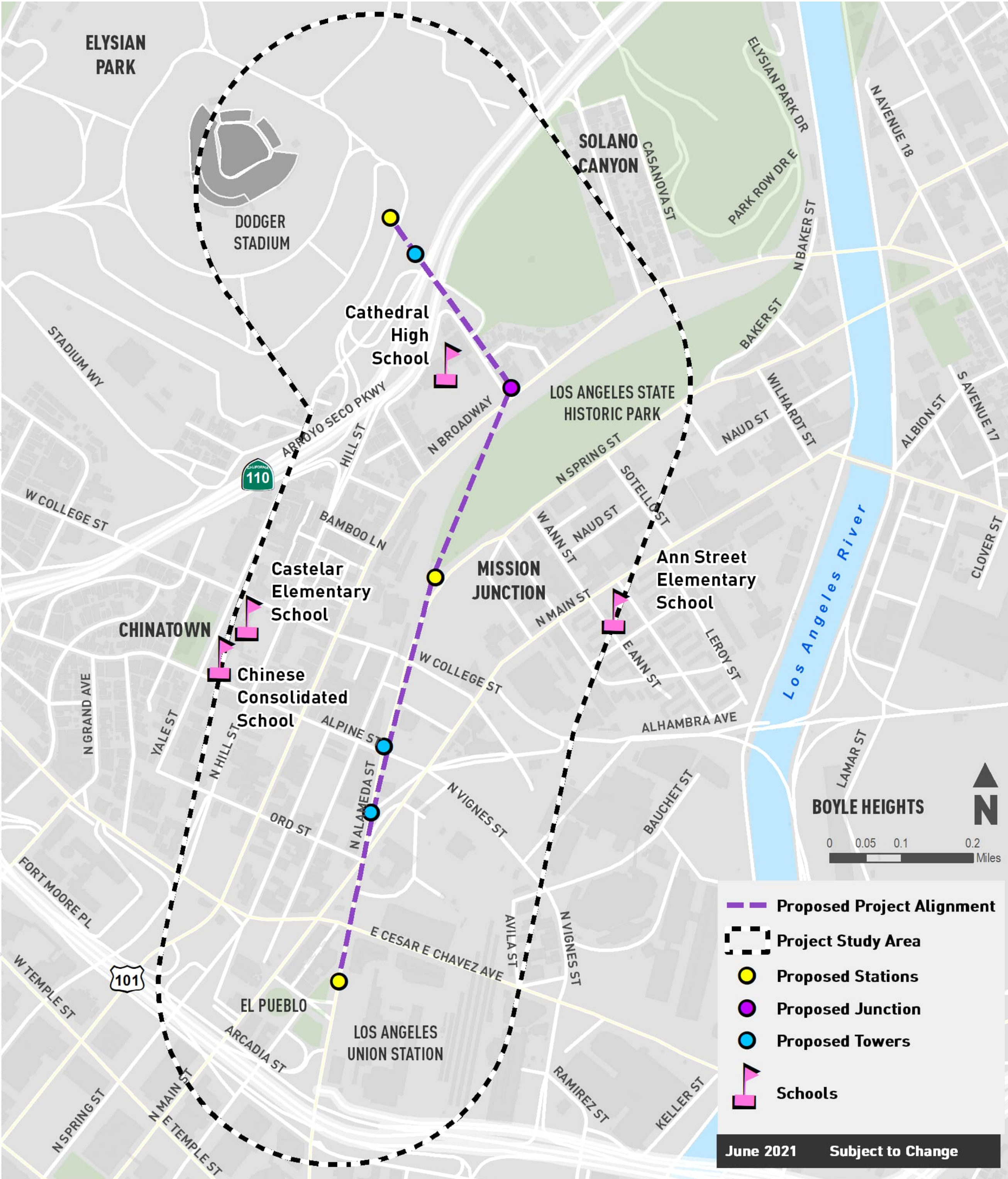


Figure 3.15-2. Schools Within the Project Study Area

Other Public Facilities

Other public facilities in the Project Study Area include libraries, senior centers, homeless bridge housing facilities, and childcare services. There are no hospitals in the Project Study Area.

The Los Angeles Public Library (LAPL) can be accessed through the Central Library in downtown Los Angeles, eight regional branch libraries, 59 community branches, four bookmobiles, and the Internet.[24] The Chinatown Branch Library is in the Project Study Area at 639 North Hill Street, approximately 0.25 mile west of the proposed location of the Alameda Tower, as shown in Figure 3.15-3.

The Los Angeles Department of Recreation and Parks (LARAP) operates 27 senior citizen centers and two multipurpose activity centers that offer special events to accommodate seniors.[25] The City of Los Angeles Department of Aging operates 16 multipurpose senior centers throughout the City that provide services such as legal assistance, health education, care management, and transportation.[26] The St. Barnabas Chinese Senior Services senior center is within the Project Study Area at 818 North Hill Street, approximately 0.2 mile west the proposed location of the Alpine Tower, as shown in Figure 3.15-3. The Chinese Committee on Aging is within the Project Study Area at 600 North Broadway, approximately 0.15 mile west of the proposed location of the Alameda Station, and provides congregate meals and services for older adults who live in adjacent areas.

El Puente Bridge Housing is at 711 N. Alameda Street in the Project Study Area, approximately 0.15 mile south of the proposed location of the Alameda Station, and provides temporary housing that aims to quickly bring the homeless off the streets. Bridge housing offers security and on-site services such as case management, mental health care, substance abuse treatment, and housing placement to help residents stabilize their lives and move on to permanent housing.[27] The Hilda L. Solis Care First Village is at 1060 N. Vignes Street in the Project Study Area, approximately 0.16 mile east of the proposed Alpine Tower, and provides housing and mental and behavioral health needs for the community.[28]

---

24 Los Angeles Public Library. 2022. Interactive map available at: https://www.lapl.org/branches. Accessed April 2022.

25 City of Los Angeles, Department of Recreation and Parks. 2022. Senior Citizen Centers. Available at: https://www.laparks.org/scc. Accessed April 2022.

26 City of Los Angeles Department of Aging. 2022. Multipurpose Senior Centers. Available at: http://aging.lacity.org/index.php?fetch=mpc. Accessed April 2022.

27 City of Los Angeles. 2022. Office of Mayor Eric Garcetti. A Bridge Home. Available at: https://www.lamayor.org/ABridgeHome. Accessed April 2022.

28 Hilda L. Solis. 2022. Available at: https://hildalsolis.org/hilda-l-solis-care-first-village-receives-license-agreement-initiate-operation/. Accessed April 2022.

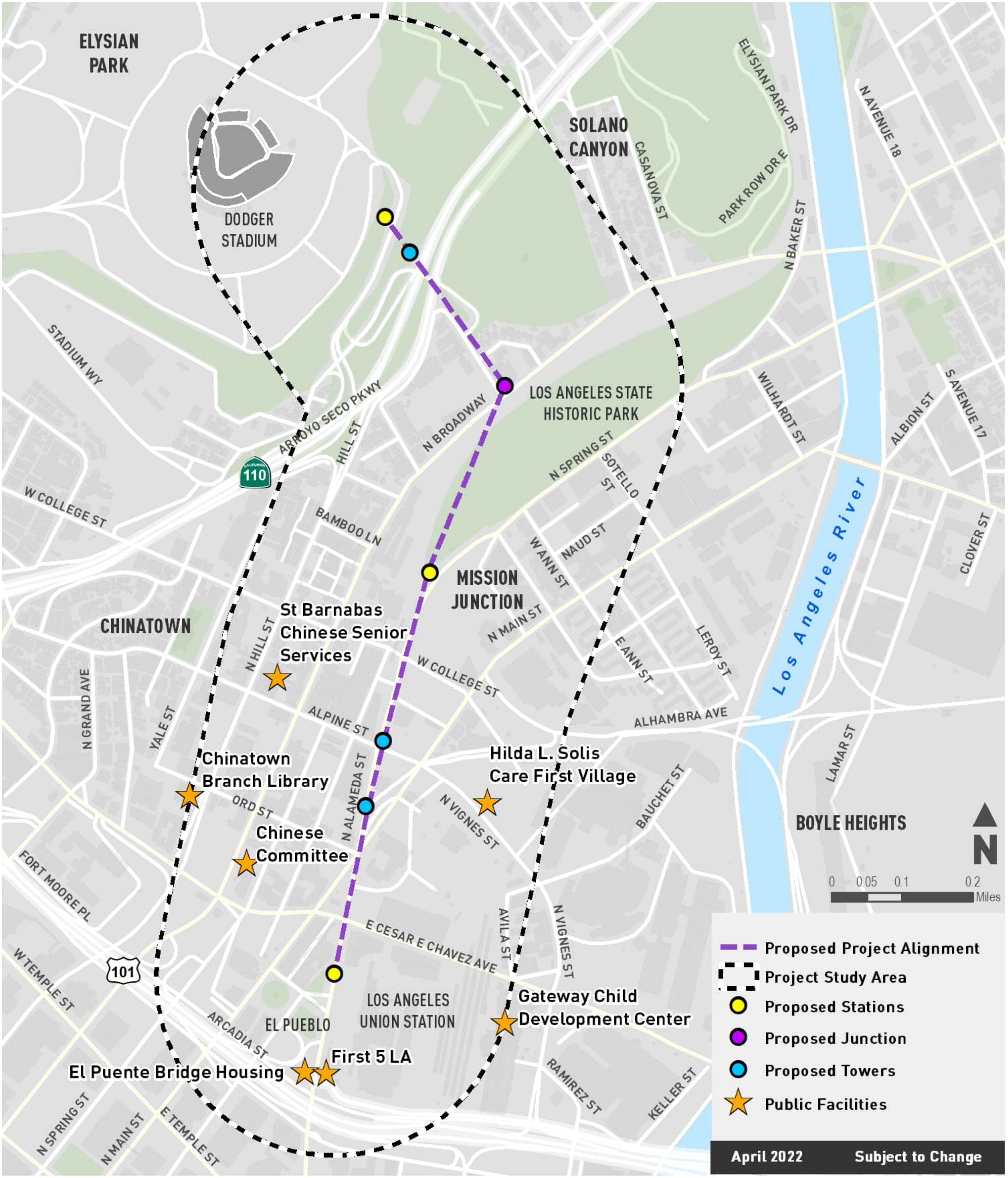


Figure 3.15-3. Other Public Facilities Within the Project Study Area

The City of Los Angeles has several types of childcare services, including early education programs, child support services, children and family services, daycare centers, childcare homes, and childcare centers. First 5 LA is an independent public agency in Los Angeles County that focuses on providing services to young children and families; it is at 750 N. Alameda Street in the Project Study Area, approximately 0.10 mile south of the proposed location of the Alameda Station. The Metro Gateway Child Development Center specializes in early childhood education for infants through five years of age, and is at One Gateway Plaza in the Project Study Area, approximately 0.20 mile east of the proposed location of the Alameda Station.

The other public facilities in the Project Study Area are presented in Table 3.15-6

Table 3.15-6
Other Public Facilities within the Project Study Area

Name		Address	Facility Type
1	Chinatown Branch Library	639 N Hill Street, Los Angeles, CA 90012	Public Library
2	Chinese Committee on Aging	600 N Broadway Street, Los Angeles, CA 90012	Senior Center
3	El Puente Bridge Housing	711 N. Alameda Street, Los Angeles, CA 90012	Homeless Shelter Housing
4	First 5 LA	750 North Alameda Street, Los Angeles, CA 90012	Children Services
5	Metro Gateway Child Development Center	One Gateway Plaza, Los Angeles, CA 90012	Childcare Center
6	St Barnabas Chinese Senior Services	818 N Hill Street, Los Angeles, CA 90012	Senior Center
7	Hilda L. Solis Care First Village	1060 N. Vignes Street, Los Angeles, CA 90012	Community Housing and Health Services

Source: ESRI 2021

3.15.3 Methodology

This section evaluates the potential of the proposed Project to adversely alter the existing operations of public services within the Project Study Area. To establish an operational baseline and evaluate the impacts of the proposed Project, the following agency websites were consulted for locations and general information: LAPD, LAFD, LAUSD, LARAP, LAPL, City of Los Angeles Department of Aging, and City of Los Angeles Planning Department. Planning documents were reviewed for relevant plans, goals, and policies. Letters were sent to LAFD and LAPD on October 19, 2020, to inquire about potential impacts to public services[29].

Thresholds of Significance

For purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on public services if it would:

[29] No written responses were received; however, verbal correspondence between LAPD Air Support Division and Los Angeles County Metropolitan Transportation Authority occurred in February 2021 regarding the location of the Hooper Heliport in relation to the Project Study Area. Heliports are further discussed in Chapter 5.0, Other CEQA Considerations.

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:
  - Fire protection;
  - Police protection;
  - Schools;
  - Parks; or
  - Other public facilities.

The threshold related to Parks is included in Section 3.16, Parks and Recreational Facilities.

3.15.4 Environmental Impacts

PS-1: *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: Fire Protection?*

Construction

Less Than Significant Impact with Mitigation. Construction activities associated with the proposed Project would create a temporary increase in demand for fire protection services at the Project site.

The LAFD has four existing fire stations within 1.6 miles of the Project. The closest fire station to the Project is Fire Station 4, at 450 E Temple Street, approximately 0.5 mile southeast of the proposed location for the Alameda Station. The service area for Fire Station 4 includes the portion of the Project that extends from LAUS to the southern boundary of the Los Angeles State Historic Park. Fire Station 1, at 2230 Pasadena Avenue, is 1 mile east of the proposed location for the Dodger Stadium Station, and services the portion of the Project that extends from the southern boundary of the Los Angeles State Historic Park to the proposed location of the Dodger Stadium Station. Fire Station 3, at 108 North Fremont Avenue, is 0.9 mile west of the proposed location for the Alameda Station, and services the portion of the Project west of Hill Street. Fire Station 20, at 2144 West Sunset Boulevard, is 1.6 miles northwest of the proposed location for the Dodger Stadium Station, and services the portion of the Project in the Dodger Stadium property. These existing fire facilities would respond to any emergency or medical services in the Project Study Area.

Fires associated with construction activities could be caused by the ignition of combustible materials, such as wood, plastics, sawdust, exposed electrical lines, or welding activities. However, in compliance with regulatory requirements, including those from OSHA, CFC, and the California Building Code requirements, construction managers and personnel would be trained in fire prevention and emergency response. Fire suppression equipment specific to construction would be maintained on site, and in accordance with LAFC Section 3312, the proposed Project would provide water for fire protection as soon as combustible material arrives on site. Project construction would comply with applicable existing codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Additionally, as noted in Section 3.20, Wildfire, under Project Design Features, a Fire Prevention Program Superintendent will be designated to interface with the LAFD and coordinate fire watch and site fire prevention and response efforts. Therefore, construction of the proposed Project would not result in the need for new or physically altered fire stations, and impacts would be less than significant. However, construction of the proposed Project would introduce construction to the Project Study Area, resulting in construction workers and lane closures that may indirectly impact acceptable service ratios, response times, or other performance objectives for fire protection.

Construction of the proposed Project would be done in phases to minimize disruption, and would require approximately 100 total workers at one time during peak period of construction, depending on the number of active construction crews working on various Project components at the same time.[30] As discussed in Section 3.14, Population and Housing, given the temporary nature of construction industry jobs, the relatively large regional construction industry, and the total number of construction workers needed during any construction phase, it is likely that the labor force from within the region would be sufficient to complete the majority of Project construction without a substantial influx of new workers and their families. Accordingly, the number of construction workers generated by the proposed Project would not substantially impact acceptable service ratios for fire protection in the heavily populated Los Angeles region.

Project construction activities could also potentially affect emergency response times and emergency access to the Project Study Area and the vicinity due to Project construction traffic and temporary street closures. Construction of the Alameda Station would require short-term full lane closures on Alameda Street during 5 weeks of construction if a temporary deck is used for deck erection and removal, and full lane closures on Alameda Street during construction hours for 30 weeks if the temporary deck option is not used. Partial lane closures on Alameda Street would be required during other phases of Alameda Station construction. Emergency access to El Pueblo would be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue if the temporary deck option is used. If the temporary deck option is not used, emergency access to El Pueblo would be provided on Alameda Street near its intersection with Los Angeles Street during the Foundations and Columns phase, and on Alameda Street near its intersection with Cesar E. Chavez Avenue during other phases. Construction of the Alameda Tower would require full lane closures on Alameda Street during construction hours for 22 weeks during one phase of construction, while still maintaining local and emergency access on Alameda Street.

Partial lane closures on Alameda Street are required during other phases of the Alameda Tower construction. Emergency access during construction hours would be maintained. Partial lane closures on Alameda Street and Alpine Street are required during construction of the Alpine Tower, although access, including emergency access, along Alameda Street and Alpine Street would be maintained. Construction of the Chinatown/State Park Station would require partial lane closures on Spring Street, while still maintaining local and emergency access for adjacent properties along Spring Street. Although construction would occur along existing access points to nearby properties, local and emergency access to these properties would be maintained. Additionally, construction of the Broadway Junction would require temporary short-term full lane closures on North Broadway and Bishops Road during the cumulative five-week period that decking is installed over the roadway, and then later removed following the completion of the

[30] It is assumed that the foundations and columns construction phase of the Alameda Station, Chinatown/State Park Station, Broadway Junction, and Dodger Stadium Station would be concurrent, and require approximately 25 workers on site at each location.

structural steel and gondola equipment erection phase. Partial lane closures on North Broadway would be required during other phases of the Broadway Junction construction. Restricted local and emergency access would be provided to allow access to properties along North Broadway from southbound travel along North Broadway. Restricted local and emergency access would be provided for the properties along North Broadway from Cottage Home Street up until the area of closure, just south of the intersection of North Broadway and Bishops Road. Emergency access would also be provided to Cathedral High School.

Rope pulling activities for each of the two ropeway systems would require temporary closure of roadways underneath each ropeway system of the Project alignment. To minimize traffic disruption, rope pulling activities for each ropeway system would not occur contemporaneously. Rope pulling activities for the ropeway system from Alameda Station to Broadway Junction would require temporary closure of Alameda Street, Spring Street, and North Broadway, as well as portions of roadways that intersect with these roadways, for up to two non-consecutive days. Rope pulling activities for the ropeway system from Broadway Junction to Dodger Stadium Station would require temporary closure of North Broadway, Bishops Road, Savoy Street, SR-110, and Stadium Way, for up to two non-consecutive days.

In the event of an emergency requiring fire protection, the proposed lane closures would inhibit access to the abovementioned roads in the Project Study Area, and by necessity, increase traffic volumes on the detour routes, which could increase traffic congestion on those routes. However, a Construction Traffic Management Plan, as outlined in Mitigation Measure TRA-B in Section 3.17, Transportation, would also be required to ensure adequate emergency access is maintained in and around the Project alignment and component sites throughout all construction activities.

In addition, compliance with the City's Emergency Operations Plan and the Los Angeles Fire Code, as well as coordination with LAFD prior to construction, would ensure that LAFD would have adequate access to fire response facilities, including hydrants, fire lanes, etc., during construction. Prior to construction, the Project Sponsor would be required to coordinate with LAFD regarding construction plans and schedules. Fire lanes provided during the construction phase would be designated and designed for fire and emergency team access pursuant to Section 503 of the Los Angeles Fire Code.

Overall, construction of the proposed Project has the potential to result in a temporary increase in demand for fire protection services. However, implementation of Mitigation Measure TRA-B, Project Design Feature WFR-PDF-A, and compliance with applicable State and local regulations, including coordination with LAFD prior to construction of the Project, would ensure that construction of the Project would not create additional demand for LAFD services that would result in the need to add new—or physically alter existing—fire protection facilities. Therefore, impacts would be less than significant with mitigation.

Operation

Less Than Significant Impact. The proposed Project would create an increased demand for fire protection services during Project operation. As discussed above, LAFD has four existing fire stations within 1.6 miles of the proposed Project. Once operational, fire protection services would be maintained, and any modifications to fire protection access would be approved by the LAFD to ensure the safest access is provided for emergency service providers.

Implementation of the proposed Project would require the restriping of travel lanes in some locations along the Project alignment; however, the proposed Project would not permanently affect roadway through lane capacity by any of the in-roadway structures proposed, and off-roadway structures would not hinder emergency response. One proposed traffic capacity reduction would include the shortening of the northbound left-turn pocket from Alameda Street to Cesar E. Chavez Avenue to accommodate the columns for the Alameda Station. Emergency responders who are traveling northbound on Alameda Street could bypass the turn pocket.

As discussed previously, compliance with the City's Emergency Operations Plan and Los Angeles Fire Code, as well as coordination with LAFD prior to planned maintenance, would ensure that LAFD would have adequate access during emergencies to maintain an orderly flow of traffic in, out, and around all areas affected by a disaster, with priority given to provide ingress/egress for emergency vehicles responding to any disaster.

Once constructed, it is anticipated that the proposed Project would require approximately 20 employees. The proposed Project would not generate population growth because it does not include any housing, and therefore, is not anticipated to cause a substantial demand for fire protection services to the extent that it would require the provision of new or physically altered governmental facilities (i.e., fire stations).

The increase in need for services during Project operation would be limited in comparison to the services currently provided by the existing fire stations. The existing fire stations would be able to meet the needs of the additional employees that would result from implementation of the proposed Project. Furthermore, in the event of simultaneous calls for service in the City, to the extent that Fire Station 4 cannot meet the immediate needs of a call for service or does not have capability to address the full extent of a larger incident in the City, Fire Stations 1, 3, or 20 would respond or provide support.

As described in Chapter 2, Project Description, a Project-specific Emergency Operations Plan would be prepared as part of the Project, which would include emergency response protocols and safety procedures developed in conjunction with the operator, system provider, and local authorities (e.g., LAFD and LAPD). The plan would address operational changes and communications protocols required in response to a range of potential emergencies, such a medical emergency in a cabin or in a station, or a fire near the alignment. The plan would consider a wide range of scenarios for which default operational responses would be determined. The plan would also include communication protocols with local authorities for further instruction and coordination.

The plan would also address the unlikely scenario where the system cannot be moved to unload passengers normally at stations. The robust design, periodic and preventative maintenance, and equipment redundancies are intended to minimize these potential impacts. However, the plan would include procedures to evacuate passengers directly from cabins, if needed. An Evacuation Plan would be developed as part of the Project-specific Emergency Operations Plan, as required by industry standards and State regulations. The Evacuation Plan would describe the preferred methods of evacuation based on the location of cabins, environmental conditions, and unusual terrain. The Evacuation Plan would also include the required equipment and procedures for evacuation, site control, and passenger communications. Analysis and coordinated practice of the evacuation modes would be performed in advance of opening the system. The Evacuation Plan would document the procedures, equipment, and personnel necessary to evacuate the system, as well as provide for recording of training and practice. Such analysis, practice, and documentation is required by OSHA.

In addition, the proposed Project would comply with the applicable OSHA, Building Code, CFC, other Los Angeles Municipal Code (LAMC), and LAFD requirements, including installation of a fire sprinkler suppression system, smoke detectors, signage, fire alarms, building emergency communication systems, and smoke control systems; compliance with LAFD fire apparatus and personnel access requirements; and water systems and roadways improved to the satisfaction of the LAFD. Compliance with applicable Building Code and CFC requirements would be demonstrated as part of LAFD's plan review and LAFD's safety inspection for new construction projects, as set forth in LAMC Section 57.118, which is required prior to the issuance of a building permit. This would further reduce potential impacts to fire protection services.

Overall, the proposed Project would create an increased demand for fire protection services during Project operation. However, with adherence to the applicable regulations, coordination with LAFD, and implementation of an Emergency Operations Plan, which would be reviewed prior to the issuance of a building permit, operation of the proposed Project would not create additional demand for LAFD services that would result in the need to add new—or physically alter existing—fire protection facilities. Therefore, impacts related to fire protection services during Project operation would be less than significant.

PS-2: *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: Police Protection?*

Construction

Less Than Significant Impact with Mitigation. Construction activities associated with the proposed Project would create a temporary increase in demand for police protection services in the Project Study Area. During construction of the proposed Project, the need for police services may increase due to theft of building materials and construction equipment, malicious mischief, graffiti, and vandalism.

LAPD has two existing police stations within 3.2 miles of the proposed Project. The closest police station is the Central Community Police Station at 251 E. 6th Street, approximately 1 mile southwest of the proposed location for the Alameda Station. The service area for this station includes Bunker Hill/Historic Core, Central City East, Chinatown, Civic Center, Downtown Los Angeles, Fashion District, Jewelry District, Little Tokyo, Old Bank District, Solano Canyon, South Park-Entertainment, and Toy District. The Northeast Community Police Station is at 3353 North San Fernando Road, approximately 3.2 miles north of the proposed location for the Dodger Stadium Station. The Northeast Community Police Station serves an area of approximately 29 square miles, including the communities of Atwater, Cypress Park, Eagle Rock, East Hollywood, Echo Park, Elysian Park, Elysian Valley, Glassell Park, Griffith Park, Highland Park, Los Feliz, Mt. Washington, and Silver Lake. In addition, the LAPD Air Support Division uses the City-owned Hooper Heliport atop the C. Erwin Piper Technical Center at 555 Ramirez Street, approximately 0.38 mile east of the proposed location for Alameda Station. Additionally, the State Parks Peace Officers have an office in the Los Angeles State Historic Park, approximately 650 feet northeast along Spring Street.

As described under PS-1 above, construction of the proposed Project would be done in phases to minimize disruption, and would require approximately 100 total workers at one time during peak period of construction, depending on the number of active construction crews working on various Project components. Given the temporary nature of construction industry jobs, the relatively large regional construction industry, and the total number of construction workers needed during any construction phase, it is likely that the labor force from within the region would be sufficient to complete the majority of project construction without a substantial influx of new workers and their families. As discussed above in Section 3.15.2, Environmental Setting, the Central Community Police Station and Northeast Community Police Station serve a population of approximately 290,000 people; therefore, the number of construction workers generated by the proposed Project would not substantially impact acceptable service ratios for police protection in the heavily populated Los Angeles region.

Project construction activities could also potentially affect emergency response times and emergency access to the Project Study Area and the vicinity due to Project construction traffic and temporary street closures. Construction of the Alameda Station would require short-term full lane closures on Alameda Street during five weeks of construction if a temporary deck is used for deck erection and removal; and full lane closures on Alameda Street during construction hours for 30 weeks if the temporary deck option is not used. Partial lane closures on Alameda Street would be required during other phases of Alameda Station construction. Construction of the Alameda Tower would require full lane closures on Alameda Street during construction hours for 22 weeks during one phase of construction, while still maintaining local and emergency access on Alameda Street. Partial lane closures on Alameda Street are required during other phases of the Alameda Tower construction. Partial lane closures on Alameda Street and Alpine Street are required during construction of the Alpine Tower, although access along Alameda Street and Alpine Street would be maintained. Construction of the Chinatown/State Park Station would require partial lane closures on Spring Street, while maintaining local and emergency access for adjacent properties along Spring Street. Additionally, construction of the Broadway Junction would require temporary short-term full lane closures on North Broadway and Bishops Road during the cumulative five-week period that decking is installed over the roadway, and then later removed following the completion of the structural steel and gondola equipment erection phase. Partial lane closures on North Broadway would be required during other phases of the Broadway Junction construction.

Rope pulling activities for each of the two ropeway systems would require temporary closure of roadways underneath each ropeway system of the Project alignment. To minimize traffic disruption, rope pulling activities for each ropeway system would not occur contemporaneously. Rope pulling activities for the ropeway system from Alameda Station to Broadway Junction would require temporary closure of Alameda Street, Spring Street, and North Broadway, as well as portions of roadways that intersect with these roadways, for up to two non-consecutive days. Rope pulling activities for the ropeway system from Broadway Junction to Dodger Stadium Station would require temporary closure of North Broadway, Bishops Road, Savoy Street, SR-110, and Stadium Way for up to two non-consecutive days.

In the event of an emergency requiring police protection, the proposed lane closures would inhibit access to the above-mentioned roads in the Project Study Area; and by necessity, increase traffic volumes on the detour routes, which could increase traffic congestion on those routes. Although drivers of emergency vehicles normally have a variety of options for avoiding congestion, such as using sirens to clear a path of travel, driving in the lanes of opposing traffic or center turn lanes, and bypassing signals and stopped traffic, this could result in a potentially significant impact related to response times. However, in accordance with the City's Emergency Operations Plan, coordination with LAPD and State Parks prior to construction would ensure that LAPD and State Parks would have adequate access to areas requiring access during emergencies to maintain orderly flow of traffic in, out, and around all areas affected by a disaster, with priority given to providing ingress/egress for emergency vehicles responding to any disaster. The development of a Construction Traffic Management Plan, as outlined in Mitigation Measure TRA-B in Section 3.17, Transportation, would be required to ensure adequate emergency access is maintained in and around the Project alignment and component sites throughout all construction activities. Additionally, construction of the proposed Project is clear of the airspace associated with the existing heliports in the proposed Project's vicinity. Therefore, the proposed Project would not interfere with LAPD access to the Hooper Heliport, and heliport operations would not be impacted by construction activities. This airspace analysis is further discussed in Appendix O.

Furthermore, the construction worksites would be secured with fencing and barriers to minimize security incidents that could result in demand for police protection, thereby reducing the potential additional demand for LAPD and State Parks Peace Officers services. This would help alleviate the need to add new—or physically alter—existing police protection facilities.

Overall, construction activities associated with the proposed Project would create a temporary increase in demand for police protection services. However, with implementation of Mitigation Measure TRA-B, and coordination with LAPD and State Parks prior to construction of the proposed Project, construction of the proposed Project would not create additional demand for LAPD [or State Parks Peace Officer] services that would result in the need to add new—or physically alter existing—police protection facilities. Therefore, impacts would be less than significant with mitigation.

Operation

Less Than Significant Impact. Development of the proposed Project would generate an increase in demand for police protection services during Project operation. As discussed above, the LAPD has two existing police stations within 3.2 miles of the proposed Project, as well as the City-owned Hooper Heliport in the Project Study Area. In addition, as discussed above, protection services in the Los Angeles State Historic Park would be covered by the State Park Peace Officers, who have an office approximately 650 feet to the northeast along Spring Street.

Once operational, the proposed Project would include various security features. The proposed stations would be secured nightly by closing the vertical access to the platforms. Security monitoring would be provided by staff and by cameras, which would feed into the control rooms constructed at each station. Cabins would feature sealed windows for viewing purposes, which, for security reasons, would not open. Each cabin would have a security camera on board with a feed to the control room, as well as a "push to talk" button, which would open two-way communications with the control room.

In addition, as described in Chapter 2, Project Description, an Emergency Operations Plan would be prepared as part of the proposed Project, and would include emergency response protocols and safety procedures. For personal events, such as a medical situation, operators would have the ability to contact local security, law enforcement, or other emergency response agencies. The combination of staff and surveillance would allow operators to respond to events as appropriate.

Implementation of the proposed Project would also require the restriping of travel lanes in some locations along the Project alignment; however, the proposed Project would not permanently affect roadway through lane capacity by any of the in-roadway structures proposed, and off-roadway structures would not hinder emergency response. One proposed traffic capacity reduction would include the shortening of the northbound left-turn pocket from Alameda Street to

Cesar E. Chavez Avenue to accommodate the columns for the Alameda Station. Therefore, emergency responders who are traveling northbound on Alameda Street could bypass the turn pocket. Indirect impacts related to response times could result due to annual maintenance activities that may require crane access at tower locations, including the potential to require the temporary closing of traffic lanes. However, similar to the short-term lane closures anticipated by the construction phase, in accordance with the City's Emergency Operations Plan, coordination with LAPD and State Parks prior to maintenance activities would ensure that LAPD and State Parks would have adequate access during emergencies to maintain orderly flow of traffic in, out, and around all areas affected by a disaster, with priority given to provide ingress/egress for emergency vehicles responding to any disaster. In addition, construction of the proposed Project is clear of the airspace associated with the existing heliports in the proposed Project's vicinity. Therefore, the proposed Project would not interfere with LAPD access to the Hooper Heliport, and heliport operations would not be impacted. This airspace analysis is further discussed in Appendix O.

Once constructed, it is anticipated that the proposed Project would require approximately 20 employees. Although the proposed Project would generate additional long-term employees in the Project Study Area, this increase in employment is not anticipated to result in an increase in population that would require the provision of new or physically altered police protection facilities.

Additionally, as stated in Section 3.16, Parks and Recreational Facilities, although the proposed Project may increase use and attendance of the Los Angeles State Historic Park because it would provide transit access to the Park from both LAUS and Dodger Stadium, the proposed Project would not result in demand beyond what is already contemplated for the Park. Furthermore, the vertical circulation of the Chinatown/State Park Station would touch down outside of the Park gates, allowing the Park to maintain the same access control as existing conditions.

Overall, the proposed Project would generate an increase in demand for police protection services during Project operation. However, with implementation of the proposed Project's security features, as well as the development of an Emergency Operations Plan, the proposed Project would not result in additional demand for LAPD and State Parks police protection services that would result in the need to add new—or physically alter existing—police protection facilities. Therefore, impacts related to police protection services during Project operation would be less than significant.

PS-3: *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: Schools?*

Construction

Less Than Significant Impact with Mitigation. As discussed above, there are four schools in the Project Study Area. Cathedral High School is the closest school to the Project alignment, situated adjacent to and directly west of the proposed location of the Broadway Junction.

Construction of the Broadway Junction would result in temporary impacts related to dust, noise, and lane closures that may indirectly impact Cathedral High School; these are discussed in this Draft EIR in Section 3.1, Air Quality, Section 3.13, Noise, and Section 3.17, Transportation. Given the temporary impacts associated with construction of the Broadway Junction, the proposed

Project would not require the provision of new or physically altered governmental facilities to maintain acceptable performance objectives for schools.

It is not anticipated that the other three schools in the Project Study Area would be substantially impacted by construction of the proposed Project due to the distance of the schools from the Project construction. Although the temporary lane closures during construction would increase traffic volumes on detour routes, which could increase traffic congestion on those routes, the Project alignment is in an established urban area that is well-served by the surrounding roadway network. However, the development of a Construction Traffic Management Plan, as outlined in Mitigation Measure TRA-B in Section 3.17, Transportation, would be required to ensure adequate emergency access is maintained in and around the Project alignment and component sites, as well as to ensure that adequate traffic signals and crossing guard personnel are present throughout construction where both existing and unsignalized school crosswalks and crossings occur along proposed detour routes.

In addition, as discussed in Section 3.14, Population and Housing, given the temporary nature of construction industry jobs, the relatively large regional construction industry, and the total number of construction workers needed during any construction phase, it is likely that the labor force from within the region would be sufficient to complete the majority of Project construction without a substantial influx of new workers and their families. Any such relocation within the region would be minimal. Although specialized personnel including ART manufacturer and cable specialists would be on site during construction phases involving the installation of the ART system and cable pulling, they are expected to use existing seasonal accommodations, and leave once construction is completed. Because construction is temporary, it is not anticipated that any specialized personnel would relocate their families and potential school-aged children for the proposed Project. In addition, pursuant to the State Education Code Chapter 6 Sections 17620 through 17626, new commercial and industrial development in the City, including transportation projects, are required to pay development fees, as adopted by the affected school district, for the construction of school facilities.

Overall, construction of the proposed Project has the potential to result in temporary impacts to schools. However, Project construction would not result in substantial adverse physical impacts associated with the provision of new or physically altered schools, the construction of which would cause significant environmental impacts. Therefore, impacts would be less than significant with mitigation.

Operation

Less Than Significant Impact. Once constructed, it is anticipated that the Project would require approximately 20 employees. Operation of the proposed Project would not generate population growth because it does not include any housing, and therefore is not anticipated to cause a substantial demand for school services to the extent that it would require the provision of new or physically altered governmental facilities (i.e., schools). Therefore, impacts on schools during Project operation would be less than significant.

PS-4: *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: Other public facilities?*

Construction

Less Than Significant Impact with Mitigation. As discussed previously, although the temporary lane closures during construction would increase traffic volumes on detour routes, which could increase traffic congestion, the Project alignment is in an established urban area that is well-served by the surrounding roadway network. In addition, the development of a Construction Traffic Management Plan, as outlined in Mitigation Measure TRA-B in Section 3.17, Transportation, would be required to ensure adequate emergency access is maintained in and around the Project alignment and component sites throughout construction. In addition, it is not anticipated that the labor force for construction of the proposed Project would result in an increase in demand for libraries, senior centers, homeless bridge housing facilities, or childcare services.

Operation

Less Than Significant. Operation of the proposed Project does not include new housing that would substantially increase the residential or employee populations in the area. Overall, the proposed Project is not anticipated to cause a demand for other public facilities to the extent that it would require the provision of new or physically altered governmental facilities (i.e., libraries, senior centers, homeless bridge housing facilities, or childcare services). Therefore, impacts would be less than significant.

3.15.5 Mitigation Measures

The following mitigation measure is proposed to reduce significant impacts related to public services to a less than significant level.

TRA-B Construction Traffic Management Plan (as described in Section 3.17, Transportation)

3.15.6 Level of Significance after Mitigation

Impacts regarding fire protection services, police protection services, schools, and other public facilities during construction were determined to be potentially significant.

Implementation of Mitigation Measure TRA-B includes the development of a Construction Traffic Management Plan to reduce potential impacts related to fire protection services, police protection services, schools, and other public facilities.

Upon implementation of Mitigation Measure TRA-B, significant impacts related to public services would be reduced to less than significant.

Impacts regarding fire protection services, police protection services, schools, and other public facilities during operation were determined to be less than significant.

3.16 PARKS AND RECREATIONAL FACILITIES

This section evaluates the proposed Project's potential to impact parks and recreational facilities during construction and operation.

3.16.1 Regulatory Setting

State

Los Angeles State Historic Park General Plan

The Los Angeles State Historic Park General Plan serves as a long-range management tool that provides guidelines for achieving the vision and purpose of the park. The General Plan states that the Park is identified and recorded as an archaeological site and is listed as a designated Historic-Cultural Monument by the City of Los Angeles. The General Plan acknowledges the Park has archaeological sensitivities and, as such, recommends continued study of existing and potential resources as well as the need to constantly update and expand the knowledge of historic activities at the Park. As for the cultural resources associated with the Park, the General Plan states that the Park should "[i]dentify, document, evaluate, and interpret cultural resources at the Park," and "[p]rotect, stabilize, and preserve significant cultural resources within the Park." Guideline 8 of the Los Angeles State Historic Park General Plan also establishes that protocols be put in place "for periodic assessments of known archaeological and historic resources. This regular inventory and monitoring should consist of updating recordation documentation, site condition assessments, and treatment recommendations[1]."

The Los Angeles State Historic Park is owned and managed by the California Department of Parks and Recreation, which is required to protect and improve the site to meet the needs of the statewide population, not just those residents who live nearby. As such, the Los Angeles State Historic Park General Plan considers the local recreation needs of the community while also serving statewide interests. Goals and guidelines included in the Los Angeles State Historic Park General Plan pertaining to the proposed Project include the following:

1. Provide recreational areas in the park for visitors to improve their health and wellness in harmony with the physical surroundings that are compatible with the natural and historic nature of the park;

2. Provide a flexible system of open space opportunities that serve a broad cross-section of the City's residents and statewide visitors;

3. Integrate potential recreational uses with other operational facilities to ensure that the planning, design, and construction preserve and emphasize key elements of the natural and cultural environment;

4. Integrate recreational programs with the park's interpretive programs;

[1] California Department of Parks and Recreation. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf, accessed April 2022.

5. Provide appropriate recreation opportunities in coordination with others in the regional recreation network (Rio de Los Angeles State Park, Elysian Park, Los Angeles River Greenway, City parks, schools, etc.).

6. Explore opportunities to provide convenient and safe pedestrian and cycling access throughout the Park, with connections from communities along North Broadway. Coordinate with the Los Angeles County Metropolitan Transportation Authority to consider pedestrian bridge possibilities over the Gold Line right-of-way. The Los Angeles State Historic Park General Plan also encourages multi-modal transportation and pedestrian access to the park and emphasizes linkages to public transportation. The Los Angeles State Historic Park General Plan recognizes that linkages with existing and future transportation systems would allow the park to connect to the regional L.A. River Greenway and the greater urban open space network within the City's historic center.

Regional

Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment

The 2016 Countywide Comprehensive Parks and Recreation Needs Assessment documents existing parks and recreation facilities in cities, including the City of Los Angeles, and unincorporated communities and uses the data to determine the scope, scale, and location of park needs in Los Angeles County.[2] The results of the analysis of the park metrics, which include condition, access, amenities, land, and pressure, were combined to determine an overall "park need" level within the County, ranging from "Very High" for areas in the County that have less park acreage per 1,000 residents and are therefore in need of additional parks, to "Very Low" for areas in the County that have higher park acreages per 1,000 residents and are therefore considered to not be in need of additional parks. The County average is 3.3 acres of parks per 1,000 residents. The following presents the average acres per 1,000 residents in each park need category as presented in the 2016 Countywide Comprehensive Parks and Recreation Needs Assessment:

- Very High Need: 0.7 acres per 1,000 residents
- High Need: 1.6 acres per 1,000 residents
- Moderate Need: 11.5 acres per 1,000 residents
- Low Need: 12.5 acres per 1,000 residents
- Very Low Need: 52.0 acres per 1,000 residents

The areas from the Countywide Comprehensive Parks and Recreation Needs Assessment that coincide with the proposed Project alignment include the City of Los Angeles Central City, Central City North, and Silver Lake-Echo Park-Elysian Valley Community Plan areas. The details of the study area profiles for the Central City Community Plan, Central City North Community Plan, Silver Lake-Echo Park-Elysian Valley Community Plan are included in Table 3.16-1.

[2] Los Angeles County Department of Parks and Recreation. 2016. Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment. Available at: https://lacountyparkneeds.org/wp-content/uploads/2016/06/FinalReport.pdf. Accessed April 2022.

Table 3.16-1: Study Area Profiles from Countywide Comprehensive Parks and Recreation Needs Assessment

STUDY AREA	POPULATION	PARK ACRES	ACRES PER 1,000 RESIDENTS	PARK NEED[1]
Central City Community Plan	37,968	15	0.4	Very High
Central City North Community Plan	22,339	34.7	1.6	High
Silver Lake-Echo Park-Elysian Valley Community Plan	71,783	58.5	0.8	Moderate

Note: According to the *Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment*, park need is calculated using the following weighting: (20% x Park Acre Need) + (20% x Distance to Parks) + (60% x Population Density).

Sources:

Los Angeles County Department of Parks and Recreation. 2016. Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment, Appendix A, Study Area 118. Accessed March 2022. https://lacountyparkneeds.org/FinalReportAppendixA/StudyArea_118.pdf

Los Angeles County Department of Parks and Recreation. 2016. Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment, Appendix A, Study Area 59. Accessed March 2022.2022 https://lacountyparkneeds.org/FinalReportAppendixA/StudyArea_059.pdf

Los Angeles County Department of Parks and Recreation. 2016. Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment, Appendix A, Study Area 138. Accessed March 2022 https://lacountyparkneeds.org/FinalReportAppendixA/StudyArea_138.pdf

The following parks within the vicinity of the proposed Project alignment are included in the 2016 Los Angeles Countywide Parks and Recreation Needs Assessment. The parks are discussed further in Section 3.16.2.

- Los Angeles Plaza Park and Placita de Dolores: Los Angeles Plaza Park and Placita de Dolores are designated as El Pueblo de Los Angeles Historic Monument. The El Pueblo de Los Angeles Historic Monument provides 0.33 park acres per 1,000 residents, far below the County average, and the area is determined to have a Very High Need for park space.[3]

- Los Angeles State Historic Park: The Los Angeles State Historic Park provides 6.61 park acres per 1,000 residents. This area is determined to have a Moderate to Very High Need for park space in comparison to the County's average park need.[4]

- Elysian Park: Elysian Park provides 68.48 park acres per 1,000 residents. This area is determined to have a Very Low Need for park space.[5]

[3] Los Angeles County Department of Parks and Recreation. 2016. Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment. Available at: https://lacountyparkneeds.org/. Accessed April 2022.

[4] Los Angeles County Department of Parks and Recreation. 2016. Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment. Available at: https://lacountyparkneeds.org/. Accessed April 2022.

[5] Los Angeles County Department of Parks and Recreation. 2016. Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment. Available at: https://lacountyparkneeds.org/. Accessed April 2022.

Local

City of Los Angeles General Plan

The City of Los Angeles General Plan is a guide for all local land use decisions for the City of Los Angeles and shapes the physical development of the City. The Framework Element of the City of Los Angeles General Plan is a strategy for long-term growth that sets a citywide context to guide the update of the community plan and citywide elements. Chapter 6, Open Space and Conservation, and Chapter 9, Infrastructure and Public Services, of the Framework Element includes goals, objectives and policies for the provision, maintenance, and management, of parks and open space resources. Additional goals, objectives, and policies associated with recreation can be found in the Open Space,[6] and Public Facilities and Services[7] elements of the General Plan. Elements of the proposed Project would be subject to the goals, objectives, and policies identified in the City of Los Angeles General Plan, as shown in Table 3.16-2.

Public Recreation Plan

The Public Recreation Plan, a subsection of the Public Facilities and Service Element of the City of Los Angeles General Plan, sets forth standards for development of parks and recreational sites.[8] Based on the Public Recreation Plan, the City's recreation system must have sufficient land area set aside for recreation; must be properly distributed in residential areas throughout the City; and must meet various recreational needs, including the needs of all age groups. The Public Recreation Plan defines the amenities, desirable size, and service areas of neighborhood recreational sites, community recreational sites, and regional parks. A neighborhood recreational site provides space and facilities for outdoor and indoor recreational facilities, such as softball, basketball, soccer, table games, and lawn games, and should include a community building that meets the needs of the particular neighborhood. A community recreational site provides space for a wider interest range than that of a neighborhood site and typically offers baseball diamonds, football or soccer fields, tennis courts, or a swimming pool. A regional park is generally over 50 acres and provides specialized recreation activities such as lakes, golf courses, campgrounds, or wilderness areas, and emphasizes scenic attractions. Elysian Park, as described below in Section 3.16.2, Environmental Setting, is considered a regional park.

An overall provision of 10 acres per 1,000 persons for total recreational facilities is recommended, which is comprised of two acres per 1,000 persons for neighborhood parks, two acres per 1,000 persons for community parks, and six acres per 1,000 persons for regional parks. However, the Public Recreation Plan recognizes that the recommended long-range service ratio of recreational facilities may not be met during the lifetime of the plan. Therefore, the short and intermediate range standards of the plan that have been adopted by most community plans are 1 acre per 1,000 persons within 1 mile of a neighborhood park and 1 acre per 1,000 persons within 2 miles of a community park.

6 City of Los Angeles Department of City Planning. 1973. City of Los Angeles General Plan Open Space Element. Available at: https://planning.lacity.org/odocument/01ea5f66-3281-488a-930b-f523712fef07/Open_Space_Element.pdf. Accessed April 2022.

7 City of Los Angeles Department of City Planning. 1968. City of Los Angeles General Plan Public Facilities and Services Element. Available at: https://planning.lacity.org/odocument/43319adf-80e9-4080-8d1d-ed7b3d3e2607/Public%20Facilities.pdf. Accessed April 2022.

8 City of Los Angeles Department of City Planning. 1968. City of Los Angeles General Plan Public Facilities and Services Element. Available at: https://planning.lacity.org/odocument/43319adf-80e9-4080-8d1d-ed7b3d3e2607/Public%20Facilities.pdf. Accessed April 2022.

Table 3.16-2: City of Los Angeles General Plan Goals and Objectives

PLAN	GOAL/OBJECTIVE/POLICY
City of Los Angeles General Plan Framework Element	Goal 6A. An integrated citywide/regional public and private open space system that serves and is accessible by the City's population and is unthreatened by encroachment from other land uses. • Objective 6.1. Protect the City's natural settings from the encroachment of urban development, allowing for the development, use, management, and maintenance of each component of the City's natural resources to contribute to the sustainability of the region. • Objective 6.2. Maximize the use of the City's existing open space network and recreation facilities by enhancing those facilities and providing connections, particularly from targeted growth areas, to the existing regional and community open space system. • Objective 6.3. Ensure that open space is managed to minimize environmental risks to the public. • Objective 6.4. Ensure that the City's open spaces contribute positively to the stability and identity of the communities and neighborhoods in which they are located or through which they pass.
	Goal 9L. Sufficient and accessible parkland and recreation opportunities in every neighborhood of the City, which gives all residents the opportunity to enjoy green spaces, athletic activities, social activities, and passive recreation. • Objective 9.22. Monitor and forecast demand for existing and projected recreation and park facilities and programs. • Objective 9.24. Phase recreational programming and park development with growth.
City of Los Angeles Open Space Element	Goal: To provide access, where appropriate, to open space lands.
	Program: The use of public transportation to provide access to open space and recreation areas should be investigated and, where appropriate, provided.

Sources:
City of Los Angeles Department of City Planning. 1995. City of Los Angeles General Plan Framework Element. Available at: https://planning.lacity.org/plans-policies/framework-element. Accessed April 2022.
City of Los Angeles Department of City Planning. 1973. City of Los Angeles General Plan Open Space Element. Available at: https://planning.lacity.org/odocument/01ea5f66-3281-488a-930b-f523712fef07/Open_Space_Element.pdf. Accessed April 2022.

City of Los Angeles Community Plans

Portions of the proposed Project alignment would be located within the Central City North Community Plan Area, the Central City Community Plan Area, and the Silver Lake-Echo Park-Elysian Park Community Plan Area. The City is currently working on an update to the Downtown Community Plan, known as DTLA 2040, which would consolidate the Central City Community Plan and Central City North Community Plan areas. Because it is unknown when the new community plan would be adopted and its EIR certified, the analysis in this section is based on the current applicable land use and zoning designations.

Elements of the proposed Project would be subject to the goals, objectives, and policies identified in the applicable community plans, as shown in Table 3.16-3.

Table 3.16-3
City of Los Angeles Community Plans' Goals, Objectives, and Policies

PLAN	GOAL/OBJECTIVE/POLICY
Central City North Community Plan	Goal 4. Adequate recreation and park facilities which meet the needs of the residents in the Plan Area. • Objective 4-1. To conserve, maintain and better utilize existing recreation and park facilities which promote the recreational needs of the community.
	Goal 5. A community with sufficient open space in balance with development to serve the recreational, environmental and health needs of the community and to protect environmental and aesthetic resources. • Objective 5-1. Encourage retention of passive and visual open space which provides a balance to the urban development of the Plan Area. • Objective 5-2. To ensure the accessibility, security and safety of parks by their users, particularly families with children and senior citizens.
Central City Community Plan	Objective 4-2. To maximize the use of the City's existing and envisioned open space network and recreation facilities by providing connections to the open space system. • Policy 4-2.1. To foster physical and visual links between a variety of open spaces and public spaces Downtown.
	Objective 4-3. To encourage increased use of existing park and recreational spaces. • Policy 4-3.1. Review existing park and recreational space usage in order to determine factors impacting low use of certain facilities.
	Objective 4-4. To encourage traditional and non-traditional sources of open space by recognizing and capitalizing on linkages with transit, parking, historic resources, cultural facilities, and social services programs. • Policy 4-4.1. Improve Downtown's pedestrian environment in recognition of its important role in the efficiency of Downtown's transportation and circulation systems and in the quality of life for its residents, workers, and visitors.
Silver Lake-Echo Park-Elysian Park Community Plan	Goal 4. Adequate recreation and park facilities which meet the needs of the residents in the plan area and create links to existing facilities to expand recreational opportunities citywide. • Objective 4-1. To conserve, maintain and better use existing recreation and park facilities.
	Goal 5. A community with sufficient open space in balance with new development to serve the recreational, environmental and health needs of the community. • Objective 5-1. Preserve existing and develop new open space resources. • Objective 5-2. Provide/ensure access to new recreational resources and open space developed throughout the Plan area, including trails and facilities along the Los Angeles River, and new parks.

Sources:

City of Los Angeles Department of City Planning. 2000. Central City North Community Plan. Available at: https://planning.lacity.org/odocument/e06434a6-341a-48ed-97dc-8f6a85780951/Central_City_North_Community_Plan.pdf. Accessed April 2022.

City of Los Angeles Department of City Planning. 2003. Central City Community Plan. Available at: https://planning.lacity.org/odocument/2ddbdde 0-a8fb-46e3-a151-f52fd09cc084/Central_City_Community_Plan.pdf. Accessed April 2022.
City of Los Angeles Department of City Planning. 2004. Silver Lake-Echo Park-Elysian Park Community Plan. Available at: https://planning.lacity.org/odocument/e87507ac-8c40-49a0-aa1c-21df963f2298/Silver_Lake-Echo_Park-Elysian_Valley_Community_Plan.pdf. Accessed April 2022.

Cornfield-Arroyo Seco Specific Plan

The Cornfield-Arroyo Seco Specific Plan (CASP) establishes planning and zoning provisions for a portion of the Central City North, Northeast, and Silverlake-Echo Park Community Plans, across approximately 660 acres of land including, and surrounding, the Los Angeles State Historic Park. The CASP was developed to meet the several key purposes, including increasing access to open space; providing places for people to socialize, including parks, sidewalks, courtyards and plazas that are combined with shops and services; and providing adequate public recreational open space within walking distance of residents and employees, integrate public art, and contribute to the civic and cultural life of the City. Amongst other zoning regulations, the zoning regulations for open space applicable to the proposed Project include the following:

- Increase recreational opportunities for residents, employees, and visitors.
- Provide pedestrian linkages throughout the Plan area.
- Generate visual interest by creating focal points and meeting places to enhance the area's image.

The Los Angeles City Planning Department is currently evaluating and amending the CASP in order to strengthen the original vision and intent of the plan. City Planning is looking to make targeted revisions to the plan, including its incentive zoning system, and identify additional areas that may allow for affordable or mixed income housing development.[9]

Department of Recreation and Parks 50 Parks Initiative

The City of Los Angeles Department of Recreation and Parks completed its 2009 Citywide Community Needs Assessment and found that the City's over 420 parks and facilities were not equitably distributed and many communities do not have parks within a reasonable distance. Based on these findings, the department developed a long-term initiative to meet the recreation needs of current and future residents of the City to substantially increase the number of parks and facilities across the City, with a specific focus on densely populated neighborhoods and communities that lack sufficient open space and recreational services. The department identified 50 sites in priority areas that could be acquired and developed into new parks. The nearest park to the proposed Project from the Community Needs Assessment is the Ord and Yale Street Park, approximately 0.30 miles west of the proposed Alameda Tower site.[10]

[9] Cornfield Arroyo Seco Specific Plan (CASP) Update. Los Angeles City Planning. Available at: https://planning.lacity.org/plans-policies/casp-update#aboutabout. Accessed April 2022.
[10] City of Los Angeles Department of Recreation and Parks. 2021. 50 Parks Initiative. Available at: https://www.laparks.org/50parks. Accessed April 2022.

Metro's Transit to Parks Strategic Plan

The goal of Metro's Transit to Parks Strategic Plan is to increase access to parks and open space throughout Los Angeles County using targeted, holistic ways to focus on increasing access for communities of need, such as those not within walking distance or without convenient public transit to a park. Expanding access to parks and open space is a key priority for the region, and the Plan sets to accomplish this priority through partnerships between Metro, cities, the County of Los Angeles, natural asset conservancies, open space management agencies, community-based organizations, and others around the County.[11]

Connect US Action Plan

In 2015, Metro, in collaboration with the City of Los Angeles, completed the Connect US Action Plan, outlining active transportation strategies to connect people to LAUS, the 1st/Central Regional Connector Station, and the historic neighborhoods surrounding them. The Connect US Action Plan seeks to "transform streets into safer and more beautiful places to walk and bike" and "unify the historic/cultural neighborhoods of El Pueblo, Chinatown, Cornfield Arroyo Seco, Boyle Heights, Arts District, Little Tokyo, and Civic Center." The Connect US Action Plan identified potential pedestrian and bicycle linkages including a proposed esplanade with walkway and bike path along Alameda Street from the Arts District to College Street, which may be extended north to the Los Angeles State Historic Park.

3.16.2 Environmental Setting

The proposed Project would connect Los Angeles Union Station (LAUS) to the Dodger Stadium property via an aerial gondola system. The proposed Project would also include an intermediate station at the southernmost entrance of the Los Angeles State Historic Park. The proposed Project would provide an aerial rapid transit (ART) option for visitors to Dodger Stadium, while also providing access between the Dodger Stadium property, the surrounding communities, including Chinatown, Mission Junction, Elysian Park, Echo Park, and Solano Canyon, and the Los Angeles State Historic Park, to the regional transit system accessible at LAUS. The surrounding land uses within the proposed Project area include high and medium density residential, commercial, retail, institutional, transit-related infrastructure, parks and open space, and public facilities uses. The proposed Project alignment would generally be located within the public right-of-way. The Chinatown/State Park Station would be located adjacent to Spring Street, partially on City ROW and partially within the boundaries of the Los Angeles State Historic Park, in the southernmost portion of the Los Angeles State Historic Park, and the alignment would cross over the western edge of the park. Impacts related to parks and recreation can also occur to areas outside of a Project's direct footprint; therefore, a 0.25-mile buffer around the proposed Project alignment has been established for this analysis, which will be characterized as the "Project Study Area.".

Existing Public Parks and Recreation Facilities

The majority of parks and recreational facilities within the City of Los Angeles are managed and operated by the City of Los Angeles Department of Recreation and Parks (LARAP). The LARAP manages over 16,000 acres of parkland and recreational areas within the City, including hundreds of athletic fields, 422 playgrounds, 321 tennis courts, 184 recreation centers, 72 fitness areas, 62

[11] Los Angeles County Metropolitan Transportation Authority. 2019. Transit to Parks Strategic Plan. Available at: http://media.metro.net.s3.amazonaws.com/projects_studies/toc/images/nextStop_transitToParks_05-2019.pdf. Accessed April 2022.

swimming pools and aquatic centers, 30 senior centers, 26 skate parks, 13 golf courses, 12 museums, and 9 dog parks.[12]

The parks and recreational facilities located within the Project Study Area are listed in Table 3.16-3 from south to north and are further described below. As shown in Table 3.16-4, one park within the Project Study Area is operated by the City, two parks are operated by LARAP, and one park is operated by the California Department of Parks and Recreation. No recreational facilities operated by the Los Angeles County Parks and Recreation are located within the Project Study Area.[13] Figures 3.16-1 shows the locations of the recreational and park facilities located in the Project Study Area.

Los Angeles Plaza Park (Father Serra Park)

Los Angeles Plaza Park (Father Serra Park) is located at 125 Paseo De La Plaza and is bounded by El Pueblo de Los Angeles on the north, North Alameda Street on the east, an on-ramp to U.S. Route 101 freeway and public facilities on the south, and North Main Street on the west. The park is maintained by LARAP and is bisected by Los Angeles Street. The western portion of the park is known as the plaza area and has a circular configuration. The paved outdoor pedestrian plaza area has a wrought iron kiosk in the center, with benches and fig, orange, and cypress trees planted around its perimeter. The park is a major event location for food festivals, receptions, concerts, health fairs, dance performances, art exhibits, and other cultural activities.[14] The western portion of the park is also part of El Pueblo, as discussed in Section 3.5, Cultural Resources. The eastern portion of Los Angeles Plaza Park is known as Father Serra Park. Father Serra Park is located directly across from LAUS and is comprised of a grass-covered area. Both vehicular and pedestrian access to the park is provided via North Main Street or North Los Angeles Street. Los Angeles Plaza Park is open every day from dawn to dusk.[15]

---

12 City of Los Angeles Department of Recreation and Parks. 2021. Who We Are. Available at: https://www.laparks.org/department/who-we-are. Accessed April 2022.

13 Los Angeles County Department of Parks and Recreation. 2021. Find A Park (Search by Finding Parks Near: 800 North Alameda St, Los Angeles, CA 90012; Distance: 5 miles; Search for Parks and Amenities). Available at: https://parks.lacounty.gov/. Accessed April 2022.

14 City of Los Angeles. 2021. El Pueblo de Los Angeles: Events. Available at: https://elpueblo.lacity.org/events. Accessed April 2022.

15 City of Los Angeles Department of Recreation and Parks. 2021. Los Angeles Plaza Park (A.K.A. Father Serra Park). Available at: https://www.laparks.org/park/los-angeles-plaza. Accessed April 2022.

Table 3.16-4
Public Recreational Facilities and Parks within Project Study Area

Name and Address	Managed By	Linear Distance to Nearest Project Component	Size (Acres)	Type of Facility and Amenities
Los Angeles Plaza Park (Father Serra Park) 125 Paseo De La Plaza, Los Angeles, CA 90012	LARAP	290 feet south of Alameda Station	1.25	Type: Park Amenities: Benches; grassy area; pedestrian plaza
Placita de Dolores 815 North Alameda Street, Los Angeles, CA 90012	City of Los Angeles, El Pueblo Department	10 feet south of vertical circulation elements (i.e. elevators, escalators, stairs) and new pedestrian plaza of Alameda Station	0.3	Type: Plaza Amenities: Grassy area; concrete seating around interior perimeter; public artwork; pedestrian plaza
Los Angeles State Historic Park 1245 N Spring Street, Los Angeles, CA 90012	California Department of Parks and Recreation	Portion of the proposed Chinatown/State Park Station located in the southernmost portion of Los Angeles State Historic Park	32	Type: State Park (Historic) Amenities: Picnic areas; exhibits; interpretive and family programs; guided tours; nature and wildlife viewing; trails; public events; parking
Radio Hills Gardens (Elysian Park) 929 Academy Road, Los Angeles, CA 90012	LARAP	275 feet east of Stadium Tower 325 feet north of Broadway Junction	575	Type: Open Space Amenities: Hiking trail; grassy area

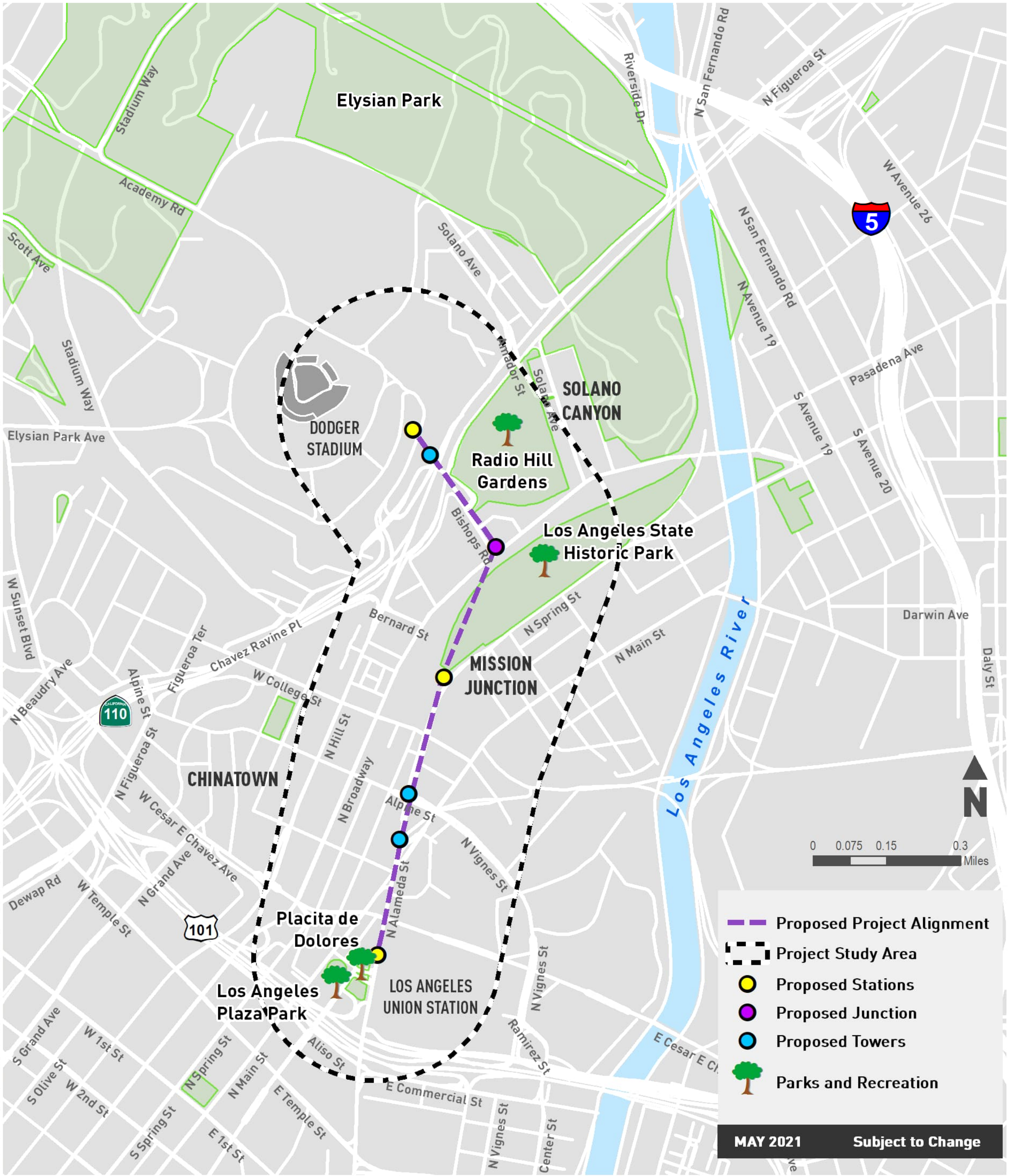


Figure 3.16 1: Existing Parks and Recreational Facilities in Project Study Area

Placita de Dolores

Placita de Dolores is a pedestrian plaza located at 815 North Alameda Street and is bounded by a surface parking area on the north, North Alameda Street on the east, Los Angeles Street on the south, and buildings that are part of El Pueblo de Los Angeles Historical Monument (El Pueblo), also known as the Los Angeles Plaza Historic District, on the west. Constructed in 1979, Placita de Dolores is an elevated triangular shaped plaza that is primarily hardscaped with a grassy area in the center and includes concrete seating in the interior perimeter. The plaza comprises approximately 0.3 acres, is maintained by the City of Los Angeles, and is used for passive recreation such as experiencing the public art located within the plaza. Placita de Dolores features a mural by Eduardo Carillo called *El Grito (The Cry)* and a bronze statue of Antonio Aguilar on horseback within a hexagonal pool.[16]

Los Angeles State Historic Park

Los Angeles State Historic Park is located at 1245 N. Spring Street and is bounded by the Metro L Line (Gold) ROW and North Broadway to the north, a mostly vacant construction staging area to the east, Spring Street and commercial/industrial uses to the south, and Metro L Line (Gold) ROW and commercial/industrial uses to the west. Both vehicular and pedestrian access to Los Angeles State Historic Park is provided via North Spring Street. Currently, there is no pedestrian access from the neighborhoods off Broadway to the Los Angeles State Historic Park due to grade changes and the Metro L Line (Gold) tracks. Los Angeles State Historic Park is open every day from 8:00 am to sunset, but hours may vary for special events. [17]

Owned and operated by California Department of Parks and Recreation, Los Angeles State Historic Park comprises 32 acres of open space directly adjacent to the community of Chinatown. Los Angeles State Historic Park was developed to preserve the site's primary cultural resource values, and the park is considered an interpretive and cultural facility, as well as an inviting open space and gathering-place intended to serve nearby residents in Los Angeles, residents throughout the state, as well as out-of-state visitors.[18,19] Currently, Los Angeles State Historic Park can host large events with up to 25,000 people and smaller monthly events of 500 to 5,000 people.[20]

The park was previously known as the River Station Area and developed in the 1870s into the Southern Pacific Railroad's River Station Yard, serving as a major industrial and commercial center for Los Angeles. The nineteenth century buildings and structures associated with the railyard were demolished and other features were covered with fill in the early twentieth century and replaced with a new railroad complex. The twentieth century railroad complex was in turn replaced by the Los Angeles State Historic Park in 2001. State Parks purchased the then vacant railyard property in 2001 after the Chinatown Yard Alliance coalition moved to block private industrial development of the parcel. An extensive public and stakeholder outreach process, including a legislative Advisory Group that represented over 60 community organizations, was

16 Public Art in Public Places. 2021. "Antonio Aguilar" (2012) by Dan Medina. Available at: https://www.publicartinpublicplaces.info/antonio-aguilar-2012-by-dan-medina. Accessed April 2022.
17 California Department of Parks and Recreation. 2021. Los Angeles State Historic Park. Available at: https://www.parks.ca.gov/?page_id=22272. Accessed April 2022.
18 California Department of Parks and Recreation. 2006. Los Angeles State Historic Park Interpretive Master Plan.
19 California Department of Parks and Recreation. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf. Accessed April 2022.
20 California Department of Park and Recreation. 2012. Los Angeles State Historic Park Master Plan Development Plan Phase I Implementation.

convened that led to a visioning document in 2003. Using that document, State Parks continued with their General Planning process, including over 60 public meetings with stakeholders that resulted in the Los Angeles State Historic Park General Plan approval by the State Park and Recreation Commission in 2005. State Parks then worked to design and develop the park for public use per its General Plan.

Once a major industrial and commercial center for Los Angeles, the park now provides passive recreation opportunities and also offers guided tours and hosts community events, from widely attended concerts to smaller community workshops. The site now comprises an elongated, grass-covered area that is primarily used for picnicking, jogging, walking, informal play, and other activities requiring large open areas. The green space provides a location for Los Angeles residents to exercise and socialize in a landscaped setting, within a region that has been historically limited in terms of access to parkland.[21] Weekly and monthly community events hosted at the park include Walk It Out, Forward Movement with API and Chinatown FIT Club, Therapeutic Thursday, Weed Warriors, First Friday Campfire, and Arts in the Park. In 2019, the average weekday and weekend attendance for the park was approximately 750 and 1,200 attendees, respectively. In 2019, Los Angeles State Historic Park also hosted concerts, craft fairs, partnership events, 5K/10K runs, workshops, and cultural festivals.[22] These events had attendance ranging from 6,000 to 22,500 attendees, with concerts typically hosting the most attendees.[23]

Elysian Park and Radio Hill Gardens

Elysian Park is located at 929 Academy Road and is generally bounded by Interstate 5 on the north, the Los Angeles River on the east, Los Angeles State Historic Park on the south, and the community of Echo Park on the west. Dedicated in 1886 and consisting of 575 acres, Elysian Park is the oldest and second largest park in the City of Los Angeles.[24] Owned by the City of Los Angeles and maintained by LARAP, Elysian Park offers hiking trails, bike paths, picnic areas with barbeque pits, a man-made lake, children’s play areas, and playfields, including the Elysian Park Recreation Center, Bishop Canyon, Chavez Ravine Arboretum, Buena Vista Meadow Picnic Area, Montecillo De Leo Politi Park, Chavez Ridge Disc Golf, and Radio Hill Gardens.

Radio Hill Gardens is located approximately 275 feet east of the proposed Stadium Tower and 325 feet north of Broadway Junction. Radio Hill Gardens was created in the mid-1990s to highlight native plants, and is now known for its hillside area featuring pathways and panoramic city views among native plants. All other recreational areas are located a linear distance of 0.5 miles or farther from the proposed Dodger Stadium Station and proposed Stadium Tower. Various vehicular access points to Elysian Park are available via Scott Avenue, Stadium Way, Academy Road, Park Row Street, and Solano Avenue. The two entrances to Radio Hill recreation area are located off Stadium Way and Bishops Road and Amador Street between Solano Avenue and SR-110. Pedestrian access to Elysian Park is also provided via multiple access points. In the vicinity of the proposed Project, pedestrian access to Elysian Park is available via Bishops Road and Academy Road. However, access to Elysian Park may be difficult for many of the surrounding

21 California Department of Parks and Recreation. 2021. Los Angeles State Historic Park. Available at: https://www.parks.ca.gov/?page_id=22272. Accessed April 2022.

22 California Department of Parks and Recreation. 2021. Los Angeles State Historic Park. Concerts and Events. Available at: https://lastatehistoricpark.org/events. Accessed April 2022.

23 S. Campbell. May 2020. Email correspondence.

24 Echo Park Historical Society. 2021 Elysian Park. Available at: http://historicechopark.org/history-landmarks/places-landmarks/elysian-park/. Accessed April 2022.

neighborhood residents because of the steep terrain and a lack of convenient or available transportation to this park.[25]

Dodger Stadium

Although Dodger Stadium is not a publicly-managed park or recreational facility, Dodger Stadium is the home to the Los Angeles Dodgers Major League Baseball team and has hosted more than 147 million fans since its opening in 1962.[26] As discussed in Section 2.3.5 of the Project Description, Dodger Stadium is located at 1000 Vin Scully Avenue on the hillside of Chavez Ravine and overlooks downtown Los Angeles to the south and the San Gabriel Mountains to the north. In addition to Major League Baseball games, Dodger Stadium also hosts concerts, other sporting events, and recreational events such as the Los Angeles Dodgers Foundation 5K and 10K Run and Kids Fun Run Presented by UCLA Health,[27] the Los Angeles Marathon,[28] and LA BIG 5K.[29]

3.16.3 Methodology

This section evaluates the potential of the proposed Project to adversely alter the existing operations of parks and recreational facilities. In order to establish an operational baseline and evaluate the impacts of the proposed Project, a study area of 0.25-mile buffer around the proposed Project alignment was established. The following agency websites were then consulted for locations and general information regarding parks and recreation: City of Los Angeles Department of Recreation and Parks, City of Los Angeles Planning Department, and California Department of Recreation and Parks. The City of Los Angeles Zone Information and Map Access System (ZIMAS) and Google Earth Pro also provided information associated with parks and recreation. The Los Angeles County Department of Parks and Recreation's *Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment* provided information on park need in the County based on a series of metrics.[30] Planning documents were reviewed for relevant plans, goals, and policies.

Thresholds of Significance

For purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In order to avoid redundancy, the thresholds related to recreational facilities and parks from Appendix G of the CEQA Guidelines are included in this section.

---

25 California Department of Parks and Recreation. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf. Accessed April 2022.

26 Major League Baseball Advanced Media. 2021. Dodger Stadium History. Available at: https://www.mlb.com/dodgers/ballpark/information/history. Accessed April 2022.

27 Los Angeles Dodgers Foundation. 2022. Los Angeles Dodgers Foundation Sunset Run. Available at: https://dodgers.race-mlb.com/. Accessed April 2022.

28 The McCourt Foundation. 2022. Los Angeles Marathon. Available at: https://www.lamarathon.com/. Accessed April 2022.

29 The McCourt Foundation. 2022. The LA Big 5K. Available at: https://www.labig5k.com/pages/la-big-5k-info. Accessed April 2022.

30 Los Angeles County Department of Parks and Recreation. 2016. Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment. Available at: https://lacountyparkneeds.org/. Accessed April 2022.

The following thresholds related to recreation are from Section XVI, Recreation, in Appendix G of the CEQA Guidelines and are presented below. The proposed Project would have a significant impact on recreational facilities if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or

- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

The following threshold related to parks is from Section XV, Public Services, in Appendix G of the CEQA Guidelines. The proposed Project would have a significant impact on parks if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services: Parks.

3.16.4 Environmental Impacts

PR-1: *Would the Project result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

Construction Impacts

Less Than Significant Impact. Increased demand for parks and recreational services is generally associated with an increase in housing or population. As discussed in Section 3.14, Population and Housing, a peak of approximately 100 total workers are anticipated during construction across all project components.[31] Because the ART system is a highly specialized system, there are a limited number of ART specialists worldwide that are trained in the installation of the ART system and the pulling of the ropeway cables between the stations, junction, and towers. During the proposed Project's later phases of construction, a limited number of ART manufacturer and cable specialists would be on site during the construction phases that involve the installation of the ART system and the cable pulling. However, these specialized personnel would be considered "people in transitory locations" according to U.S. Census residence rules as they would be expected to leave when construction is completed. As a result, it is anticipated that the labor force from within the region would be sufficient to complete the majority of project construction without a substantial influx of new workers and their families. Moreover, it is anticipated that construction workers would use parks and recreational facilities near their homes and families for recreational purposes. Should any construction workers use parks or recreational facilities in the Project Study Area on lunch breaks or after their shifts end, such park use would be rare because construction workers are temporary employees with high turnover associated with the various phases of construction. In addition, the use would be temporary and cease following construction. As such, construction of the proposed Project would not generate a

[31] It is assumed that the foundation construction phase of the Alameda Station, Chinatown/State Park Station, Broadway Junction, and Dodger Stadium Station will be concurrent and require approximately 25 workers on site at each location.

permanent increase or substantial temporary increase in the demand for parks, or generate new permanent residents that would result in an increase in the use of existing parks and recreational facilities such that substantial deterioration of parks would occur or be accelerated.

Alameda Station

Impacts to parks and recreational facilities from the construction of the Alameda Station would be temporary. Placita de Dolores is located directly adjacent to the Alameda Station. Vertical circulation elements (i.e. elevators, escalators, stairs) for pedestrian access, which would also serve as queuing areas to the station, would be introduced at-grade north of the Placita de Dolores in a proposed new pedestrian plaza at El Pueblo on the west in an area currently containing a parking and loading area for El Pueblo. The Alameda Station would not result in direct temporary impacts to Placita de Dolores, as construction of the proposed Project would not require any closure of the Placita de Dolores. However, construction of the Alameda Station would temporarily generate noise and dust, introduce heavy construction equipment into the area, and require roadway and pedestrian closures along Alameda Street (refer to Section 3.3, Air Quality, Section 3.13, Noise, and Section 3.17, Transportation, for impacts related to noise, dust, and roadway closures). While there would be temporary road closures on Alameda Street, access to the Placita de Dolores and the nearby Los Angeles Plaza Park would be maintained. As the indirect impacts to Placita de Dolores would be temporary in nature and direct impacts to the Placita de Dolores are not anticipated, impacts would be less than significant.

Alameda Tower and Alpine Tower

Construction of the Alameda Tower and Alpine Tower would not impact parks and recreational facilities. Construction of the Alameda Tower would occur at the Alameda Triangle, which is City ROW and not located within or adjacent to a park or recreational facility. Construction of the Alpine Tower would occur on a City-owned parcel that is currently being used as a non-public parking storage for City vehicles, at the northeast corner of Alameda Street and Alpine Street, which is not located within or adjacent to a park or recreational facility. Therefore, construction of the Alameda Tower and Alpine Tower would not result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Chinatown/State Park Station

The Los Angeles State Historic Park has the potential to be impacted by the construction of the proposed Chinatown/State Park Station. The northern portion of the station would be integrated into the southern boundary of the Los Angeles State Historic Park. Construction of Chinatown/State Park Station would require the temporary closure of approximately 1.59 acres of the southern entrance to Los Angeles State Historic Park during the approximately 19 months construction duration for the Chinatown/State Park Station. While there would be a temporary closure, access to the park would be maintained as there are various access points (e.g., at the intersection of Sortello and North Spring Street) to Los Angeles State Historic Park. Construction of the Chinatown/State Park Station would not require any closures of areas used for recreation; however, it would affect the current location of the outdoor seating area associated with the Park concessionaire.

Construction of the Chinatown/State Park Station would temporarily fence off portions of the park, generate dust and noise, and introduce heavy construction equipment into the area, which may potentially discourage people from using certain portions of the park, disrupt events occurring at the park, or increase the use of the open portions of the park. In addition, during one of the final phases of construction, the overhead ropeway cables of the ART system would be installed, which would require a brief and temporary closure of the southernmost corner and western edge of the Los Angeles State Historic Park beneath the cables for safety purposes. However, other options for pedestrian access, including the provision of pedestrian detours during construction, would allow for continued pedestrian access within the Project area. In the location of the Chinatown/State Park Station, a covered pedestrian sidewalk on the roadway would be provided to maintain pedestrian access during all phases of construction, with the exception of 10 non-consecutive days of asphalt / restriping that would occur on the existing southbound parking lane. In addition, the eastern sidewalk on Spring Street would remain open for pedestrian access at all times.

As such, park patrons would still be able to access approximately 30 acres of the 32-acre Los Angeles State Historic Park, including all the recreational areas, during construction activities within the park. In addition, regular park patrons are familiar with temporary park closures as they often occur in conjunction with concerts, fairs, and festivals that take place within the park throughout the year. It is not anticipated that construction activities at the southernmost portion of the park would increase the use in other areas of the park or at other parks and recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated as the portion where construction activities are occurring is primarily landscape and hardscape. Impacts would be less than significant.

Broadway Junction

Construction of Broadway Junction would primarily occur on privately-owned property with a portion of the junction and overhead cable infrastructure above the City ROW, which is not located within or directly adjacent to a park or recreational facility. During certain, limited phases of construction of the Broadway Junction, temporary lane closures would be required on North Broadway between Cottage Home Street and Savoy Street, and Bishops Road between North Broadway and Savoy Street, while maintaining local and emergency access for adjacent properties as well as pedestrian access along Broadway. Radio Hill Gardens, located approximately 325 feet north of Broadway Junction, is separated from the Project component site by a row of single-family houses and steep hilly terrain. While there would be a temporary road closure of Bishops Road south of Radio Hill Garden, access to the area would be maintained as the trail entrance could be accessed via Cottage Home Street. Therefore, construction of Broadway Junction would not result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, and impacts would be less than significant.

Stadium Tower

Construction of Stadium Tower would not impact parks and recreational facilities. Construction of Stadium Tower would primarily occur on privately-owned property, which is not located within or directly adjacent to a park or recreational facility. Radio Hill Gardens, located approximately 275 feet east of Stadium Tower, is separated from the Project component site by the SR-110. Therefore, construction of Broadway Junction would not result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Dodger Stadium Station

Construction of the proposed Project would not impact Elysian Park. Construction of Dodger Stadium Station would occur on private property. Elysian Park would maintain service to current users and would not be impacted by the construction of the proposed Project. Therefore, construction of the proposed Project would not result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Therefore, impacts related to increase in the use of existing neighborhood and regional parks or other recreational facilities from construction of the proposed Project would be less than significant.

Operational Impacts

Less Than Significant Impact. The proposed Project would provide infrastructure through an ART system within urbanized downtown Los Angeles, and would increase connectivity in the Project Study Area, providing direct linkages for existing residents and communities to parks and recreational facilities, including Los Angeles Plaza Park, Placita de Dolores, and the adjacent Olvera Street; Los Angeles State Historic Park; Dodger Stadium; and Elysian Park. By providing direct linkages for existing residents, the proposed Project would have the beneficial effect of increasing transit accessibility to parklands and recreational facilities for potential visitors of the parks through a connection to the Metro and regional transit system.

Increased use of existing neighborhood and regional parks or other recreational facilities is typically associated with an increase in population or increased park amenities. No housing units are proposed as part of the Project. Operation of the proposed Project is anticipated to require up to 20 employees. It is likely that these employees would come from within the region, and the nominal number of employees would not result in a substantial influx of new workers and their families that would increase the use of parks or recreational facilities. In addition, although these employees may use parks or recreational facilities within the Project Study Area on lunch breaks or after their shifts end, the number of employees is considered nominal and would not result in a noticeable increased use of existing parks or other recreational facilities, such that substantial physical deterioration would occur. Therefore, the proposed Project would not result in increased population that would increase the use of existing parks or other recreational facilities such that substantial physical deterioration would occur.

While the proposed Project would provide increased connectivity to existing parks for local residents, which has the potential to result in increased use of these facilities, existing facilities in the Project Study Area currently experience attendance at much lower rates than what the parks can accommodate. For example, as discussed further below, the Los Angeles State Historic Park has historically accommodated events with attendance ranging from 6,000 to 22,500 visitors,[32] and the average weekday and weekend attendance for the park in 2019 was approximately 750 and 1,200. Therefore, the Los Angeles State Historic Park would be able to accommodate additional visitation. Regardless, the proposed Project would provide additional concessions, restrooms, and covered breezeways similar to existing park amenities, as well as new features such as landscaping, shade structures, and seating to improve pedestrian access.

It is also important to note that park demand is based on population, and as discussed above, the proposed Project would not result in an increase in population to the extent that would necessitate new parks or expansion of existing parks. Rather, residents already geographically served by these existing facilities would be afforded the opportunity of improved access. Such improvements would align the proposed Project with the objectives, goals, programs, and policies of regulatory plans such as Metro's Transit to Parks Strategic Plan, the Los Angeles State Historic Park General

32 S. Campbell. May 2020. Email correspondence.

Plan, the City of Los Angeles Open Space Element, and the various community plans within the Project Study Area, which all strive to provide local access to existing parks via public transit. Additionally, regional visitors would be traveling to an urbanized City with over 16,000 acres of parkland and recreational areas; it is unlikely that increased access to parks within the project study area would draw a substantial numbers of visitors from other park and recreational areas in the City to the Project Study Area. Therefore, potential effects from increased accessibility are not expected to increase the use of existing parks or other recreational facilities such that substantial physical deterioration would occur.

Alameda Station

Operation of Alameda Station would introduce vertical circulation elements (i.e., elevators, escalators, stairs) for pedestrian access, which would also serve as queuing areas to the station, would be introduced at-grade north of the Placita de Dolores in a proposed new pedestrian plaza at El Pueblo on the west in an area currently containing a parking and loading area for El Pueblo. There is potential for riders of the ART system to utilize parks such as the Placita de Dolores and Los Angeles Plaza Park; however, it is not anticipated that the proposed Project would accelerate physical deterioration of the Placita de Dolores or Los Angeles Plaza Park. The Alameda Station would include trash receptacles, and the vertical circulation and queuing areas north of the Placita de Dolores would be monitored by security, including low-level lighting features, in order to minimize impacts to the area. Therefore, impacts related to an increase in the use of existing parks and recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated would be less than significant.

Alameda Tower and Alpine Tower

As described above, the Alameda Tower and Alpine Tower would not be located within or adjacent to a park or recreational facility. Therefore, operation of the Alameda Tower and Alpine Tower would not result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Chinatown/State Park Station

While the proposed Project may increase usage of the Los Angeles State Historic Park and attendance from existing conditions as it would provide transit access to the park from both LAUS and Dodger Stadium, the proposed Project would not result in demand beyond what is already contemplated for the park. The park currently has the ability to host large events with up to 25,000 people and smaller monthly events. The current average attendance numbers are lower than what the park can accommodate, with an average weekday and weekend attendance of approximately 750 and 1,200 people, respectively.

Currently, the park's southernmost entrance includes a fencing system which can be closed after park operating hours; hardscaping and landscaping; and a concession stand. The Chinatown/State Park Station would include the addition of amenities, which would be constructed within the southern section of the Park in close proximity to the proposed Chinatown/State Park Station. These amenities include approximately 740 square feet of concessions, 770 square feet of restrooms, and a 220 square foot covered breezeway connecting the concessions and restrooms. These amenities would be operated by the Los Angeles State Historic Park. These proposed amenities would not change the existing use and capacity of Los Angeles State Historic Park, as the park already includes these types of amenities intended for use by park patrons.

Additionally, the Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program.

Additional security would also be provided for use after park hours. Use of the southernmost portion of the park would be controlled by a dual-gating system, with one gate fencing off the park from the general public (this gate exists today), as well as a second outer gate that would be located outside of the park property, which would provide fencing for the proposed concession and restrooms. This dual-gate design would ensure that park areas would not be accessible to the general public and the Project users once the park is closed. However, should the concessionaire wish to operate after park hours, the dual-gating system would allow the Park amenities to remain accessible to the general public and proposed Project users.

In addition, the proposed Project does not propose housing units that would otherwise increase the population and therefore increase the usage of the park which may result in accelerated deterioration. Instead, the proposed Project would improve the area's mobility and accessibility by providing an ART option to the regional transit system at LAUS, including for spectators and visitors of Dodger Stadium, visitors of the Los Angeles State Historic Park and Elysian Park, and residents of the surrounding communities. This increased access to the Park is in accordance with several community and state-wide plans, including the Los Angeles State Historic Park General Plan, City of Los Angeles General Plan, Central City North Community Plan, CASP, Metro's Transit to Parks Strategic Plan, and Connect US Action Plan, to increase access to the park.

Moreover, the proposed Project's location in the park and required aerial clearance would not increase the usage of the park such that substantial physical deterioration of the facility would occur or be accelerated. The Chinatown/State Park Station would be located adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park and would have a footprint of 2,195 square feet in the park, and the station canopy would have an overhang of 9,320 square feet over the park. The proposed Project alignment crosses over the westernmost edge of the Los Angeles State Historic Park, adjacent to the existing Metro L Line (Gold) and the associated overhead catenary system. The proposed Project's required aerial clearance width over the Los Angeles State Historic Park would be 53 feet 2 inches wide with an area of approximately 59,470 square feet, plus an Additional Separation Buffer. The proposed Project's vertical clearance to the bottom of the cabins would range from 26 to 53 feet with an average of approximately 40 feet from ground level over the park. Given these required clearances and the height at which the cabins would travel over the Los Angeles State Historic Park, it will continue to be possible for most events to take place both under the majority of the alignment within the park and adjacent to the alignment. Given the large-scale events currently held at the park (as discussed in Chapter 5, Other CEQA Considerations, Subsection 5.5.2 Special Events at the Los Angeles State Historic Park), additional transportation options to access the Park have the added benefit of reducing the detrimental impacts of those events to the Park and the neighboring communities. Coordination as to operation of special events at the Los Angeles State Historic Park and the proposed Project are anticipated to be addressed in operational agreements related to the park.

Therefore, while the proposed Project would provide transit access to the park, the proposed Project would not increase the use of Los Angeles State Historic Park to the extent that substantial physical deterioration of the facility would occur or be accelerated, and the operational impacts would result in less than significant impacts.

Broadway Junction

As described above, Broadway Junction would not be located within or directly adjacent to a park or recreational facility. Therefore, operation of Broadway Junction would not result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Stadium Tower

Stadium Tower would not be located within or directly adjacent to a park or recreational facility. Therefore, operation of Stadium Tower would not result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Dodger Stadium Station

The proposed Project would include a potential mobility hub at Dodger Stadium Station, where passengers would be able to access a suite of first- and last-mile multi-modal options, and connections to Elysian Park and adjacent neighborhoods. The potential mobility hub and connections to Elysian Park and adjacent neighborhoods would have the potential effect of increasing transit accessibility and non-motorized transportation options to Elysian Park as users of the proposed ART system would be able to access the park from the terminus at Dodger Stadium Station. Implementation of the potential mobility hub and connections to Elysian Park and adjacent neighborhoods would support the goal of the Silver Lake-Echo Park-Elysian Park Community Plan to create links for existing residents of the plan area to existing facilities in the City to expand their recreational opportunities. However, the proposed Project would not change the existing use and capacity of Elysian Park as the park is the second largest park in the City of Los Angeles, spanning 575 acres. It is not anticipated that operation of the proposed Project would result in substantial physical deterioration of the Elysian Park by providing access to the park, as the park is underutilized and the proposed Project does not propose housing units that would otherwise increase the population of the area.[33] Instead, the proposed Project would improve the mobility and accessibility for people in the area by providing an ART option, in accordance with several community plans, including the City of Los Angeles General Plan, Silver Lake-Echo Park-Elysian Park Community Plan, and Metro's Transit to Parks Strategic Plan, to increase access to the park. Therefore, the proposed Project would not increase the use of Elysian Park to the extent that substantial physical deterioration of the facility would occur or be accelerated, and the operational impact would be less than significant impacts.

PR-2: *Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Construction

Less Than Significant Impact. The proposed Project is a transit project that would construct an aerial rapid transit system between LAUS and Dodger Stadium, and would not include the construction or expansion of recreational facilities.

[33] Based on a review of the Los Angeles County Department of Parks and Recreation, *Los Angeles Countywide Parks and Recreation Needs Assessment* (May 3, 2016), metrics of available park land and park acre need, available at: https://lacountyparkneeds.org/. Accessed April 2022.

Alameda Station

Construction impacts of the Alameda Station would be the same as described in Threshold PR-1 above. Construction of the Alameda Station's vertical circulation and queuing area would be introduced at-grade north of the Placita de Dolores in an area currently containing a parking and loading area for El Pueblo. Construction of the Alameda Station would not include recreational facilities or require the construction of expansion of recreational facilities (i.e. Placita de Dolores) which might have an adverse physical effect on the environment. No impact would occur.

Alameda Tower and Alpine Tower

Construction of the Alameda Tower and Alpine Tower is comprised of the construction of cable-supporting towers. Construction of the Alameda Tower and Alpine Tower would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. No impact would occur.

Chinatown/State Park Station

Construction of the Chinatown/State Park Station would require closure of approximately 1.5959 acres of the southern entrance to Los Angeles State Historic Park and the southernmost corner and western edge during cable installation. The southern portion of the station would be located on City ROW, while the northern portion of the station would be integrated into the southern boundary of the Los Angeles State Historic Park. Construction of the Chinatown/State Park Station would result in temporary environmental impacts, such as generating dust and noise, and introducing construction equipment to the park, which are covered in the construction activities analyzed throughout the Draft EIR for each resource topic. Construction of the Chinatown/State Park Station would include construction of amenities within the park boundary, including approximately 740 square feet of concessions, 770 square feet of restrooms, pedestrian improvements, such as landscaping, shade structures, and seating. Additionally, the Chinatown/State Park Station would include a mobility hub. However, construction of the Chinatown/State Park Station would not directly include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Impacts would be less than significant.

Broadway Junction

Construction of Broadway Junction is comprised of construction of a non-passenger junction with vertical circulation elements for staff and maintenance access. Construction of Broadway Junction would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. No impact would occur.

Stadium Tower

Construction of Stadium Tower is comprised of construction of a cable-supporting tower. Construction of Stadium Tower would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. No impact would occur.

Dodger Stadium Station

Construction of Dodger Stadium Station would occur on private property. Construction may potentially include a mobility hub, and connections to Elysian Park and adjacent neighborhoods.

Construction impacts of Dodger Stadium Station would be temporary which are covered in the construction activities analyzed throughout the Draft EIR for each resource topic. Additionally, construction of Dodger Stadium Station would not directly include recreational facilities or require the construction of or expansion of recreational facilities which might have an adverse physical effect on the environment. Impacts would be less than significant.

Operational Impacts

Less Than Significant Impact. The proposed Project would improve mobility and accessibility for the region by providing high capacity aerial rapid transit connecting the regional transit system at LAUS, Dodger Stadium, the Los Angeles State Historic Park, Elysian Park, and surrounding communities. The proposed Project would also provide a potential mobility hub at Dodger Stadium property to provide connectivity to Elysian Park and surrounding communities. The proposed Project would also provide a mobility hub at the Chinatown/State Park Station where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. ART is a proven, safe, sustainable, high-capacity, and highly efficient form of transportation that would function as both a reliable rapid transit system and first/last mile connector. In addition, the proposed Project would welcome visitors to Los Angeles. Therefore, the proposed Project has the potential to draw an increased population of visitors to the parks within the proposed Project vicinity. Visitors and tourists to the Los Angeles region may use the proposed Project for tourism and recreational purposes. However, regional visitors would be traveling to an urbanized City with over 16,000 acres of parkland and recreational areas; it is unlikely that increased access to parks within the project study area would draw a substantial numbers of visitors from other park and recreational areas in the City to the Project Study Area. Therefore, potential effects from increased accessibility are not expected to increase the use of existing parks or other recreational facilities such that new or expanded facilities would be required. By creating a high-quality and high-capacity rapid transit connection between LAUS and Dodger Stadium, the proposed Project is anticipated to provide transit service to Dodger games and events at Dodger Stadium. With Metro's existing and planned expansion of its transit system, coupled with other providers such as Metrolink, Amtrak, and other municipal bus operators whose services all converge at LAUS, the proposed Project provides the opportunity for anyone in the Los Angeles County region to access Dodger Stadium via public transit. As discussed in Section 3.17, Transportation, the proposed Project is anticipated to provide service to Dodger game/Stadium event employees; tourists or others who want to ride ART; visitors to the Los Angeles State Historic Park and Elysian Park; and commuters or residents in adjacent neighborhoods, including El Pueblo, Chinatown, Mission Junction, Elysian Park, Echo Park, and Solano Canyon. Additionally, the proposed Project does not include a component (i.e., housing) that would generate increased population that would directly increase the demand for parks or recreational facilities, which would necessitate construction or expansion of parks or recreational facilities. Operation of proposed Project would not include recreational facilities or require the construction or expansion of recreational facilities.

Alameda Station

Operation of Alameda Station would not include recreational facilities or require the construction or expansion of recreational facilities. The Alameda Station is a passenger station with vertical circulation elements and no recreational elements. Therefore, operation of the Alameda Station would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Impacts would be less than significant.

Alameda Tower and Alpine Tower

Operation of the Alameda Tower and Alpine Tower would not include recreational facilities or require the construction or expansion of recreational facilities. The Alameda Tower and Alpine Tower are considered cable-supporting components. Therefore, operation of the Alameda Tower and Alpine Tower would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. No impact would occur.

Chinatown/State Park Station

As discussed above, the southern portion of the station would be located on City ROW, while the northern portion of the station would be integrated into the southern boundary of the Los Angeles State Historic Park. Operation of the Chinatown/State Park Station would include development of new amenities within the park boundary, including approximately 740 square feet of concessions, 770 square feet of restrooms, as well as pedestrian improvements, such as landscaping, shade structures, and seating. The Los Angeles State Historic Park would operate the amenities. Specifics on coordination for operations for the station on park property and its management would be per an operating agreement. Additionally, the Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. Potential implementation of the mobility hub would support the goals of the Los Angeles State Historic Park General Plan that encourages multi-modal transportation and pedestrian access to the park, while emphasizing linkages to public transportation. However, the proposed Project would not create or expand the existing use and capacity of the Los Angeles State Historic Park beyond what is already contemplated for the park. Therefore, operational impacts of the Chinatown/State Park Station related to the construction of expansion of recreational facilities which might have an adverse physical effect on the environment would be less than significant.

Broadway Junction

Operation of Broadway Junction would not include recreational facilities or require the construction or expansion of recreational facilities. Elements of Broadway Junction include vertical circulation for staff and maintenance access. Therefore, operation of Broadway Junction would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. No impact would occur.

Stadium Tower

Operation of Stadium Tower would not include recreational facilities or require the construction or expansion of recreational facilities. Stadium Tower is considered a cable-supporting component. Therefore, operation of Stadium Tower would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. No impact would occur.

Dodger Stadium Station

The Dodger Stadium Station would potentially include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, and connections to Elysian Park and adjacent neighborhoods. As described above, the potential mobility hub and connections to Elysian Park and adjacent neighborhoods would have the beneficial effect of increasing transit accessibility and non-motorized transportation options to Elysian Park as users of the proposed

ART system would be able to access the park from the terminus at Dodger Stadium Station. Implementation of the potential mobility hub and connections to Elysian Park and adjacent neighborhoods would support the goal of the Silver Lake-Echo Park-Elysian Park Community Plan to create links for existing residents of the plan area to existing facilities in the City to expand their recreational opportunities. However, the proposed Project would not create or expand the existing use and capacity of Dodger Stadium or Elysian Park. The potential mobility hub and connections to Elysian Park and adjacent neighborhoods would be located within the boundaries of Dodger Stadium parking lot. Therefore, operational impacts of Dodger Stadium Station related to the construction of expansion of recreational facilities which might have an adverse physical effect on the environment would be less than significant.

PR-3: *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Parks?*

Construction Impacts

Less Than Significant Impact. The demand for parks is generally associated with an increase in housing or population. As discussed in Section 3.14, Population and Housing, and above in Threshold PR-1, a peak of approximately 100 workers are anticipated during construction of each Project component. Except for the ART specialists, it is anticipated that the construction workers from within the region would be sufficient to complete the majority of Project construction without a substantial influx of new workers and their families. Moreover, it is anticipated that construction workers would use parks and recreational facilities near their homes and families for recreational purposes. Should any construction workers use parks or recreational facilities in the Project Study Area on lunch breaks or after their shifts end, such park use would be rare because construction workers are temporary employees with high turnover associated with the various phases of construction. In addition, the use would be temporary and cease following construction. As such, construction of the proposed Project would not generate an increase in the demand for parks requiring new or physically altered facilities. Therefore, the proposed Project would not result in the provision of new park facilities, or the need for new or physically altered park facilities during construction.

Alameda Station

Construction of the Alameda Station would not require the provision of new or physically altered government facilities (i.e., parks), or need for new or physically altered parks. As described in PR-1, construction of the Alameda Station would be temporary and would not require closure of any parks or recreational facilities. While construction would temporarily generate noise and dust, introduce heavy construction equipment into the area, and require roadway and pedestrian closures along Alameda Street (refer to Section 3.3, Air Quality, Section 3.13, Noise, and Section 3.17, Transportation for impacts related to noise, dust, and roadway closures), access to Placita de Dolores and Los Angeles Plaza Park would be maintained. Therefore, construction would not result in need for new or physically altered parks in order to maintain acceptable service ratios, response times or other performance objectives. Impacts related to the construction of the Alameda Station would be less than significant.

Alameda Tower and Alpine Tower

Construction of the Alameda Tower and Alpine Tower is comprised of the construction of cable-supporting towers. Construction of the Alameda Tower and Alpine Tower would not require the provision of new or physically altered government facilities (i.e., parks), or need for new or physically altered parks. Therefore, construction of the Alameda Tower and Alpine Tower would not result in a substantial adverse physical impact associated with the provision of new or physically altered parks in order to maintain acceptable service ratios, response times or other performance objectives. No impact would occur.

Chinatown/State Park Station

Construction of the Chinatown/State Park Station would not require the provision of new government facilities (i.e., parks), or result in substantial adverse physical impacts associated physically altering a government facility (i.e., parks).) As described in PR-1, construction of the Chinatown/State Park Station would require the temporary closure of approximately 22 acres of the southern entrance to Los Angeles State Historic Park and the southernmost corner and western edge of the park during cable installation. While there would be a temporary closure, access to the park would be maintained as there are various access points to Los Angeles State Historic Park, and construction of the Chinatown/State Park Station would not require any closures of areas used for recreation. Construction would temporarily generate noise and dust, require select tree removal, introduce heavy construction equipment into the area, and require roadway and pedestrian closures along the southern entrance to the park (refer to Section 3.3, Air Quality, Section 3.4, Biological Resources, Section 3.13, Noise, and Section 3.17, Transportation for impacts related to dust, tree removal, noise, and roadway closures). Therefore, construction would not result in need for new or physically altered parks in order to maintain acceptable service ratios, response times or other performance objectives. Closures of this scale or duration do temporarily occur, such as with previous (southern), current (eastern), and future remediation activities within portions of the park.[34] Because this closure would be temporary, would only affect a small portion of the park, and would not impede overall public usage, it would not constitute a substantial adverse physical impact. Therefore, impacts on recreation related to the construction of the Chinatown/State Park Station would be less than significant.

Broadway Junction

Construction of Broadway Junction is comprised of construction of a non-passenger junction with vertical circulation elements for staff and maintenance access. Radio Hill Gardens, located approximately 325 feet north of Broadway Junction, is separated from the Project component site by a row of single-family houses and steep hilly terrain. While there would be a temporary road closure of Bishops Road south of Radio Hill Garden, access to the area would be maintained as the trail entrance could be accessed via Cottage Home Street. Therefore, construction of Broadway Junction would not result in need for new or physically altered parks in order to maintain acceptable service ratios, response times or other performance objectives. Impacts related to the construction of Broadway Junction would be less than significant.

Stadium Tower

Construction of Stadium Tower is comprised of the construction of a cable-supporting tower. Construction of Stadium Tower would not require the provision of new or physically altered

[34] Department of Toxic Substances Control. 2021. Envirostor. Cornfield Site (19400013), Activities. Available at: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19400013. Accessed April 20222.

government facilities (i.e., parks), or need for new or physically altered parks. Therefore, construction of Stadium Tower would not result in a substantial adverse physical impact associated with the provision of new or physically altered parks in order to maintain acceptable service ratios, response times or other performance objectives. No impact would occur.

Dodger Stadium Station

Construction of the Dodger Stadium Station would not require the provision of new or physically altered government facilities (i.e., parks), or the need for new or physically altered parks. As described in PR-1, construction of Dodger Stadium Station would occur on private property and would not impact Elysian Park. Therefore, construction of Dodger Stadium Station would not result in a substantial adverse physical impact associated with the provision of new or physically altered parks in order to maintain acceptable service ratios, response times or other performance objectives. No impact would occur.

Operational Impacts

Less Than Significant. The demand for parks is generally associated with an increase in housing or population. No housing units are proposed as part of the Project. As such, the proposed Project would not result in a direct population increase from construction of new homes. Operation of the proposed Project is anticipated to require up to 20 employees. It is likely that these employees would come from within the region and the nominal number of employees would not result in a substantial influx of new workers and their families that would increase the demand for parks. In addition, although these employees may use parks within the Project Study Area on lunch breaks or after their shifts end, the number of employees is considered nominal and would not result in a noticeable increased use of existing parks or other recreational facilities. Therefore, operation of the proposed Project would not result in a substantial adverse physical impact associated with the provision of new or physically altered parks in order to maintain acceptable service ratios, response times or other performance objectives.

As discussed in Threshold PR-1, the proposed Project would provide infrastructure through an ART system within urbanized downtown Los Angeles, and would increase connectivity in the Project Study Area, providing direct linkages for existing residents and communities to parks and recreational facilities, including Los Angeles Plaza Park, Placita de Dolores, and the adjacent Olvera Street; Los Angeles State Historic Park; Dodger Stadium; and Elysian Park. Thus, the proposed Project would have the beneficial effect of increasing transit accessibility to parklands and recreational facilities for potential visitors of the parks through a connection to the Metro and regional transit system.

Alameda Station

Operation of the Alameda Station would not require the provision of new or physically altered government facilities (i.e., parks), or need for new or physically altered parks. While the vertical circulation and queuing area for the Alameda Station would be located north of the Placita de Dolores, the proposed station would not result in any physical impacts to the Placita de Dolores that would result in the need for new or physically altered government facilities. Similar to existing conditions, the Placita de Dolores would be continued to be used as a pedestrian plaza used by visitors, workers, and residents. Therefore, operation of the Alameda Station would not result in a substantial adverse physical impact associated with the provision of new or physically altered parks increased use of existing parks in order to maintain acceptable service ratios, response times or other performance objectives. Impacts would be less than significant.

Alameda Tower and Alpine Tower

Operation of the Alameda Tower and Alpine Tower would not require the provision of new or physically altered government facilities (i.e., parks), or need for new or physically altered parks. Therefore, operation of the Alameda Tower and Alpine Tower would not result in a substantial adverse physical impact associated with the provision of new or physically altered parks in order to maintain acceptable service ratios, response times or other performance objectives. No impact would occur.

Chinatown/State Park Station

Operation of the Chinatown/State Park Station would not require the provision of new or government facilities (i.e., parks), or need for new parks. While the proposed Project may increase usage of the Los Angeles State Historic Park and attendance from existing conditions as it would provide transit access to the park from both LAUS and Dodger Stadium, the proposed Project would not result in usage beyond what is already contemplated for the park.

As discussed, the northern portion of the station would be integrated into the southern boundary of the Los Angeles State Historic Park. The Chinatown/State Park Station would include amenities within the existing park boundary, including approximately 740 square feet of concessions, 770 square feet of restrooms, and a 220 square foot covered breezeway connecting the concessions and restrooms. The amenities would be operated by the Los Angeles State Historic Park. Additionally, the Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. However, the proposed Project would not change the existing use and capacity of Los Angeles State Historic Park with the addition of the Chinatown/State Park Station. The proposed Project does not propose housing units that would otherwise increase the population and therefore increase usage of the park resulting in unacceptable service ratios, response times or other performance objectives. Instead, the proposed Project would improve the area’s mobility and accessibility by providing an ART option to the regional transit system at LAUS, including for spectators and visitors of Dodger Stadium, visitors of the Los Angeles State Historic Park and Elysian Park, and residents of the surrounding communities.

By providing additional access to the park, these Project components would be consistent with the Los Angeles State Historic Park General Plan objectives to serve a broad cross-section of the City’s residents and statewide visitors. Therefore, operation of the Chinatown/State Park Station would not result in a substantial adverse physical impact associated with the provision of new or physically altered parks increased use of existing parks in order to maintain acceptable service ratios, response times or other performance objectives. Impacts would be less than significant.

Broadway Junction

Operation of Broadway Junction would not require the provision of new or physically altered government facilities (i.e., parks), or need for new or physically altered parks. Therefore, operation of Broadway Junction would not result in a substantial adverse physical impact associated with the provision of new or physically altered parks in order to maintain acceptable service ratios, response times or other performance objectives. No impact would occur.

Stadium Tower

Operation of Stadium Tower would not require the provision of new or physically altered government facilities (i.e., parks), or need for new or physically altered parks. Therefore, operation of Stadium Tower would not result in a substantial adverse physical impact associated with the provision of new or physically altered parks in order to maintain acceptable service ratios, response times or other performance objectives. No impact would occur

Dodger Stadium Station

Operation of Dodger Stadium Station would not require the provision of new or physically altered government facilities (i.e., parks), or need for new or physically altered parks. The proposed Project would potentially provide a mobility hub at Dodger Stadium Station, where passengers would be able to access a suite of first- and last-mile multi-modal options, including a bike share program and individual bike lockers, and connections to Elysian Park and adjacent neighborhoods. As such, the proposed project would result in beneficial impacts related to Elysian Park. Elysian Park is located in the Silver Lake-Echo Park-Elysian Park Community Plan Area. One of the goals of the Community Plan is to provide/ensure access to new recreational resources and open space developed throughout the Plan area, including trails and facilities along the Los Angeles River, and new parks The proposed Project would improve the mobility and accessibility for existing residents and communities in the area by providing direct linkages to major residential, employment, and tourist destinations, such as LAUS, El Pueblo/Olvera Street, Chinatown, Los Angeles State Historic Park, and Dodger Stadium. Therefore, operation of Dodger Stadium Station would not result in substantial adverse physical impacts associated with the provision of new or physically altered parks, need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives, and the impact would be less than significant.

3.16.5 Mitigation Measures

The proposed Project would result in less than significant impacts to parks and recreation. No mitigation measures are required.

3.16.6 Level of Significance after Mitigation

The proposed Project would result in less than significant impacts to parks and recreation.

This page intentionally left blank.

3.17 TRANSPORTATION

This section presents the evaluation of the potential impacts of the proposed Project on transportation conditions during construction and operations. The regulatory setting and affected environment are documented, baseline conditions are detailed, and an evaluation of the potential for Project-related transportation impacts are documented.

The proposed Project would be located within the urbanized and developed City of Los Angeles, within the downtown, El Pueblo, Chinatown, Mission Junction, and Elysian Park communities. The Project study area selected for analysis extends to Hill Street and Broadway to the west, Commercial Street and 1st Street to the south, Lyon Street to the east, and North Avenue 18 to the north, as shown in Figure 3.17-1. However, for the evaluation of vehicle miles travelled (VMT), the full extent of travel to/from Dodger Stadium in Los Angeles County and adjacent counties were analyzed based on cell-phone data sources, as further detailed in Section 3.17.4. This area was identified based on the intersections projected to be affected by construction and/or operations of the proposed Project. All the streets in the Project study area are under the jurisdiction of the City of Los Angeles. Freeways are under the jurisdiction of the California Department of Transportation (Caltrans).

3.17.1 Regulatory Setting

Federal

Americans with Disabilities (ADA) Act of 1990

Titles I, II, III, and V of the ADA have been codified in Title 42 of the United States Code, beginning at Section 12101. Title III prohibits discrimination on the basis of disability in "places of public accommodation" (businesses and non-profit agencies that serve the public) and "commercial facilities" (other businesses). The regulation includes Appendix A to Part 36 (Standards for Accessible Design),[1] establishing minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. The Project will be designed to meet all ADA design requirements.

State

Complete Streets Act

Assembly Bill (AB) 1358, the Complete Streets Act (Government Code Sections 65040.2 and 65302), was signed into law in September 2008. As of January 1, 2011, the law requires cities and counties, when updating the part of a local general plan that addresses roadways and traffic flows, to ensure that those plans account for the needs of all roadway users. Specifically, the legislation requires cities and counties to ensure that local roads and streets adequately accommodate the needs of bicyclists, pedestrians and transit riders, as well as motorists.

[1] United States Code, 2009 Edition available at: https://www.govinfo.gov/content/pkg/USCODE-2009-title42/html/USCODE-2009-title42-chap126.htm accessed April 2022.

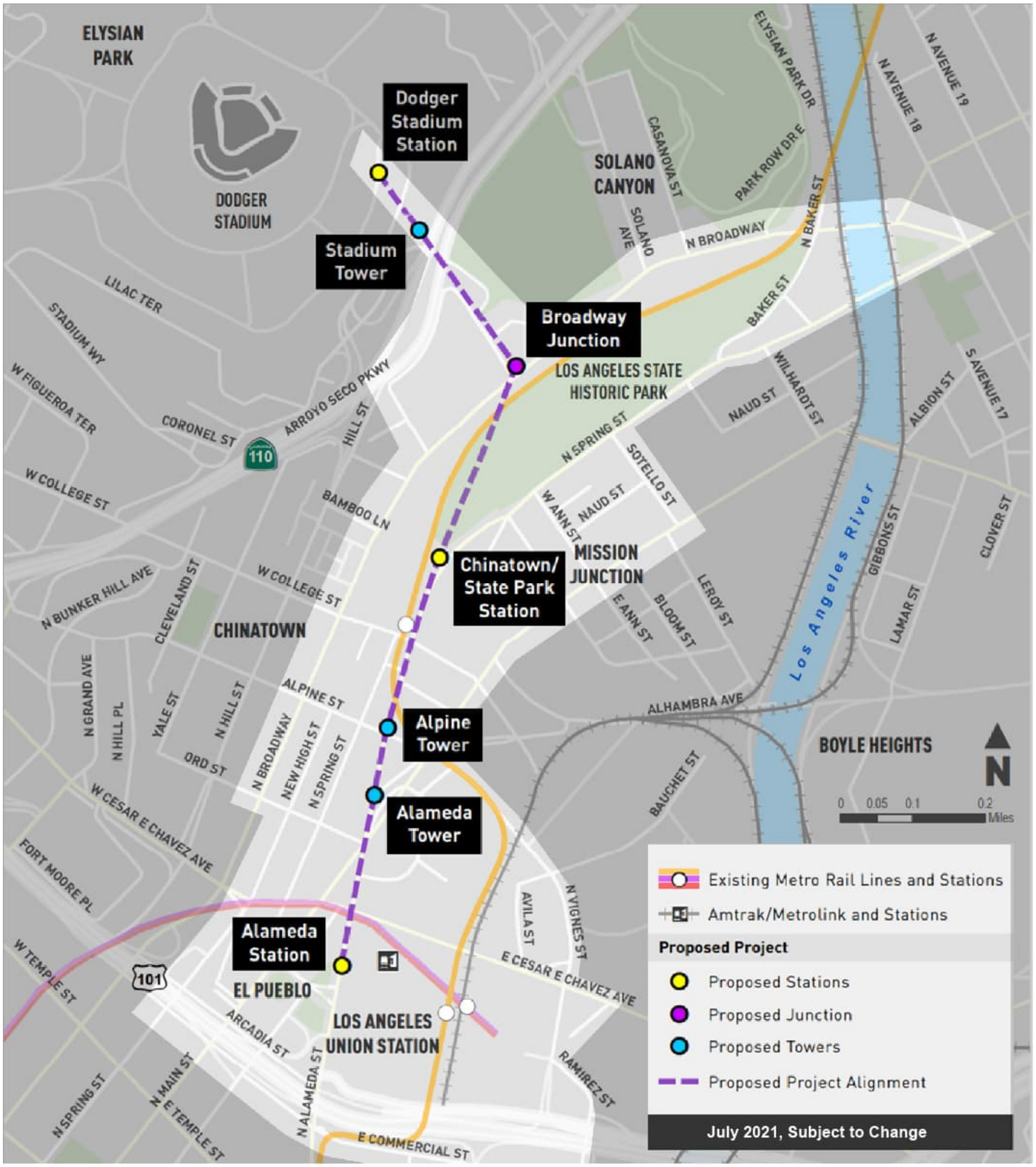


Figure 3.17-1: Transportation Study Area & Proposed Project Alignment

Statewide Transportation Improvement Program

Caltrans administers transportation programming for the State. Transportation programming is the public decision-making process that sets priorities and funds projects envisioned in long-range transportation plans. It commits expected revenues over a multi-year period to transportation projects. The Statewide Transportation Improvement Program is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources.[2]

California Manual on Uniform Traffic Control Devices (California MUTCD)

The California Manual on Uniform Traffic Control Devices (California MUTCD) is published by Caltrans and is issued to adopt uniform standards and specifications for all official traffic control devices in California, in accordance with Section 21400 of the California Vehicle Code (CVC). The California MUTCD incorporates the Federal Highway Administration's Manual on Uniform Traffic Control Devices (2009 Edition) and all policies on traffic control devices issued by Caltrans that were issued at the time of its release. Caltrans publishes Standard Specifications, Standard Special Provisions, Standard Plans, and other manuals, which contain specifications and requirements for traffic control devices, including their use and placement. In some cases, those specifications and requirements can vary from and be more stringent than those shown in the California MUTCD. The proposed Project would be required to be designed in accordance with all California MUTCD design requirements on any roadway facilities affected by the Project.

Highway Design Manual

The 7th Edition Highway Design Manual (HDM) establishes uniform standards for the design of roadways in the State. Local design guidance generally conforms to the HDM when feasible though local design standards may deviate when necessary due to local contexts that may differ from overall Statewide standards.

Senate Bill 743

Senate Bill (SB) 743 was signed into California law in September 2013. SB 743 eliminates auto delay and level of service as transportation impact metrics in CEQA analyses. The text of the bill states the following as the intent of the legislature:

1. Ensure that the environmental impacts of traffic, such as noise, air pollution, and safety concerns, continue to be properly addressed and mitigated through the California Environmental Quality Act.

2. More appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.

The Governor's Office of Planning Research (OPR) completed a rule-making process and published guidelines to implement the changes for determining significant impacts associated with transportation per SB 743. Under SB 743, the required impact metrics are related to vehicle miles traveled (VMT). Compliant with this requirement, CEQA Guidelines section 15064.3(a) was

2 Caltrans Statewide Transportation Improvement Program available at: https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/state-transportation-improvement-program accessed April 2022.

adopted in December 2018 and states "a project's effect on automobile delay does not constitute a significant environmental impact."

Individual lead agencies are ultimately responsible for identifying VMT related impact criteria. On July 30, 2019, the City of Los Angeles adopted vehicle miles traveled (VMT) as part of its CEQA Transportation Thresholds and approved the updated Transportation Analysis Guidelines (TAG) that describe the approach, screening options, methodology, and impact criteria. An update to the TAG was published in July 2020. The TAG is discussed in detail throughout this section as it is the primary framework for evaluating the potential for project-related transportation impacts in the City of Los Angeles.

Regional

Metro Long Range Transportation Plan

Metro adopted the 2020 Long Range Transportation Plan (LRTP) titled Our Next LA, in September 2020. It is the first update to the LRTP since 2009 and provides a vision for transportation in Los Angeles County through 2047. The plan aims to address population growth, changing mobility needs and preferences, technological advances, equitable access to opportunity, and adaptation to a changing environment. The plan details construction of an additional 100 miles of fixed-guideway transit, investments in arterial and freeway projects to reduce congestion, and construction of regional-scale bicycle and pedestrian projects to increase active transportation. Other efforts detailed in the plan include traffic management practices for congested roadways (e.g., ExpressLanes toll lanes), maintaining and upgrading the existing transportation system for all modes, and partnering with local, State, and federal agencies, and the private sector. Our Next LA includes transit and highway improvements funded by Measure M, as well as expansion of off-peak transit service, of the active transportation network, and of programs such as ExpressLanes, partnerships to provide bus only lanes and freight management policies, and bold policy proposals, including free transit, faster bus trips, and subregional congestion pricing.

Metro Complete Streets Policy

Metro's Complete Streets policy adopted in October 2014, reinforces the California Complete Streets Act (AB 1358), which requires cities and counties to ensure that local roads and streets adequately accommodate the needs of bicyclists, pedestrians and transit riders, as well as motorists. Other goals include making public transit access more convenient and attractive, and improving safety for all. Metro requires that all local jurisdictions within Los Angeles County adopt a Complete Streets Policy, an adopted city council resolution supporting Complete Streets, or an adopted general plan consistent with the California Complete Streets Act of 2008 in order to be eligible for Metro capital grant funding programs.[3]

SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy and Federal Transportation Improvement Program

SCAG adopted the 2020-2045 RTP/SCS in September 2020. The RTP/SCS is a planning document required under State and federal statutes and encompasses the SCAG region, which includes six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

[3] Los Angeles County Metropolitan Transportation Authority, Complete Streets Policy, October 2014, available at: https://media.metro.net/projects_studies/sustainability/images/policy_completestreets_2014-10.pdf, accessed April 2022.

The RTP/SCS forecasts long-term transportation demands and identifies policies, actions, and funding sources to accommodate these demands. The RTP/SCS consists of the construction of new transportation facilities with an emphasis on expanding the region's transit network, transportation systems management strategies, transportation demand management and land use strategies, with goals such as efficiency of the transportation network and greenhouse gas emissions reduction.[4] The Federal Transportation Improvement Program, also prepared by SCAG based on the RTP/SCS, lists all of the federally funded/programmed improvements over a 6-year period in the region.[5]

Local

City of Los Angeles General Plan

Transportation Element: Mobility Plan 2035

The City updated the Transportation Element of the City's General Plan, now referred to as Mobility Plan 2035, to reflect policies and programs that lay the policy foundation for safe, accessible, and enjoyable streets for pedestrians, bicyclists, transit users, and motorists throughout the City of Los Angeles. Mobility Plan 2035 and its Final EIR were adopted on August 11, 2015. Mobility Plan 2035 is compliant with the 2008 Complete Streets Act (Assembly Bill 1358), which mandates that the circulation element of a city's General Plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.[6] Mobility Plan 2035 identifies several typologies of "enhanced networks" to guide street design and prioritize one or more modes of travel appropriate to the character of the street and demand for certain travel needs. The typologies include transit, freight, bicycle, and pedestrian, as well as vehicle enhanced (prioritizing critical through-traffic to connect with freeways) and neighborhood enhanced (prioritizing low-speed neighborhood streets with a focus on safety and sharing space between cars and active modes). Several streets in the Project study area are part of the enhanced networks of Mobility Plan 2035.

Land Use Element

Thirty-five Community Plans comprise the City of Los Angeles' State-mandated Land Use Element of the General Plan. The Project alignment is located within the boundaries of the Central City Community Plan Area, Central City North Community Plan Area, and the Silver Lake-Echo Park-Elysian Valley Community Plan Area.

---

[4] Southern California Association of Governments, The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments: Connect SoCal, September 2020, available at: https://www.connectsocal.org/Documents/Adopted/0903fConnectSoCal-Plan.pdf, accessed April 2022

[5] Southern California Association of Governments, 2019 Federal Transportation Improvement Program, September 2018, available at: http://ftip.scag.ca.gov/Pages/2019/adopted.aspx, accessed April 2022

[6] *City of Los Angeles Department of City Planning, Mobility Plan 2035: An Element of the General Plan, September 2016,* available at: *https://planning.lacity.org/odocument/523f2a95-9d72-41d7-aba5-1972f84c1d36/Mobility_Plan_2035.pdf,* accessed April 2022.

Central City Community Plan

The Central City Community Plan is intended to promote an arrangement of land uses, streets, and services that will encourage and contribute to the health, safety, welfare, and convenience of the people who live and work in the community. The Community Plan aims to keep downtown as the focal point of the regional mobility system while accommodating internal access and mobility within the community. The Community Plan also aims to enhance pedestrian safety and prioritize pedestrian access and enhance the streetscape with pedestrian amenities.

Central City North Community Plan

The Central City North Community Plan also aims to enhance pedestrian safety and prioritize pedestrian access and enhance the streetscape with pedestrian amenities.

Proposed DTLA 2040 Community Plan

The City is currently working on an update to the Downtown Community Plan, known as DTLA 2040, which would consolidate the Central City Community Plan and Central City North Community Plan areas. The proposed DTLA 2040 Community Plan includes land use designation and zoning changes, as well as street network and circulation changes. The transportation model forecast for the proposed DTLA 2040 Community Plan using the City of Los Angeles travel mode is used in the forecast of future conditions for the Project study area, as it represents the most current detail for what is expected in the future.

Silver Lake-Echo Park-Elysian Valley Community Plan

This Community Plan aims to identify regional transportation solutions to minimize commuter traffic on the plan area and improve non-motorized transportation alternatives to better connect and encourage non-vehicle trips between and within the residential and commercial areas of the plan area. The Silver Lake-Echo Park-Elysian Valley Community Plan was adopted in 2004 and amended in 2016 as part of the Mobility Plan 2035 update.

Alameda District Specific Plan

The Alameda District Specific Plan provides for expanded development of the LAUS area as a major regional transit hub, including as a mixed-use development providing office, hotel, retail, entertainment, tourism, residential and related uses. This Specific Plan was adopted in 1996 and prevails over the Los Angeles Municipal Code in its regulation of densities, heights, uses, parking, open space, and landscape requirements for the geographic area. The Specific Plan allows for modifications to identified transportation projects based on analysis by the City of Los Angeles Department of Transportation (LADOT) and approval by the General Manager of LADOT and the City of Los Angeles Planning Director.

Cornfields Arroyo Seco Specific Plan (CASP)

The CASP designates flexible zoning regulations, design guidelines and mobility and urban design enhancements for the portions of the Project study area due east of the Los Angeles State Historic Park and east of the Los Angeles River. The CASP increases allowable densities in the Project study area, and as such, substantial growth is expected. The CASP identifies modifications to street standards, including the proposed future widening of Spring Street to accommodate pedestrian and bicycle facilities.

City of Los Angeles Transportation Analysis Guidelines

In 2019, the City adopted the LADOT Transportation Assessment Guidelines ("TAG"), which is a document providing information on the approach, screening, methodology, analysis requirements, and impact criteria for transportation analysis in the City of Los Angeles. Consistent with SB 743, a transportation project would be considered to have a potentially significant impact if it induces additional VMT. The TAG also includes a refinement to the analysis approach for determining whether a project conflicts with Plans, Programs, Ordinances, or Policies (PPOP), as well as the evaluation of geometric design hazards. In addition to CEQA related transportation impact analysis, the TAG also includes non-CEQA transportation analysis related to access, circulation, construction, and cut through traffic.

Connect US Action Plan

The Connect US Action Plan (formerly Union Station and 1st/Central Station Linkages Study) was developed to improve historical and cultural connections in downtown Los Angeles by enhancing pedestrian and bicycle travel options through and between communities. At the center of the study is access to LAUS and the future Regional Connector station at 1st/Central. The Connect US Action Plan ("Connect US") includes a neighborhood-level assessment of arterial and collector streets, with an emphasis on bicycle and pedestrian mobility. The study is centered around a community-driven process to identify implementable public improvements which can create connections and pathways between and through downtown neighborhoods. Connect US provides a community-prioritized list of improvement projects to strengthen bicycle and pedestrian (i.e., active transportation) connectivity between communities, destinations, and public transit. The City Planning Commission adopted a Downtown Design Guide Update that includes references to the Connect US Action Plan.

Several cumulative transportation projects are in the process of design and implementation that originate from the Connect US Action Plan, including the LAUS Forecourt and Alameda Esplanade Improvements Project. These projects are discussed in more detail in Chapter 5, Other CEQA Considerations.

Downtown Design Guide

The Downtown Design Guide was developed by the Department of City Planning to guide development in downtown Los Angeles, intended to make the area a "livable and sustainable community." It includes specific guidance for sidewalk design, open space design, architectural guidelines, and other streetscape and aesthetic elements. One of the stated goals of the design guide is to connect LAUS better to its surroundings via the Connect US Action Plan.

3.17.2 Environmental Setting

A comprehensive data collection effort was undertaken to develop a detailed evaluation of existing conditions in the Project study area. The assessment of conditions relevant to this study includes a description of the Project study area, an inventory of the local street system in the vicinity of the Project alignment, a review of traffic volumes on these facilities, an assessment of the resulting operating conditions, and the current transit service in the Project study area. A detailed description of these elements is presented in this section.

Roadway Network

Major arterials serving the Project study area include Cesar E. Chavez Avenue, Alameda Street, Los Angeles Street, Main Street, Spring Street, Broadway, and Vignes Street. Regional access is provided by US-101 directly south of the Project study area, Interstate 5 (I-5), and State Route/Interstate 110 (SR-110/I-110).[7] The characteristics of the major roadways serving the Project study area are described below. The street descriptions include the designation of these roadways under the Mobility Plan 2035. Streets classified as boulevards have roadway widths greater than 80 feet, avenues have widths between 46 and 100 feet, while local and collector streets are 66 feet or narrower. Streets are organized in a hierarchy, with boulevards expected to carry the highest number of vehicles, followed by avenues, and then collector and local streets.

Freeways

The list below describes the regional freeways within the Project study area:

- **US-101** runs in a northwest-southeast direction near the Project alignment and extends north beyond Los Angeles County. In the vicinity of the Project study area, US-101 provides four lanes in each direction. Interchanges are provided at Vignes Street, Commercial Street, Alameda Street, and Mission Road.
- **SR-110** lies in the western portion of the Project study area and runs in a north-south direction from Pasadena to San Pedro. In the vicinity of the Project study area, SR-110 provides four lanes in each direction. Freeway ramps closest to the Project alignment are located at Alpine Street, Figueroa Street, and Hill Street.
- **I-5** runs in a north-south direction across the region and beyond. In the vicinity of the Project alignment, I-5 provides five lanes in each direction and interchanges are located at Cesar E. Chavez Avenue and at Pasadena Avenue.

Arterials

The list below describes key arterials within the Project study area:

- **Cesar E. Chavez Avenue** is designated as an Avenue I in the Project study area. Cesar E. Chavez Avenue has two lanes in each direction and turn pockets at most intersections. Parking is generally permitted on both sides of the street east of Mission Road. Cesar E. Chavez Avenue is part of the Transit Enhanced Network and the Bicycle Enhanced Network as designated in Mobility Plan 2035. In the Project study area, the street has a westbound PM peak period bus-only lane (and during Dodger game days) west of Broadway. From Broadway to the LAUS Driveway (located in between the two Mozaic Apartment buildings), there is an all-day shared dedicated bus/bike only lane on Westbound Cesar E. Chavez Avenue.
- **Commercial Street/Aliso Street** is designated as a Collector Street east of Alameda Street (Commercial Street) and a Local Street west of Alameda Street. Commercial Street has two through lanes in each direction and provides access to eastbound vehicles on US-101. Parking is only permitted east of the US-101 ramps on Commercial Street. Aliso Street is a one-way frontage road on the south side of US-101 with access to and from the freeway for eastbound vehicles. Parking is not permitted on Aliso Street.

7 SR-110 becomes I-110 south of the I-10.

- **Temple Street** is designated as an Avenue II in the Project study area. Temple Street has two lanes in each direction and turn pockets at most intersections. Parking is permitted on the south side of the street between Broadway and Spring Street and on the north side of the street between Main Street and Alameda Street.
- **Vignes Street/Alpine Street** is designated as a Boulevard II between Cesar E. Chavez Avenue and US-101, designated as an Avenue I between Cesar E. Chavez Avenue and Alameda Street, designated as an Avenue III between Alameda Street and Spring Street, and designated as an Avenue III west of Spring Street. Parking is permitted east of Alameda Street. Alpine Street/Vignes Street is designated as part of the Bicycle Enhanced Network between US-101 and North Broadway and part of the Neighborhood Enhanced Network between Main Street and Broadway. Vignes Street provides access to and from the US-101 northbound.
- **Alameda Street** is designated as an Avenue I in the Project study area and as part of the Vehicle Enhanced Network from south of US-101 to the southern edge of the Project study area. Alameda Street has two or three travel lanes running in each direction and turn pockets at most intersections. Parking is permitted north of Ord Street on both sides of the street. Alameda Street is also designated as part of the Bicycle Enhanced Network and the Goods Movement Network within the Project study area.
- **Broadway** is designated as an Avenue II in the Project study area. Broadway has two lanes in each direction and turn pockets at most intersections. Parking is permitted on the east side of the street between Aliso Street and Temple Street and on both sides of the street north of Cesar E. Chavez Avenue. Broadway is designated as part of the Bicycle Enhanced Network and Transit Enhanced Network within the Project study area.
- **Los Angeles Street** is designated as an Avenue I in the Project study area. Los Angeles Street has two lanes in each direction and turn pockets at most intersections. Los Angeles Street is part of the Bicycle Enhanced Network from 2nd Street to Alameda Street and includes Class IV bicycle lanes in each direction between 1st Street and Alameda Street.
- **Main Street** is designated as an Avenue II in the Project study area. It is designated as part of the Transit Enhanced Network and the Bicycle Enhanced Network. Main Street includes three northbound travel lanes, parking on one side of the street, and a two-way protected bikeway on the west side of the street, south of Aliso Street. Between Aliso Street and Paseo Luis Olivares, Main Street provides two northbound travel lanes and a two-way protected bikeway on the west side of the street with no on-street parking. North of Paseo Luis Olivares and up to Cesar E. Chavez Avenue, Main Street provides three northbound travel lanes and a one-way southbound protected bikeway.
- **Mission Road** is designated as a Boulevard II in the Project study area. It includes two lanes in each direction with turn pockets at most intersections. Parking is permitted on either side of the street north of US-101. It is designated as part of the Transit Enhanced Network and Bicycle Enhanced Network and includes Class II bicycle lanes in each direction.
- **Spring Street** is designated as an Avenue I north of 1st Street and south of Cesar E. Chavez Avenue and a Collector Street north of Cesar E. Chavez Avenue. South of Cesar E. Chavez Avenue, Spring Street has three southbound lanes and two northbound bus-only lanes with turn pockets at most intersections. North of Cesar E. Chavez Avenue, Spring Street has one lane in each direction with parking permitted on both sides of the street. Spring Street is part of the Bicycle Enhanced Network and includes southbound Class II bicycle lanes south of Cesar E. Chavez Avenue.

Existing Transit Service

LAUS serves as a local, regional, and intercity hub for a variety of transit mode types and transit operators, including Metro Rail and Metro Bus, Metrolink, Amtrak rail and bus, and intercity, regional, and local bus service operated by other carriers. The following local and regional transit service types operate at LAUS:

Amtrak Intercity Rail

Amtrak is the United States' national rail operator, providing long-distance, intercity rail service throughout the United States. The system uses standard gauge tracks, rolling stock, and diesel locomotives.

Metrolink

Metrolink is the agency that operates Southern California's regional commuter rail system, which serves commuters in six counties, including Los Angeles, Orange, San Bernardino, Riverside, Ventura, and northern San Diego County. Metrolink is governed by the Southern California Regional Rail Authority (SCRRA), a joint powers authority created in 1991, with representation by agencies from five counties, including the Los Angeles County Metropolitan Transportation Authority (Metro), the Orange County Transportation Authority (OCTA), the Riverside County Transportation Commission (RCTC), the San Bernardino Association of Governments (SANBAG), and the Ventura County Transportation Commission (VCTC). The system uses standard gauge tracks and rolling stock, diesel locomotives, and operates on shared conventional rail tracks with Amtrak and freight operators.

Metro Rail

Metro operates the Metro Rail system, the high-capacity rail rapid transit service for Los Angeles County. Metro Rail is operated in dedicated rights-of-way (in contrast to Metrolink and Amtrak, which operate on tracks shared with freight operators), serves dedicated transit stations, and is powered by electricity. Service is provided using two technologies, subway and light rail:

- Subway – Metro Rail's heavy rail subway system includes the B (Red) and D (Purple) Lines. The lines operate exclusively below grade and are powered by an electrified third rail. The lines use 75-foot cars, and typically operate 4- to 6-car trains. The B and D Lines serve LAUS within the Project study area.
- Light Rail – Metro Rail Light Rail Transit (LRT) service uses shorter trains than heavy rail—typically operated with two- or three-car trains and includes the A (Blue), C (Green), E (Expo), and L (Gold) Lines. LRT vehicles are powered by overhead catenary wires. Unlike heavy rail, Metro Rail LRT service runs on rights-of-way ranging from complete grade separation (above or below grade) to at-grade. The L Line has stations at LAUS and Chinatown within the Project study area.

Intercity Bus

Intercity bus lines operate coach-style service, serving destinations in California and the southwest. At LAUS, intercity bus service includes Amtrak, Greyhound, and FlixBus.

Metro Bus Service

Metro Transitway

Metro Transitway service is expedited Bus Rapid Transit (BRT) service that operates in its own exclusive ROW on either arterials or freeways with dedicated transit stations. Enhancements included high capacity vehicles, transit signal priority, and improved fare collection via ticket vending machines (TVM).

Express Bus

Metro Express is used for longer distance trips with fewer stops and service that typically becomes more localized near the end of their routes. Metro Express lines serving downtown Los Angeles are given route numbers in the 400s. Metro Express service usually operates from a collector area, such as a park-and-ride location, directly to a specific destination or in a particular corridor, with stops on routes to major transfer points or activity centers. In addition, it generally operates a major portion of its routing on freeways in either mixed flow traffic, high occupancy vehicle (HOV) lanes, or dedicated bus lanes.

Metro Rapid

Metro Rapid is expedited arterial bus service operating on heavily traveled corridors. Time reductions are achieved with fewer bus stops and transit signal priority. Metro Rapid buses use specially branded buses and enhanced bus stops at select locations, which may include special shelters, information kiosks, and “Next Trip” displays.

Metro Local

Metro provides local bus service throughout Los Angeles County. Local buses numbered 1 to 99 provide service to and from downtown Los Angeles, with many including service to LAUS. Local bus service may also include limited-stop service, numbered in the 300s, though many of these lines have been transferred to the Metro Rapid system.

Metro NextGen Bus Plan

In 2018, Metro began the NextGen Bus Plan to better meet the needs of current and future riders. The Metro bus network carries 70 percent of transit riders in the county. The intended outcome is to improve service to current customers and attract new customers by creating a world-class bus network that meets the goal of Metro’s Vision 2028 to build a comprehensive World Class Transportation System. This will be achieved by implementing a new competitive bus system that is fast, frequent, reliable and accessible, specifically through strategies such as refocusing service in areas with the greatest travel demand and simplifying routes and schedules, coordinating with Los Angeles County’s other bus agencies to ensure service is as seamless as possible for passengers, investing in smart street improvements such as signal synchronization, transit priority enhancements, stop realignments and bus-only lanes (where feasible), and improving stop amenities and enhancing security features. The plan was approved by the Metro Board in October 2020.

Commuter Services

Commuter bus service is a transit service which provides commuters from outside the core metropolitan Los Angeles area an alternative to driving. Though commuter buses are fewer in number than local buses, they have a large role in moving people into the City and through LAUS. Commuter buses only pick up riders at the beginning of their route and deliver riders to job centers with few stops along the way. Commuter services that serve LAUS include routes operated by Santa Clarita Transit (SCT), OCTA, Antelope Valley Transit Authority (AVTA), and the LADOT Commuter Express (CE), as well as several lines operated by Foothill Transit (FT).

LAX FlyAway

Los Angeles World Airports (LAWA), owner and operator of Los Angeles International Airport (LAX), operates the FlyAway system. The FlyAway system offers airport patrons the option of a direct, non-stop bus route to the airport as an alternative to driving.

Shuttle Service

A variety of public and private operators serve local destinations and employment centers in the vicinity of LAUS. Private shuttles include those operated by large employers in downtown Los Angeles, as well as USC and Mount St. Mary's College. LADOT operates DASH service that serves Lincoln Heights/Chinatown and various downtown destinations. On Los Angeles Dodger game days, Metro operates the Dodger Stadium Express shuttle.

Table 3.17-1 shows the various local, rapid, and express bus routes providing service in the Project study area, and their peak period frequencies. Due to drops in ridership associated with the COVID-19 pandemic, several routes, particularly commuter services are operating with less frequency in the peak period than prior to the pandemic.

Figure 3.17-2 illustrates the transit routes that access LAUS, and Figure 3.17-3 illustrates daily stop level bus boardings plus alightings for Metro and municipal bus services within the Project study area that have this data available. LAUS has the highest rail ridership of stations in the study area, and the bus stops at the intersection of Cesar E. Chavez Avenue and Vignes Street adjacent to LAUS have the highest bus stop ridership in the study area, with approximately 6,000 daily boardings plus alightings.

The City of Los Angeles Mobility Plan 2035 calls for the establishment of the Transit Enhanced Network, a network of roadway improvements to provide a frequent and reliable bus system, which interfaces and supports the fixed-transit lines. As stated, several streets within the Project study area are part of this network.

Additionally, several streets within the network have portions of the street dedicated exclusively to transit vehicles during all or part of the day, including Spring Street, Cesar E. Chavez Avenue, Aliso Street, and Alameda Street.

Table 3.17-1: Project Study Area Bus Transit Service

Line	Operator	Service Type	Route	Peak Frequency
Amtrak Thruway	Amtrak	Regional	Fresno via Bakersfield	60 min.
FlixBus	FlixBus	Regional	Multiple	90 min.
Greyhound Bus	Greyhound Bus	Regional	Multiple	1 per day
AV785	Antelope Valley Transit	Local	Lancaster/Palmdale-Downtown LA	22-35 min.
BBBR10	Big Blue Bus	Express	Downtown LA-Santa Monica via Jefferson Bl	60 min.
CE 409	LADOT	Express	Sylmar-Downtown LA	40 min.
CE 419	LADOT	Express	Chatsworth/Northridge-Downtown LA	20 min.
CE 422	LADOT	Express	Downtown LA-San Fernando Valley/Thousand Oaks	15-20 min.
CE 423	LADOT	Express	Thousand Oaks/Encino-Downtown LA/USC	60 min.
CE431	LADOT	Express	Downtown LA-Westwood/Rancho Park/Palms	60 min.
CE 437	LADOT	Express	Venice/Marina del Rey-Downtown LA	60 min.
CE 438	LADOT	Express	Redondo Beach/Hermosa Beach-Downtown LA	20-30 min.
CE 448	LADOT	Express	Rancho Palos Verdes-Downtown LA	30 min.
LAX FlyAway	LAWA	Express	Downtown LA-LAX	30 min.
FT493	Foothill Transit	Express	Diamond Bar - Rowland Heights - Downtown Los Angeles	15 min.
FT495	Foothill Transit	Express	Downtown LA-Walnut	15 min.
FT498	Foothill Transit	Express	Azusa - West Covina - Express Service to Downtown Los Angeles	15 min.
FT499	Foothill Transit	Express	San Dimas Park & Ride - Via Verde Park & Ride - Los Angeles Express Service	15 min.
FT699	Foothill Transit	Express	Montclair - Fairplex Park & Ride - Cal State LA - USC Medical Ctr - Downtown Los Angeles Express Service	10 min.
Silver Streak	Foothill Transit	Express	Downtown LA - Montclair	15 min.
CE 534	LADOT	Express	Downtown LA - Westwood/West Los Angeles/Century City	60 min.
DASH A	LADOT	DASH - Local	Little Tokyo-City West	7 min.

Table 3.17-1: Project Study Area Bus Transit Service

Line	Operator	Service Type	Route	Peak Frequency
DASH B	LADOT	DASH - Local	Chinatown-Financial District	8 min.
DASH D	LADOT	DASH - Local	Downtown LA - Harbor Freeway Station	6 min.
DASH Lincoln Heights/ Chinatown	LADOT	DASH - Local	Downtown LA - El Monte Station via Garvey Ave & Cesar E Chavez Ave	30 min.
2	Metro	Local	Westwood-Downtown LA	20 min.
4	Metro	Local	Downtown LA - Santa Monica	15 min
28	Metro	Local	Century City - Eagle Rock via Downtown LA	20 min.
30	Metro	Local	West Hollywood - East Los Angeles via Downtown LA	10 min.
33	Metro	Local	Downtown LA - Santa Monica via Venice	20 min.
40	Metro	Local	Downtown LA - South Bay Galleria	10 min.
45	Metro	Local	Lincoln Heights - Rosewood via Downtown LA	10 min.
70	Metro	Local	Downtown LA - El Monte	15 min.
76	Metro	Local	Downtown LA - El Monte	20 min.
78	Metro	Local	Downtown LA - Arcadia	15 min.
487/489	Metro	Local/Express	Downtown LA - Sierra Madre Station	45 min.
81	Metro	Local	Eagle Rock - South Los Angeles via Downtown LA	15 min.
90	Metro	Local	North Hollywood - Downtown LA	30 min.
92	Metro	Local	Sylmar - Downtown LA via Glendale	40 min.
94	Metro	Local	North Hollywood - Downtown LA via San Fernando Rd and Magnolia Bl	20 min.
96	Metro	Local	Burbank - Downtown LA via Griffith Park Dr	60 min.
106	Metro	Local	Downtown LA - Cal State LA	60 min.
Metro J Line Silver	Metro	El Monte Transitway & Harbor Transitway	El Monte - Harbor Gateway	10 min.

Table 3.17-1: Project Study Area Bus Transit Service

Line	Operator	Service Type	Route	Peak Frequency
Dodger Stadium Express	Metro	Special Event	Downtown LA - Dodger Stadium	10 min. before and after Dodger Games
SC 799	Santa Clarita Transit	Express	Downtown LA - Santa Clarita	15-20 min.
SC 794	Santa Clarita Transit	Express	Downtown LA - Santa Clarita	8 min.
T4X	Torrance Transit	Express	Downtown LA - Torrance	50-60 min.

Source: Fehr & Peers, 2022

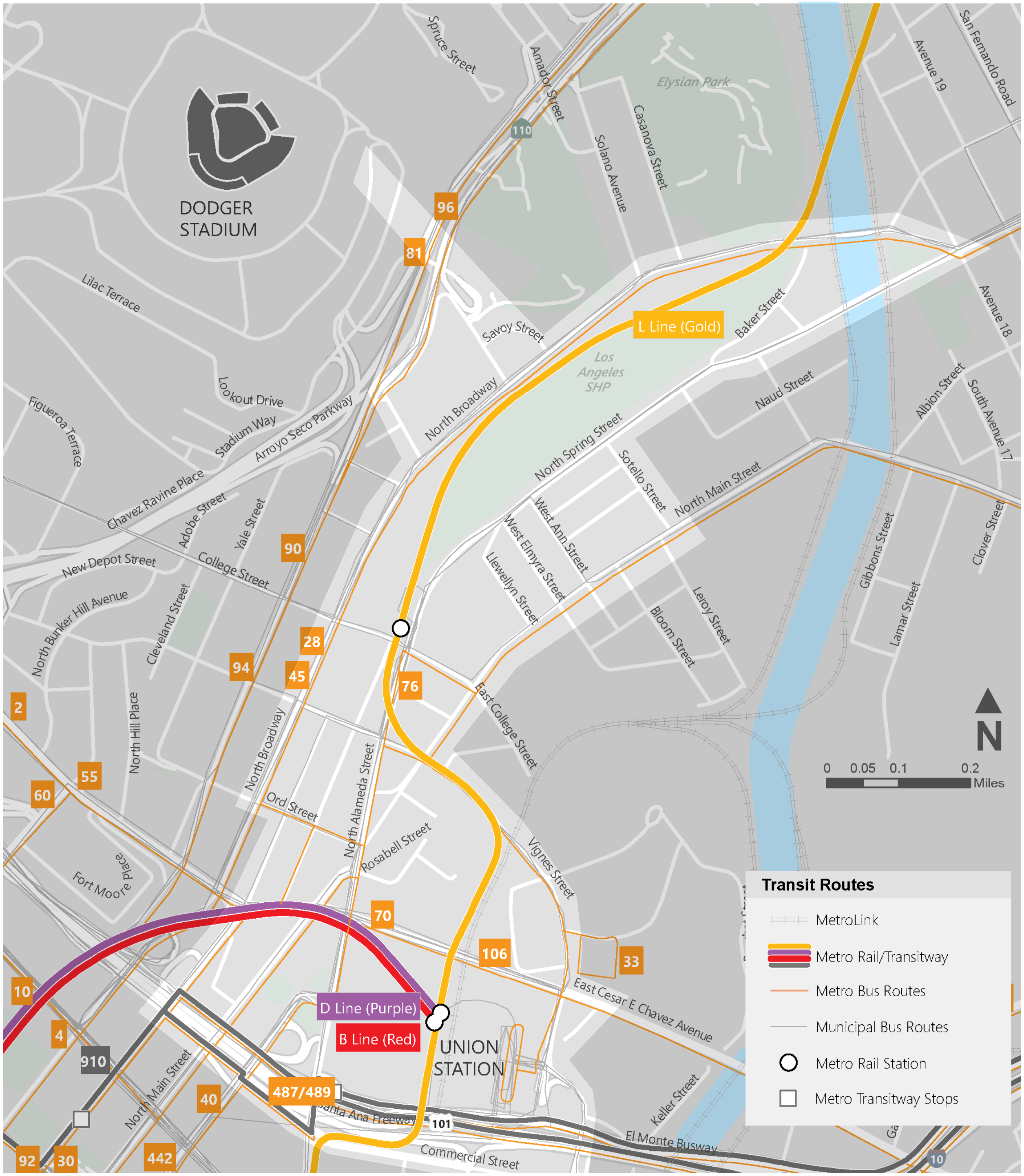


Figure 3.17-2: Existing Transit Routes in the Project Area

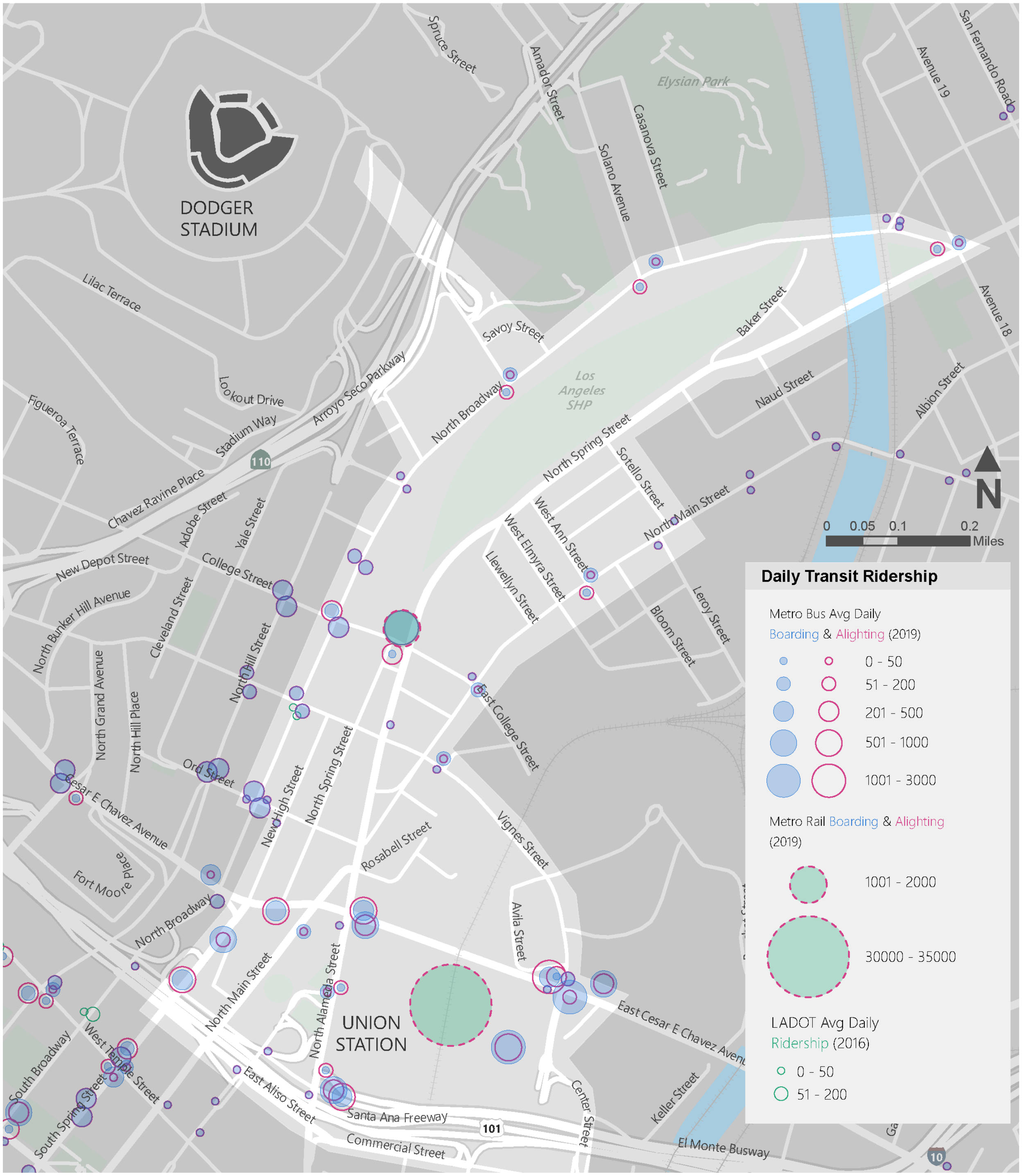


Figure 3.17-3: Daily Transit Ridership in the Project Area

Existing Bicycle Facilities & Conditions

Bikeway planning and design in California typically relies on guidelines and design standards established by Caltrans in the Highway Design Manual (Chapter 1000: Bikeway Planning and Design). The following are the typical bikeway classifications. Figure 3.17-4 illustrates typical street cross sections for these facility types.

- Class I Bikeway (Bike Path) provides a completely separate ROW and is designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian crossflow minimized. In general, bike paths serve corridors not served by streets and highways or where sufficient ROW exists to allow such facilities to be constructed away from the influence of parallel streets and vehicle conflicts.
- Class II Bikeways (Bike Lanes) are lanes for bicyclists generally adjacent to the outer vehicle travel lanes. These lanes have special lane markings, pavement legends, and signage. Bicycle lanes are generally five feet wide. Adjacent vehicle parking and vehicle/pedestrian cross-flow are permitted.
- Class III Bikeway (Bike Route) are designated by signs or pavement markings for shared use with pedestrians or motor vehicles but have no separated bike ROW or lane striping. Bike routes serve either to: a) provide continuity to other bicycle facilities, or b) designate preferred routes through high demand corridors.
- Class IV Bikeways (Cycletracks or Protected Bike Lanes) provide a ROW designated exclusively for bicycle travel within a roadway and which are protected from other vehicle traffic with devices, including, but not limited to, grade separation, flexible posts, inflexible physical barriers, or parked cars.

There are no existing Class I bike paths currently within the Project study area. The nearest future Class I bike path is the LAUS Forecourt and Esplanade Improvements Project, which will implement a pedestrian and bicycle esplanade with portions of a differentiated bicycle facility between Cesar E. Chavez Avenue and Arcadia Street. The future extension of the Esplanade is planned between Arcadia Street and Aliso Street/Commercial Street. An additional Class I bicycle path is proposed to run along the Los Angeles River east of the Project alignment in the northeastern portion of the Project study area.

The following streets have Class II bike lanes in the Project study area:

- 1st Street from San Pedro Street to the western edge of the Project study area
- Spring Street from Cesar E. Chavez Avenue to the southern edge of the Project study area
- Mission Road from Cesar E. Chavez Avenue to the northern edge of the Project study area

The following street has a designated Class III bikeway, with or without sharrows (shared lane markings):

- 1st Street from San Pedro Street to the eastern edge of the Project study area

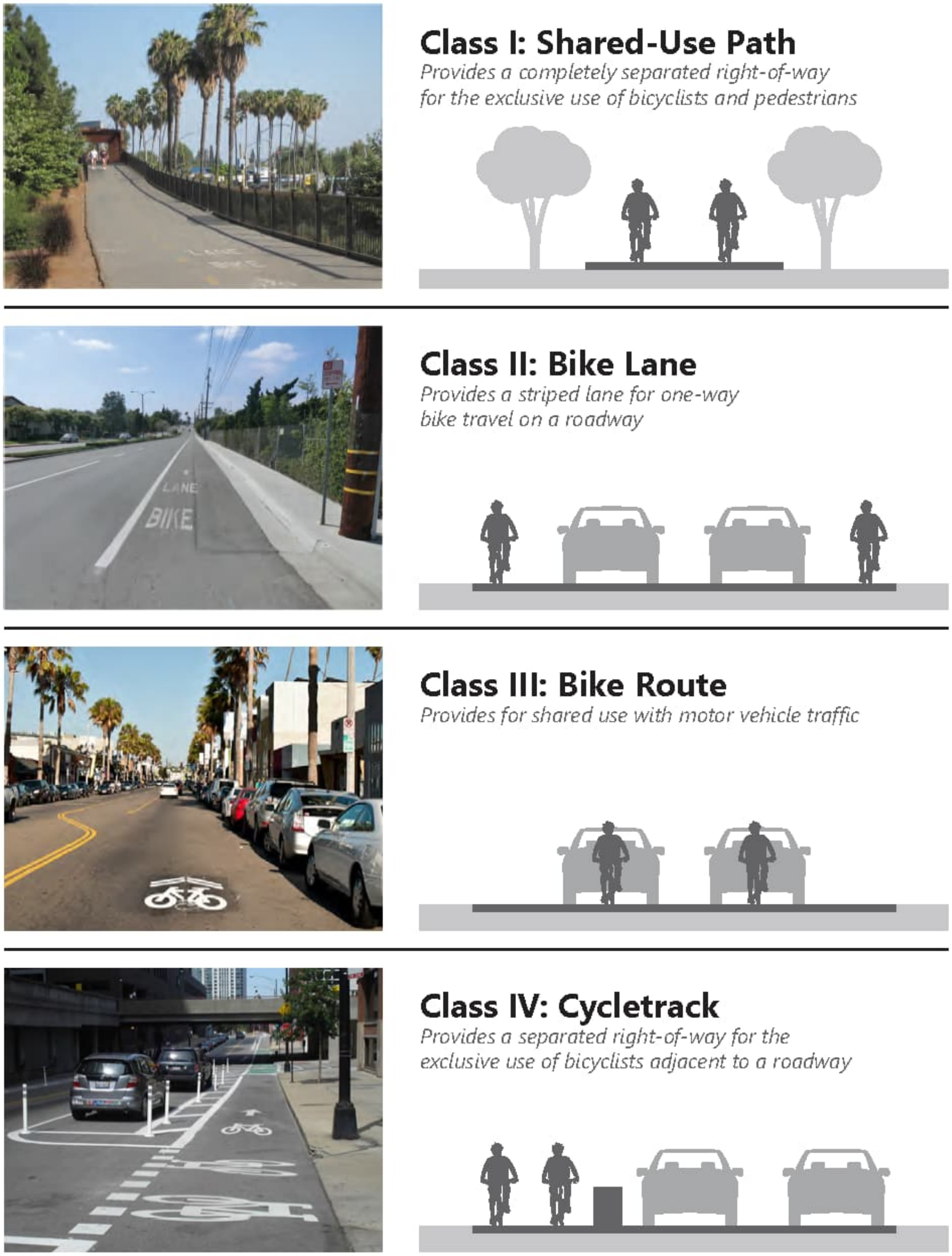


Figure 3.17-4: Bicycle Facility Cross Sections

A Class IV cycle track exists on Los Angeles Street from Alameda Street to 1st Street, and on Main Street from 9th Street to Cesar E. Chavez Avenue.

Figure 3.17-5 displays the existing and planned bikeways in the Project study area, and Figure 3.17-6 maps collisions involving bicycles in the Project study area between 2015 and 2019, using the most recent data available from the Statewide Integrated Traffic Records System (SWITRS), accessed through UC Berkeley SafeTREC Transportation Injury Mapping System (TIMS). This is the most-recently available five-year data set, as 2020 collision data are still provisional.

Although recent expansions to the bikeway network have improved connections near LAUS, key north-south and east-west gaps remain on Cesar E. Chavez Avenue and Alameda Street north of the site.

Within the Project study area, collisions involving bicycles are highest along Broadway at Bernard Street and College Street and along College Street in Chinatown, and along Alameda Street between the US-101 freeway and College Street. Many of the streets within the Project study area are part of the Bicycle-Enhanced Network within the Mobility Plan 2035, which are planned for treatments that prioritize bicyclists.

Existing Pedestrian Facilities & Conditions

Downtown Los Angeles has a built out network of pedestrian facilities including sidewalks, crosswalks, and pedestrian safety features. Immediately west of LAUS, across Alameda Street, Olvera Street and the Los Angeles Plaza Park provide open space for pedestrians to rest. Approximately 8- to 12-foot sidewalks are generally provided throughout the area, less than the 15-foot sidewalk width designated for most streets in the areas as part of the City of Los Angeles Complete Streets Design Guide.

Figure 3.17-7 shows collisions involving pedestrians in the Project study area between 2015 and 2019. Within the Project study area, collisions involving pedestrians are highest along Alameda Street in front of LAUS, along Broadway, Alpine Street, and College Street in Chinatown, and along Vignes Street on the eastern edge of the Project study area. Many of the streets within the Project study area are characterized as Pedestrian-Enhanced Districts, where pedestrian improvements are prioritized relative to other modes in the Mobility Plan 2035.

As directed by Mayor Garcetti, the City of Los Angeles has made a commitment to eliminate all traffic deaths by 2025 through its Vision Zero initiative. As part of the Vision Zero process, LADOT has identified a network of streets, designated as the High Injury Network (HIN), where safety investments will be prioritized. The following street segments in the Project study area are part of the HIN:

- Alameda Street from the southern boundary of the Project study area to Alpine Street
- Broadway from Cesar E. Chavez Avenue to College Street
- Hill Street from Cesar E. Chavez Avenue to College Street
- Alpine Street from Broadway to Alameda Street
- College Street from Yale Street to Spring Street
- Vignes Street from Bauchet Street to the eastern boundary of the Project study area

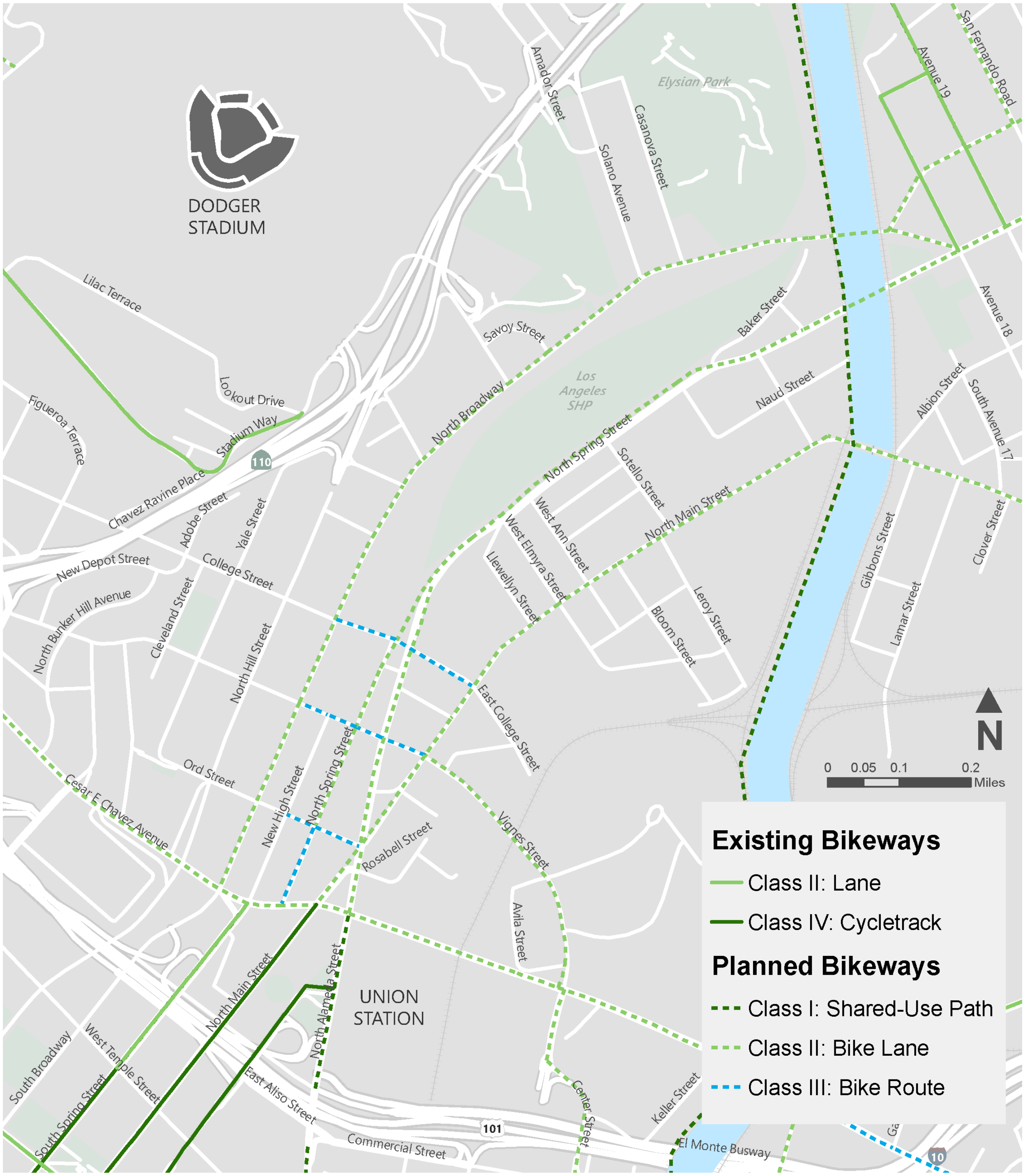


Figure 3.17-5: Existing and Planned Bicycle Facilities in the Project Area

Figure 3.17-6: Bicycle Collisions in the Project Area, 2015-2019

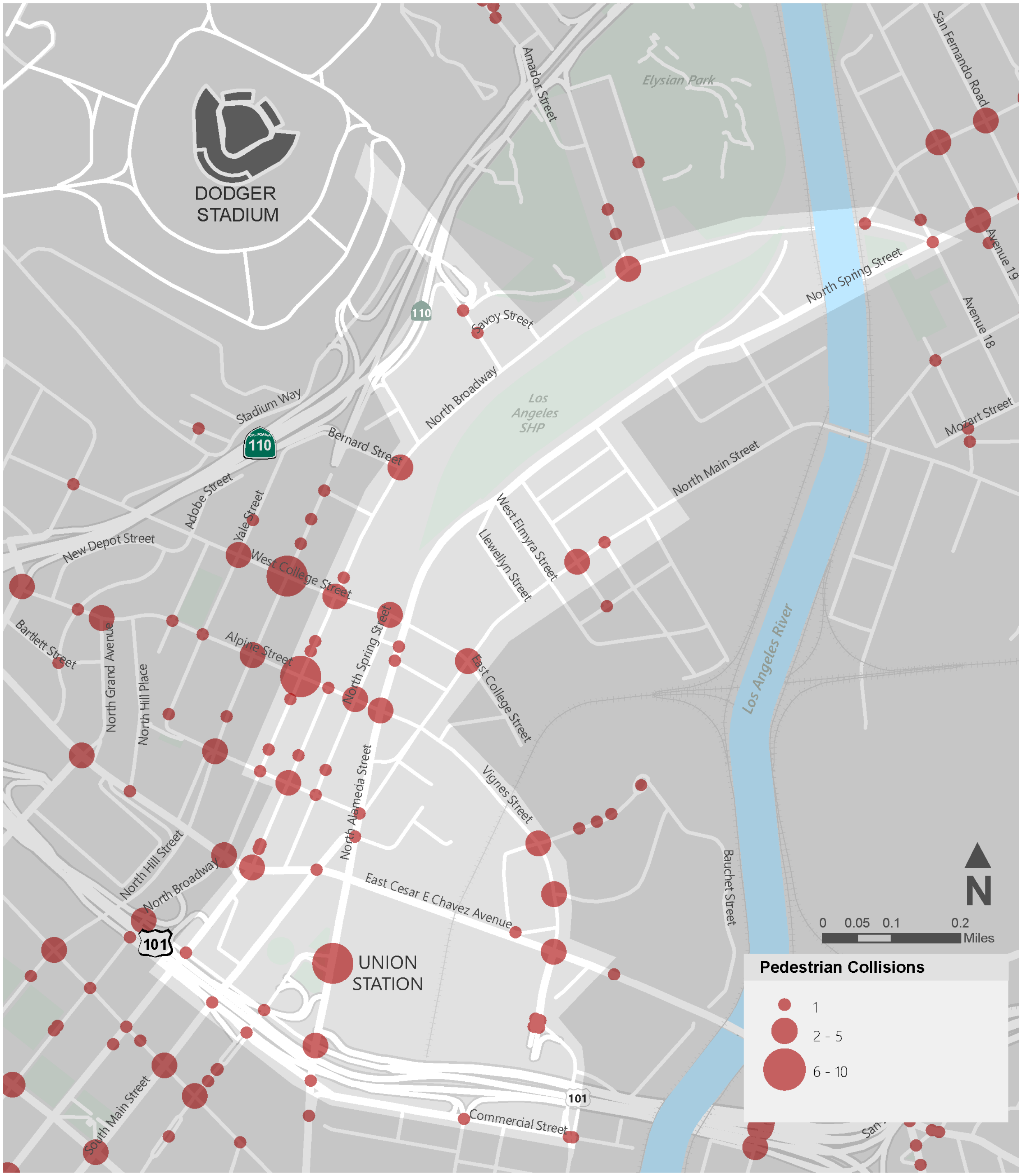


Figure 3.17-7: Pedestrian Collisions in the Project Area, 2015-2019

3.17.3 Methodology

Estimating Future Conditions

The impact analysis presented in Section 3.17.4 uses the proposed Project opening year of 2026 and the Horizon Year of 2042 (developed in consultation with Metro and consistent with the Horizon Year used on other recent Metro EIRs' such as the Environmental Impact Report for the West Santa Ana Branch Transit Corridor Project) to analyze the potential for proposed Project transportation impacts on the surrounding street system, taking into consideration the future conditions that would be present in the Project study area. As further discussed in Chapter 5, Other CEQA Considerations, projects that would affect the transportation network, including transit and active transportation projects, as well as development projects (known as related projects) that could increase traffic volumes in the Project study area are detailed. Related projects are land use developments expected to be implemented in the Project study area prior to the buildout date of the proposed Project. Refer to Chapter 5 for a list of the related projects.

In addition to the future land use development projects proposed in the Project study area, additional ambient growth is expected to occur by the years 2026 and 2042. Particularly in downtown Los Angeles and the CASP area, substantial growth is anticipated. In order to ensure that the cumulative forecasts used to assess the proposed Project are consistent with the expected level of development in the Project study area, the City of Los Angeles Travel Demand Model forecast for the *Downtown Community Plan Update/New Zoning Code for Downtown Community Plan Draft Environmental Impact Report*[8] was used to estimate cumulative conditions because it is expected to have the most current detail on growth forecasts in the immediate vicinity of the proposed Project. The City of Los Angeles model analysis years are 2016 and 2040. To estimate the change in traffic volumes due to the underlying development in the Central City Community Plan Area (and beyond), the forecast change in daily roadway link volumes was calculated. The overall growth was approximately 24 percent, or 1 percent per year. In order to develop cumulative conditions in the Project study area, this one percent per year average growth in traffic volumes was applied to estimate 2019, 2026, and 2042 conditions.

The model includes population and employment growth forecasts as well. Using a similar process these forecasts were annualized to develop growth rates for jobs and population in order to develop estimates for 2019, 2026, and 2042 conditions. As discussed in the ridership estimates described below, these growth rates were applied to population and job estimates from the United States Census in order to estimate neighborhood ridership potential that the proposed Project could capture.

To validate that the City of Los Angeles Travel Demand Model includes sufficient growth in population and jobs within the Project study area to cover the known future related projects, estimates of population and jobs for each of the related projects was made as detailed in Appendix N. The City of Los Angeles Model includes sufficient growth of population and jobs in the Project study area to cover the expected growth from the related projects.

Ridership Estimates

The proposed Project would serve the transit needs of a number of distinct market segments including: Dodger Stadium game and event attendees, employees, tourists, neighborhood riders,

[8] City of Los Angeles Department of City Planning, August 2020, available at: https://planning.lacity.org/development-services/eir/downtown-community-plan-updatenew-zoning-code-downtown-community-plan, access July2021

and Los Angeles State Historic Park visitors and event attendees. Each market segment is described below, along with the methodology used to estimate ridership. Due to the unique nature of the proposed Project as an aerial gondola system, its unique operating condition in terms of headways, and the frequency of event-related ridership on the system, the Metro ridership forecasting model and the City of Los Angeles travel demand model were both determined to substantially under estimate ridership for Dodger Stadium games and events because the models only include regular weekday employment, and have no mechanism for estimating ridership from attendees since the model excludes such "special generators" such as Dodger Stadium. Additionally, neither model includes an aerial gondola system mode, or transit services with 23 second headways. In order to estimate ridership, a detailed event mode choice was developed, which models for the proposed Project, as well as less detailed off-model ridership estimate techniques for non-event related market segments. The *Transportation Appendices* (Appendix N) detail model inputs and parameters used in model development and calibration and ridership estimating.

Dodger Stadium Games/Events Riders

Regression-based game/event day Project ridership models were developed for transit and park and ride access to LAUS. Mode choice intercept surveys were conducted to evaluate the relationship between zip code of origin (and its transportation variables such as travel time and cost for driving compared with riding transit) and the resulting mode choice decision for an attendee at a sporting event. Transit access for basketball games at the Staples Center was selected for this evaluation, because Staples Center is a transit-rich environment, and better reflects the type of transit conditions that will be available in the future with the proposed Project at Dodger Stadium, and so was determined to provide a reasonable survey sample to analyze travel behavior for the proposed Project. Intercept surveys were also conducted of Dodger Stadium Express riders. The models compare the statistical relationship between cost and time associated with taking transit to a game with the cost and time of driving and parking at a game and calculates the resulting transit mode share for the game, as a relative share of average game attendance.

Dodger Stadium Employees

The Dodgers estimate that there are approximately 300 employees at Dodger Stadium on a non-game/event day and 1,400 employees on game days, including Dodger and vendor employees. Zip code of residence data were not available for Dodgers employees and vendors, but the Dodgers indicated that many of their employees commute to the stadium from neighborhoods to the east, where many have good transit access, including northeast Los Angeles, Boyle Heights, downtown Los Angeles, and east Los Angeles. Commute mode-choice data from the American Community Survey of the United States Census were reviewed in these areas and averaged approximately 10 percent across these neighborhoods.

Tourists

Tourism ridership would be driven by the proposed Project capturing a share of the existing tourism market in Los Angeles, particularly for tourists to downtown Los Angeles visiting other attractions. Tourism ridership would not be consistent on a daily basis and would be variable depending on the seasonality of tourism in Downtown Los Angeles. On peak game attendance days, pre-purchase of timed tickets would be implemented, and game-day riders possessing a timed ticket would have priority boarding.

Neighborhood Riders

The proposed Project would provide fixed route transit service to several neighborhoods including Chinatown, Mission Junction, Elysian Park and Solano Canyon, and to destinations around the Los Angeles State Historic Park. Ridership for neighborhood riders was estimated by calculating the working-age people and jobs within a half-mile walking-distance of each proposed station based on a street network analysis. The Project Sponsor will request a program with the Los Angeles Dodgers on the potential for the Dodger Stadium Station to include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options; accordingly, a one-mile biking distance for the Dodger Stadium Station was chosen for the evaluation of the Dodger Stadium Station since the potential mobility hub would facilitate safe and convenient connections to Elysian Park and Solano Canyon, which are beyond a half-mile walking distance. The American Community Survey and the Longitudinal Employer-Household Dynamics of the United States Census was used to calculate the population and jobs respectively within the station catchment areas.

The City of Los Angeles travel demand model was used to estimate growth in population and jobs consistent with the DTLA 2040 EIR forecast. As with Dodger employees, U.S. Census commute mode choice data were reviewed to develop capture rates for the proposed Project based on existing transit mode share in the area, as well as proximity to other fixed route services, such as Metro Rail.

The Chinatown/State Park Station would provide access to several destinations that are currently not as well served by high frequency fixed route transit, including William Meade Homes. A mobility hub is also proposed at the Chinatown/State Park Station.

Los Angeles State Historic Park Visitors and Event Attendees

The Los Angeles State Historic Park would be served by the proposed Project via an intermediate station, Chinatown/State Park Station, located adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park. The southern portion of the station would be located on City ROW, while the northern portion of the station would be located within the southern boundary of the Los Angeles State Historic Park. This intermediate station would provide a more direct access to the park than the existing Metro L Line (Gold) station in Chinatown for recreationalists, as well as for event attendees on the days that the Los Angeles State Historic Park hosts events. Ridership for the daily park use is included in the ridership estimates for neighborhood riders.

The Los Angeles State Historic Park also provided special event data. In 2019, there were 15 special event days at the park, ranging from craft fairs drawing 6,000 to 8,000 people per event to evening concerts drawing 12,000 to 20,000 people per event. The event attendance was averaged to estimate future event attendance for this analysis. Event attendees would be able to ride the proposed Project from LAUS. A 10 percent capture rate for rides to and from LAUS was assumed.

Vehicle Miles Traveled

Per the TAG guidelines and further described below, VMT analysis for a Transportation Project is required only when a Transportation Project is likely to induce additional vehicle miles traveled by increasing vehicle capacity. The proposed Project would not increase vehicle capacity as it is a mode of transit. The proposed Project, as detailed in this section, would reduce VMT. Thus, no VMT analysis is required, and the associated impact is therefore less than significant. Additionally, per the Governor's Office of Planning and Research's *Technical Advisory on Evaluating Transportation Impacts in CEQA,*[9] "Transit and active transportation projects generally reduce VMT and therefore are presumed to cause a less-than-significant impact on transportation. This presumption may apply to all passenger rail projects, bus and bus rapid transit projects, and bicycle and pedestrian infrastructure projects."

While not required, the VMT reduction benefit of the proposed Project was quantified for informational purposes. VMT for Dodger Stadium games and events was calculated using the methodologies detailed below. While the proposed Project is expected to have VMT benefit associated with neighborhood transit riders, tourists, and Los Angeles State Historic Park visitors and event attendees, these market segments were not included in the VMT analysis.

Dodger Stadium fans currently travel to and from the stadium by either traveling directly to Dodger Stadium or traveling to LAUS to transfer to the Dodger Stadium Express, which is a bus service that shuttles fans between LAUS and Dodger Stadium. Average ridership on game days in 2019 was approximately 1,845 riders (pre-game to Dodger Stadium from LAUS), with an average of an additional 415 riders on the South Bay Dodger Stadium Express, for a total ridership of 2,260 or 4.7 percent of game attendees. Mode of Access (MOA) for the Dodger Stadium Express was calculated based on 2014 season data provided by Metro.[10] These data are further detailed in the *Transportation Appendices* (Appendix N).

People who travel to Dodger Stadium generally drive a private vehicle and park at the stadium or are dropped off by a transportation network company (TNC, e.g., Uber or Lyft) vehicle. Most people who travel to LAUS to transfer to Dodger Stadium Express generally take transit, though some drive a private vehicle and park or are dropped off by a TNC vehicle. VMT estimates were generated for each of these five modes: Park at Dodger Stadium, TNC to Dodger Stadium, Transit to Dodger Stadium Express, Park and Ride to Dodger Stadium Express, and TNC to Dodger Stadium Express.

Dodger Stadium hosts games on weekdays and weekends, which have unique travel patterns. VMT estimates were generated for weekday evening, Friday evening, weekend daytime, and weekend evening games. There were three weekday day games in the 2019 regular season, including Opening Day. Since these games are generally outliers, they were not quantified separately in their own category, and were instead grouped with weekday evening games for the purposes of the VMT analysis. Average game attendance for each of the game periods was calculated based on the paid attendance from the 2019 season, and game attendance was assumed to remain constant for the future year scenarios. These time periods were aggregated to analyze Daily Weekday VMT, Daily Weekend VMT, and Annual VMT. Annual VMT was estimated based on the number of games and events in 2019 within the day and time categories above.

VMT is calculated by multiplying the number of vehicle trips by the average trip length. VMT for CEQA analysis is focused on automobile VMT, therefore transit riders generate zero VMT. VMT was calculated for vehicles destined for Dodger Stadium (both parking and TNC drop off), and for LAUS (park and ride and TNC drop off).

---

9 Governor's Office of Planning and Research, December 2018, available at: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf, accessed July2021, page 23.

10 Mode of access data for patrons riding the Dodger Stadium Express was available and obtained from Metro for years ranging from 2011 through 2015. The 2014 season data was selected for use since it had the most data samples compared with the other years and also had a lower non-automobile mode of access, making the VMT assessment more conservative. See Appendix N.

Calculating Average Vehicle Occupancy

Since VMT is calculated by vehicle rather than individual, the number of vehicles were estimated by dividing the number of game attendees driving in a private vehicle or riding in a TNC to Dodger Stadium and LAUS by the average vehicle occupancy (AVO) for each game period. AVO for private vehicles was calculated by dividing the number of people who drove a private vehicle to Dodger Stadium (attendance minus attendance that arrived via transit or TNC) by the number of paid parking scans (i.e., vehicles); this AVO was also applied for people driving and parking at LAUS. The AVO was separately calculated for weekday evening (AVO of 3.6) and weekend day games (AVO of 3.9). AVO for TNC vehicles was assumed to be three per vehicle for post-game travel (excluding the driver who did not attend the game/event). To calculate pre-game AVO for TNCs, the estimated post-game TNC ridership (calculated by multiplying post-game TNC vehicle counts by 3.0) was divided by the counts of pre-game TNCs collected at Dodger Stadium, resulting in pre-game TNC AVO of approximately 1.7-1.8 game attendees per vehicle. This adjustment in AVO was made because post-game TNC vehicle counts collected at Dodger Stadium are lower than pre-game TNC vehicle counts, indicating that TNCs are fuller post-game than pre-game, potentially because groups whose members travel to the game separately from two different origins may leave the game together, whether in a TNC or a private vehicle. TNC data accounts for TNC arrivals and departures at the Dodger Stadium property.

Calculating Average Trip Length

Average trip length (roundtrip in miles) for each game period to Dodger Stadium and LAUS was estimated using data collected by Teralytics, a data firm that aggregates and anonymizes mobile signal data to provide an estimated share of vehicles traveling to and from a specified zone during a specified time period. The data included the share of vehicles destined for the Stadium by zip codes (i.e., “zones”) within a 50-mile radius of Dodger Stadium on game days during the Dodgers’ 2019 season. Beyond this radius, travel was aggregated at the level of counties.

The Dodger Stadium zone for origin/destination share was drawn in the shape of the Stadium property (including its parking).

Because much of the LAUS travel activity is pass-through travel on transit to/from downtown, drawing a strict boundary around the station would not capture these “pass-through trips” and would over represent the Metro and Metropolitan Water District of Southern California office buildings in the travel pattern distribution.[11] In order to more accurately capture the travel patterns of destinations in the greater LAUS vicinity, the average trip length was estimated using the zip code (90012) that surrounds LAUS.

The Teralytics data had approximately 2.1 million trip samples, and average trip length was calculated as a weighted average – weighted by the number of samples to and from each zip code – for each of the analysis time periods.

The average trip lengths to Dodger Stadium and LAUS were shorter for all weekday games (19 - 21 miles) compared to all weekend games (22 – 25 miles). This difference may indicate that more fans who attend weekday games live or work near the stadium. The average trip lengths leaving Dodger Stadium and LAUS are comparable between weekday games and weekend

[11] Because employees of Metro and MWD park in parking facilities on the Union Station campus and use driveways that are shared with transit riders, it is not possible to fully isolate employee travel from transit rider travel. Additionally, proposed Project related vehicle mode of access is expected to occur at parking and curbside loading zones designated within the station vicinity, not at Union Station.

daytime games (21 – 22 miles). These trip lengths may be comparable because fans attending weekend daytime games stay in the downtown Los Angeles area to visit other attractions. The average trip length for weekend evening games was similar for trips to and from Dodger Stadium and LAUS (22 – 25 miles).

Calculating VMT

VMT for patrons driving a private vehicle and parking at Dodger Stadium or LAUS was calculated by multiplying the number of vehicles by the average trip length. VMT for patrons riding a TNC to Dodger Stadium or LAUS was calculated by multiplying the number of vehicles by the average trip length and then applying a deadhead factor of 1.5 to account for the distance a TNC driver drives while waiting for a passenger request; the deadhead factor is based on research completed for Uber and Lyft to estimate TNC's share of VMT.[12]

Employee VMT, for both Dodger Stadium and proposed Project operations, was calculated by applying the per capita (employee) VMT from the Central City North Community Plan. Annual average change in per capita VMT was estimated based on the model forecast years described in the Future Transportation Network Changes discussion above and the average annual change was used to estimate per capita employee VMT for 2019, 2026 and 2042. Based on the number of games and events at Dodger Stadium, annual VMT for Dodgers employees was estimated for game/event days, and annual non gameday employee VMT was estimated based on a count of the remaining days of the year other than 10 holiday days. Proposed Project operations employees are assumed to work 365 days a year.

Table 3.17-2 presents Daily VMT for the Existing (2019) scenario for Dodger Stadium game/event ticketholders and employees. Existing Weekday VMT for Dodger Stadium ticketholders and employees is estimated at 576,600 and Existing Weekend Day VMT is 750,900.[13]

Table 3.17-2: Dodger Stadium Estimated Daily VMT – Existing

VMT Market Segment	Daily Weekday VMT		Daily Weekend VMT	
	2019		2019	
	Low Day	High Day - Game	Low Day	High Day - Game
Dodger Game/Stadium Event Ticket Holders		563,200		737,500
Dodger Employees	2,900	13,400	2,900	13,400
Total VMT	**2,900**	**576,600**	**2,900**	**750,900**

Table 3.17-3 presents Annual VMT for the Existing (2019) scenario for Dodger Stadium game/event ticketholders and employees. Existing Annual VMT for Dodger Stadium ticketholders and employees is estimated at 53,549,000.

12 Fehr & Peers, Estimated TNC Share of VMT in Six US Metropolitan Regions, 2019. Please note that this material is either covered under a NDA, otherwise confidential, and/or copywritten.

13 Weekend day games are presented as opposed to weekend evening games because that is the weekend time period when background traffic conditions are worse. All games, including weekend evening games, are accounted for within the annual VMT estimates.

Table 3.17-3: Dodger Stadium Estimated Annual VMT – Existing

VMT Market Segment	Annual VMT
	2019
Dodger Game/Stadium Event Ticket Holders	51,640,000
Dodger Employees	1,909,000
Total VMT	**53,549,000**

City of Los Angeles Transportation Assessment Guidelines Screening (CEQA)

LADOT has established screening criteria, analysis methodology, and threshold criteria to determine significant traffic impacts of a proposed project in its jurisdiction through the City's TAG.

The first chapter provides screening guidelines that determine whether a transportation assessment is needed. For a transportation project, analysis would be required for projects that meet the following criteria:

> "If a Transportation Project is likely to either (1) induce additional vehicle miles traveled by increasing vehicle capacity; or (2) reduce roadway through lane capacity on a street that exceeds 750 vehicles per hour per lane for at least two (2) consecutive hours in a 24-hour period after the project is completed"

The proposed Project does not require a transportation assessment based on the City of Los Angeles TAG screening criteria above since it would neither induce additional vehicle miles traveled by increasing vehicle capacity nor reduce through-lane capacity after the Project is completed. Therefore, while this transportation assessment was determined not to be required for the proposed Project based on the TAG screening criteria, a transportation assessment was completed for informational purposes.

Thresholds of Significance

For purposes of this EIR, the checklist questions contained in Appendix G of the CEQA Guidelines and the CEQA transportation impact criteria of the TAG have been utilized as the thresholds of significance for transportation impacts. In accordance with Appendix G of the CEQA Guidelines, as well as the CEQA transportation impact criteria of the TAG, the Project would have a significant impact on transportation if it would:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- Substantially increase hazards due to a geometric design feature (e.g., shape curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
    - Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
    - Preliminary project access plans are to be reviewed in light of commonly accepted traffic engineering design standards to ascertain whether any deficiencies are

apparent in the site access plans which would be considered significant. The determination of significance shall be on a case-by-case basis, considering the following factors:

- The relative amount of pedestrian activity at project access points.
- Design features/physical configurations that affect the visibility of pedestrians and bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists.
- The type of bicycle facilities the project driveway(s) crosses and the relative level of utilization.
- The physical conditions of the site and surrounding area, such as curves, slopes, walks, landscaping or other barriers, that could result in vehicle/pedestrian, vehicle/bicycle, or vehicle/vehicle safety hazards.

o The project location, or project-related changes to the public right-of-way, relative to proximity to the High Injury Network or a Safe Routes to School program.

- Result in inadequate emergency access.

  o For emergency access impacts, a review was conducted for Project access to determine if adequate emergency access is provided. The analysis considered the physical conditions of the Project alignment and surrounding area, such as curves, slopes, walls, landscaping or other barriers. Additionally, a determination was made as to whether the Project would preclude adequate emergency access within the adjacent roadway network.

3.17.4 Environmental Impacts

This section assesses potential impacts associated with the Project and, if necessary, identifies mitigation measures to eliminate or reduce impacts. The methodology implemented in this assessment consists of evaluating whether the Project would have significant transportation and traffic impacts according to the above-stated thresholds. Impacts are primarily assessed by considering the Project objectives and proposed uses in light of the regulatory setting as well as the existing and surrounding uses described above. Related projects, including future transportation projects and development projects, are discussed in Chapter 5, Other CEQA Considerations.

Project Features with Potential to Affect the Street Network

The proposed Project would commence adjacent to LAUS and El Pueblo de Los Angeles (El Pueblo) and terminate at Dodger Stadium. The proposed Project would include three stations, a non-passenger junction, and cable-supporting towers at various locations along the alignment. The proposed Project alignment would generally be located within public ROW, following Alameda Street and then continuing along Spring Street in a northeast direction through the community of Chinatown to the southernmost corner of the Los Angeles State Historic Park. The alignment would then continue northeast over the western edge of the Los Angeles State Historic Park and the Los Angeles County Metropolitan Transportation Authority (Metro) L Line (Gold) to the intersection of North Broadway and Bishops Road. At this intersection, the proposed Project alignment would turn and continue northwest following Bishops Road toward its terminus at Dodger Stadium, located in the Elysian Park community. The main change to the existing street system would be to shorten the northbound left turn from Alameda Street onto Cesar E. Chavez Avenue by approximately 140 - 150 feet. All other Project components would be located out of the roadway network and would not affect roadway capacity.

TRA-1: Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less Than Significant Impact. As previously discussed, the TAG includes a refinement to the analysis approach for determining whether a project conflicts with plans, programs, ordinances, or policies, known as PPOP. A detailed evaluation of the required elements of the PPOP for the proposed Project is provided in the *Transportation Appendices* (Appendix N). The following discussion summarizes the key elements of the PPOP analysis.

SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

The proposed Project would introduce a unique new mode of transit for travelers between LAUS and Dodger Stadium. Implementation of the proposed Project would create new and improve existing connections not only to communities along the Project alignment, but also to other area transit lines and stations, including the regional transit lines served by LAUS, the Chinatown Metro L Line (Gold) station, and several regional and local bus lines serving the Project Study Area. Additionally, the proposed Project has the potential to reduce air quality emissions by reducing vehicle trips. As such, the proposed Project would be consistent with several goals under the RTP/SCS, including: improving mobility, accessibility, reliability, and travel safety for people and goods; enhancing the preservation, security, and resilience of the regional transportation system; increasing person and goods movement and travel choices within the transportation system; reducing greenhouse gas emissions and improving air quality; supporting healthy and equitable communities; adapting to changing climate and supporting an integrated regional development pattern and transportation network; and leveraging new transportation technologies and data-driven solutions that result in more efficient travel. Therefore, the proposed Project would be consistent with SCAG's RTP/SCS.

Mobility Plan 2035

All Project components would be sited and designed such that they would not affect existing or proposed street classifications and cross sections. Therefore, the proposed Project would be consistent with the street classifications identified in the Mobility Plan 2035.

There are no existing bicycle facilities along the Project alignment. However, there are planned bicycle facilities identified in the Project area on Alameda Street, Spring Street, and Broadway. All Project components would be designed such that they would accommodate future bicycle facilities in the Project study area. Therefore, the proposed Project would be consistent with the 2010 Bicycle Plan, which has been incorporated into the Mobility Plan 2035.

The Project would facilitate multi-modal access to and from the stations with pedestrian network improvements and would improve the bike circulation system by carrying cyclists over key barriers (e.g., SR-110110 and the steep grades up to Dodger Stadium and Elysian Park). The Dodger Stadium Station would provide pedestrian network improvements around the station, including repaving pedestrian paths through the Dodger Stadium parking lot to channelize and provide a safe connection for pedestrians traveling between the station and the stadium. Additionally, a mobility hub would be potentially provided at Dodger Stadium to provide connections to Elysian Park and the surrounding communities and at the Chinatown/State Park Station. Therefore, the proposed Project would be consistent with the Mobility Plan 2035 policies regarding the provision of quality pedestrian access.

Citywide Design Guidelines

None of the proposed Project stations, junctions or towers would introduce new curb cuts for passenger loading zones. Instead, the proposed Project would rely on existing parking facilities and curbside loading zones with available capacity to avoid introducing new locations with the potential for pedestrian and vehicle conflicts. As such, the proposed Project would be consistent with the Citywide Design Guidelines to incorporate vehicular access such that it does not interfere with pedestrian and/or vehicular circulation. Parking is not a CEQA impact area.

TRA-2: Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) (Vehicle Miles Traveled)?

CEQA Guidelines section 15064.3 establishes VMT as the most appropriate measure of transportation impacts. VMT refers to the amount and distance of automobile travel attributable to a project. The analysis of VMT for the proposed Project employed a variety of data, methodologies, and models in order to estimate Project ridership, vehicle trips reduced, vehicle trip lengths, and ultimately the VMT benefit of the proposed Project.

Construction Impacts

No Impact. Per the City of Los Angeles TAG, construction impacts are not considered to be a part of the CEQA analysis and so are included for informational purposes. Additionally, due to the temporary nature of construction traffic associated with the proposed Project, a substantial increase in VMT would not be anticipated to result from construction. Given the temporary nature of construction industry jobs, the relatively large regional construction industry, and the total number of construction workers needed during any construction phase, it is likely that the labor force from within the region would be sufficient to complete the majority of Project construction without a substantial influx of new workers and their families, and would not result in a substantial increase in VMT. Additionally, the Governor’s Office of Planning and Research specifically directs lead agencies that CEQA transportation impact analysis for VMT should consider automobile VMT only, and not commercial truck VMT. Therefore, construction of the proposed Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3. No impact would occur under the proposed Project.

Operational Impacts

No Impact. Per the TAG guidelines, VMT analysis for the proposed Project is screened out and is presumed less than significant. However, for informational purposes and to evaluate whether the proposed Project would result in a VMT reduction benefit, VMT for Dodger Stadium games and events was calculated using the methodologies detailed in Section 3.17.3 above.

Ridership Estimates

The proposed Project would serve the transit needs of a number of distinct market segments including: Dodger Stadium game and event attendees, employees, tourists, neighborhood riders, and Los Angeles State Historic Park visitors and event attendees. The total daily rider estimates for each market segment are summarized below and shown in Table 3.17-4 for average weekdays and weekends on “low” (non-event) days, “high” days (days with games or events) for the Project Opening Year (2026) and the Horizon Year (2042).

Dodger Stadium Games/Events Riders

It is estimated that 6,000 game attendees (12,000 trips for round-trip) would ride the proposed Project in 2026 and 10,000 game attendees (20,000 trips for round-trip) would ride the proposed Project in 2042 per game, reaching the estimated capacity of the system. Based on Dodger ticket sale data, approximately 15 percent of this ridership is expected to access the system at the Chinatown/State Park Station, transferring from the Metro L (Gold) Line.

Dodger Stadium Employees

Applying a 10 percent capture rate for the proposed Project, as described for this market segment in Section 3.17.3, it is estimated that 30 employees (60 trips for round-trip) would ride the proposed Project on a non-game day and 140 employees (280 trips for round-trip) would ride on a game/event day.

Tourists

The daily number of tourists who would ride the proposed Project is estimated to vary between 1,265 tourists (2,530 trips for round trip) and 3,370 tourists (7,140 trips for round trip).

Neighborhood Riders

The daily number of neighborhood transit riders per station is estimated to vary between 200 riders (400 trips for round-trip) to 575 riders (1,150 trips for round-trip).

Los Angeles State Historic Park – Visitors and Event Attendees

It estimated that an average of 1,120 event attendees (2,240 trips for round-trip) would ride the proposed Project to attend an event at the State Historic Park

Vehicle Miles Traveled

While the Project is expected to have VMT benefit associated with neighborhood transit riders and Los Angeles State Historic Park visitors, these market segments were not included in the VMT analysis to allow for a more conservative analysis. However, the proposed Project will provide substantially improved access to neighborhood riders with a direct, high frequency connection to the local and regional transit services at LAUS. It will also benefit communities surrounding Dodger Stadium by shifting riders who are currently driving to the regional transit network via improved connections to LAUS compared with the existing Dodger Stadium Express.

Table 3.17-4: Proposed Project Estimated Daily Riders

Ridership Market Segment	Daily Weekday Riders				Daily Weekend Riders					
	2026		2042		2026			2042		
	Low Day	High Day - Game	Low Day	High Day - Game	Low Day	High Day – LASHP	High Day - Game	Low Day	High Day – LASHP	High Day - Game
Dodger Stadium Access (Game/Stadium Event Ticket Holders)										
Alameda Station		5,100		8,500			5,100			8,500
Chinatown/State Park Station		900		1,500			900			1,500
Tourists	2,575	1,265	2,575	1,265	3,570	3,570	1,210	3,570	3,570	1,210
Dodger Employees	30	140	30	140	30	30	140	30	30	140
Other Special Events										
Special Events at LA State Historic Park						1,120			1,120	
Neighborhood Riders										
Alameda Station	400	400	500	500	200	200	200	250	250	250
Dodger Stadium Station	400	400	550	550	200	200	200	300	300	300
Chinatown/State Park Station (Neighborhood/Regional and Daily Park Access)	425	425	575	575	320	320	320	370	370	370
Total Daily Riders										
Total Daily Riders	3,830	8,630	4,230	13,030	4,320	5,440	8,070	4,520	5,640	12,270

Note: This table shows the number of daily riders. It is assumed that each rider will make two trips.
LASHP = Los Angeles State Historic Park.
Total ridership in the high game day scenario exceeds the 10,000 riders destined to the game since the Project will operate during the day before the game, including carrying employees and neighborhood riders.

Tourism ridership would be driven by the proposed Project capturing a share of the existing tourism market in Los Angeles, particularly for tourists to downtown Los Angeles visiting other attractions. VMT generated by proposed Project tourism is expected to be negligible as it is not expected to result in an increase in overall regional tourism and because the proposed Project would have high quality transit access. It is anticipated that most tourist trips on the proposed Project would be visiting other attractions in downtown Los Angeles.

For Los Angeles State Historic Park visitors and event attendees, there was no data available to determine the average trip length for Los Angeles State Historic Park vehicle trips. It is anticipated that VMT would likely modestly decrease as the proposed Project would improve fixed-route transit connections to the park. However, due to limited data and minor overall VMT benefit, this VMT change is conservatively not quantified.

For neighborhood transit users, the proposed Project would reduce VMT by providing a direct high-quality transit connection that could serve the Elysian Park and Solano Canyon neighborhoods, the Los Angeles State Historic Park, Chinatown, and Mission Junction. However, due to the short length of the Project alignment, the overall VMT reduction would be minor and so is conservatively not being quantified.

The proposed Project would require approximately 20 employees for operations and maintenance on a typical day. For a worst-case analysis, it was assumed that all of these employees would drive a personal vehicle to work, rather than use an alternate mode of transportation.

Table 3.17-5 presents Daily VMT for the Existing (2019), Future Year 2026, and Future Year 2042 scenarios for Dodger Stadium game/event ticketholders, Dodger Stadium employees, and proposed Project employees. Existing Weekday VMT for Dodger Stadium ticketholders and employees is estimated at 576,600 and Existing Weekend Day VMT is 750,900. Compared with Existing Conditions, in Future Year 2026 with the Proposed Project, Daily Weekday VMT is projected to decrease by approximately 25,800 VMT, from 576,600 to 550,800 VMT. Daily Weekend VMT is projected to decrease by approximately 31,700 VMT from 750,900 to 719,200 VMT. Compared with Existing Conditions, in Future Year 2042 with Proposed Project, Daily Weekday VMT is projected to decrease by approximately 53,300 VMT from 576,600 to 523,300 VMT. Daily Weekend VMT is projected to decrease by approximately 65,900 VMT from 750,900 to 685,000 VMT.

Table 3.17-6 presents Annual VMT for the Existing (2019), Future Year 2026, and Future Year 2042 scenarios for Dodger Stadium game/event ticketholders, Dodger Stadium employees, and proposed Project employees. Existing Annual VMT for Dodger Stadium ticketholders and employees is estimated at 53,549,000 VMT. Compared with Existing Conditions, in Future Year 2026 with Proposed Project, Annual VMT is projected to decrease by approximately 2,434,000 VMT to 51,115,000 VMT. Compared with Existing Conditions, in Future Year 2042 with proposed Project, Annual VMT is projected to decrease by approximately 5,067,000 VMT to 48,482,000 VMT.

As shown in Tables 3.17-5 and 3.17-6, the proposed Project would result in an overall reduction in VMT, resulting in a beneficial effect on the environment. Therefore, operation of the proposed Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3. No significant transportation impact would occur under the proposed Project.

Table 3.17-5: Dodger Stadium Estimated Daily VMT - with Proposed Project

VMT Market Segment	Daily Weekday VMT						Daily Weekend VMT					
	2019		2026 With Proposed Project		2042 With Proposed Project		2019		2026 With Proposed Project		2042 With Proposed Project	
	Low Day	High Day - Game	Low Day	High Day - Game	Low Day	High Day - Game	Low Day	High Day - Game	Low Day	High Day - Game	Low Day	High Day - Game
Dodger Game/Stadium Event Ticket Holders		563,200		539,300		513,600		737,500		707,700		675,300
Dodger Employees	2,900	13,400	2,400	11,300	2,000	9,500	2,900	13,400	2,400	11,300	2,000	9,500
Proposed Project Operations Employees	0	0	200	200	200	200	0	0	200	200	200	200
Total VMT	**2,900**	**576,600**	**2,600**	**550,800**	**2,200**	**523,300**	**2,900**	**750,900**	**2,600**	**719,200**	**2,200**	**685,000**
VMT Reduction (Compared to Existing VMT)			***-300***	***-25,800***	***-700***	***-53,300***			***-300***	***-31,700***	***-700***	***-65,900***

Note: 2042 VMT results include the benefit associated with the further buildout of the regional transit network

Table 3.17-6: Dodger Stadium Estimated Annual VMT – with Proposed Project

VMT Market Segment	**Annual VMT**		
	2019	**2026 With Proposed Project**	**2042 With Proposed Project**
Dodger Game/Stadium Event Ticket Holders	51,640,000	49,438,000	47,085,000
Dodger Employees	1,909,000	1,611,000	1,342,000
Proposed Project Operations Employees	0	66,000	55,000
Total VMT	**53,549,000**	**51,115,000**	**48,482,000**
VMT Reduction (Compared to Existing VMT)	**0**	**-2,434,000**	**-5,067,000**

TRA-3: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Construction Impacts

Less than Significant Impact with Mitigation. Per the City of Los Angeles TAG, construction impacts are not considered to be part of the CEQA analysis, and so are included for informational purposes. Nonetheless, Project construction would introduce lane closures and closed worksites within City streets for construction activities, such as foundations and steel erection. Construction worksites would be fenced, and lane closures and associated lane tapers, temporary advance warning signs, detour signs, etc., would be implemented in accordance with the California MUTCD and LADOT requirements to ensure that no significant temporary geometric design hazards are introduced during the construction period after mitigation. Construction of the proposed Project would not substantially increase hazards due to a geometric design feature or incompatible use with implementation of Mitigation Measure TRA-B, as presented in Section 3.17.5, Mitigation Measures, below. As Project features get constructed, such as columns, the potential for visibility obstructions detailed below for operations could be introduced. As these features are constructed, Mitigation Measure TRA-A, as presented in Section 3.17.5, Mitigation Measures, below would be implemented concurrently to ensure that these impacts would be less than significant during construction.

Operational Impacts

Less Than Significant Impact with Mitigation

Pedestrian Activity

The proposed stations along the Project alignment would be located in areas with varying amounts of pedestrian activity. The Alameda Station would be adjacent to LAUS, which is a large pedestrian generator since it provides connections to many bus and rail services for both local and distance travel. Pedestrian counts were collected at the nearby intersection of Alameda Street and Los Angeles Street in June 2019, showing up to 687 pedestrians at a single crossing during the PM peak hour. The proposed Project would not hinder pedestrian access or crossings. The footprint of the Alameda Station would be located away from and would not impede access to the nearby intersection. Therefore, the proposed Project would not hinder pedestrian access or crossings at this location. As described in Section 2, Project Description, the Alameda Station would have access from the west side of Alameda Street at El Pueblo, and from the east side of Alameda Street within the planned LAUS Forecourt. Therefore, riders of the proposed Project would not need to cross Alameda Street in order to access the Project, and it would not increase pedestrian crossing activity at the intersection of Alameda Street and Los Angeles Street.

The Chinatown/State Park Station would be located in the southernmost portion of the Los Angeles State Historic Park, which naturally encourages pedestrian activity. Surrounding existing and approved land uses include a mix of residential, commercial, and industrial. Per the typical count collection process under the TAG, pedestrian counts were collected at intersections. A pedestrian count from May 2019 at the intersection of Spring Street and College Street found up to 117 pedestrians crossing Spring Street at a single crossing in the AM peak hour (the highest peak hour counted). The footprint of the Chinatown/State Park Station would be located away from and would not impede access to the nearby intersection. As described in Section 2, Project Description, the proposed Project would enhance the pedestrian connection between the Metro L (Gold) Line Chinatown Station and the entrance to the Chinatown/State Park Station of the proposed Project. No pedestrian crossings would occur across City streets via this connection. One driveway crossing would be along this pedestrian connection. Enhancements to this driveway crossing are detailed under Mitigation Measure TRA-A, as presented in Section 3.17.5, Mitigation Measures, below. Therefore, the proposed Project would not hinder pedestrian access or crossings.

The Broadway Junction would be located across Bishops Road from Cathedral High School. A pedestrian count from May 2019 at the intersection of Broadway and Bishops Road found up to 90 pedestrians crossing at least one leg of the intersection in a peak hour. The footprint of the Broadway Junction would not impede access to the nearby intersection. Therefore, the proposed Project would not hinder pedestrian access or crossings.

The Dodger Stadium Station would be located in the existing Dodger Stadium parking lot, where the main pedestrian activity currently consists of pedestrians walking to and from their vehicles before and after events at Dodger Stadium. Per the typical count collection process under the TAG, pedestrian counts were collected at intersections. Dodger Stadium roadways are private off-street facilities, and therefore pedestrian counts were not collected. The proposed Project would include a pedestrian connection to enhance the pedestrian experience between the Dodger Stadium Station and Dodger Stadium. This pedestrian pathway would also provide an enhancement for pedestrians who currently walk between Dodger Stadium and Chinatown and enter at the Downtown Gate. Therefore, the proposed Project would enhance pedestrian access at Dodger Stadium.

Visibility of Cars, Pedestrians, and Bicyclists

The proposed Project features with the potential to affect the visibility of pedestrians and bicyclists in adjacent crosswalks are station columns where introduced in the roadway. The proposed stations, junction, and towers located off-street are less likely to affect visibility but are also evaluated below.

Alameda Station

A site distance evaluation was prepared for the Alameda Station to evaluate the potential visibility impacts for southbound motorists approaching the pedestrian crossing on the north leg of the intersection of Alameda Street and Los Angeles Street (to be built as part of Metro's LAUS Forecourt and Esplanade Improvements Project), as well as for northbound motorists approaching the pedestrian crossing on the south leg of the intersection of Alameda Street and Cesar E. Chavez Avenue.

The horizontal sight distance was evaluated to determine whether pedestrians entering the raised crossing of the LAUS Forecourt and Esplanade Improvements Project would be visible to southbound motorists, whose visibility may be restricted due to the location of the Alameda Station columns.[14] Based on the 35-mph posted speed limit, the required stopping distance is 250 feet. At 250 feet in advance of the pedestrian crossing, there would be a clear horizontal line of sight between a vehicle and the entire length of the pedestrian crossing. Thus, there is no anticipated horizontal sight distance issue for this crossing due to the placement of the columns for the Alameda Station. The southern leg crosswalk of the Alameda Street and Cesar E. Chavez

[14] Metro's LAUS Forecourt and Esplanade Improvements Project is currently being developed in coordination with the City of Los Angeles and would include repurposing the existing northwestern parking lot at LAUS into a pedestrian forecourt and gathering space, as well as pedestrian and bicycle enhancements along Alameda Street and Los Angeles Street.

Avenue intersection has more than 250 feet of separation, so there is no horizontal sight distance issue anticipated at this location. Since the raised crossing will be fully signalized, vehicles stopping for pedestrians in the crosswalk will be controlled by a red traffic signal indication during the walk phase.

In addition, the vertical sight distance was evaluated to determine whether the traffic signal heads at the LAUS Forecourt and Esplanade Improvements Project pedestrian crossing and the traffic signal heads at the intersection of Alameda Street and Cesar E. Chavez Avenue would be visible to southbound motorists and northbound motorists, respectively. The base of the Alameda Station platform would be located approximately 20 feet above the roadway, with the boarding platform located approximately 31 feet above the roadway. Based on the 35-mph posted speed limit, the required stopping distance is 250 feet in both directions. At 250 feet in advance of the stop bars in each direction, there would be a clear vertical line of sight between the vehicle and the signals. Thus, there is no anticipated vertical sight distance issue for traffic signals due to the height of the station platform. No visibility impact would result from operation of the Alameda Station.

<u>Alameda Tower</u>

The Alameda Tower would be located on the Alameda Triangle, in City ROW, at the southeast corner of the intersection of Alameda Street and Alhambra Avenue. The intersection is signalized. The Alameda Tower would not obstruct the vertical line of sight between the northbound and southbound vehicles and the traffic signals. Westbound right-turning vehicles on a red light would need sufficient corner sight distance to see northbound vehicles on Alameda Street approaching Alhambra Avenue. Per the HDM, the minimum value for corner sight distance at signalized intersections should be equal to the stopping sight distance. Based on the 35-mph posted speed limit, the required stopping sight distance and the required corner sight distance is 250 feet. The Alameda Tower would obstruct the horizontal line of sight between a westbound vehicle on Alhambra Avenue, approaching the right turn onto northbound Alameda Street, and a vehicle traveling northbound on Alameda Street, 250 feet upstream of the intersection. Because this intersection is signalized, the primary potential point of conflict could potentially occur when a westbound vehicle would attempt to make a right turn on red while northbound vehicles have a green phase.

Implementation of the visibility enhancements described under Mitigation Measure TRA-A, as presented in Section 3.17.5, Mitigation Measures, below, primarily by implementing westbound no right turn on red restrictions would alleviate potential visibility issues associated with operation of the Alameda Tower by prohibiting vehicles from making a westbound right turn on red. With implementation of Mitigation Measure TRA-A, as presented in Section 3.17.5, Mitigation Measures, below, impacts would be less than significant.

<u>Alpine Tower</u>

The Alpine Tower would be located on a City-owned property, currently being used as non-public parking storage for City vehicles, at the northeast corner of the intersection of Alameda Street and Alpine Street, adjacent to the elevated Metro L Line (Gold). The intersection is signalized, and the Alpine Tower would not obstruct the vertical line of sight between the northbound vehicles and the traffic signals. Based on a 35-mph speed limit, Alameda Street would require 250 feet for stopping sight distance, and based on a 30-mph speed limit, Alpine Street would require 200 feet for stopping sight distance. The Alpine Tower would not obstruct the horizontal line of sight for westbound vehicles making a right-turn from Alpine Street to Alameda Street, nor would it obstruct the horizontal line of sight for southbound vehicles making a left-turn from Alameda Street to Alpine Street. Therefore, no visibility impact would result from operation of the Alpine Tower.

Chinatown/State Park Station

The Chinatown/State Park Station would be located adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park. The southern portion of the station would be located on City ROW, while the northern portion of the station would be located within the southern boundary of the Los Angeles State Historic Park. This station would be located across the street from the planned driveway for the future College Station residential development and directly adjacent to the existing driveway immediately south of the Los Angeles State Historic Park, which is a planned driveway for the future Buena Vista residential development. Eastbound exiting vehicles from the driveway would need sufficient corner sight distance to see southbound vehicles on Spring Street approaching the driveway. Based on the 35-mph posted speed limit, the required corner sight distance is 340 feet. The Chinatown/State Park Station would not obstruct the horizontal line of sight between an eastbound vehicle exiting the driveway onto Spring Street.

Because the columns would be set back from the roadway, pedestrians crossing in the crosswalk across the existing driveway immediately south of the Los Angeles State Historic Park would be fully visible to vehicles turning into the existing driveway, and no sight distance obstructions would be present. Vehicles exiting the driveway would have full view of pedestrians crossing without obstructions. Pedestrians who cross outside of the crosswalk to the west of the columns could be obstructed by the columns for motorists travelling southbound on Spring Street making a right turn into the driveway. While there is an existing paved pathway behind the proposed column locations north of the driveway to access the Los Angeles State Historic Park, south of the driveway is a parking drive aisle of the Capital Milling property. Pedestrians are unlikely to cross in that location, because there would not be a sidewalk to cross onto south of the driveway. However, to further limit the potential for pedestrians to cross behind the columns, implementation of the visibility enhancements described under Mitigation Measure TRA-A, as presented in Section 3.17.5, Mitigation Measures, below, including the channelization of pedestrians to the crosswalk, would alleviate potential visibility issues associated with operation of the Chinatown/State Park Station by preventing pedestrians from crossing behind the columns where they would not be visible to motorists. With implementation of Mitigation Measure TRA-A, impacts would be less than significant.

Broadway Junction

The Broadway Junction would be located at the intersection of North Broadway and Bishops Road. The junction would primarily be located on privately-owned property with a portion of the junction and overhead cable infrastructure cantilevered and elevated above the public ROW. The intersection is signalized. Based on a 35-mph speed limit, Broadway would require 250 feet for stopping sight distance, and based on a 25-mph speed limit, Bishops Road would require 150 feet for stopping sight distance. The Broadway Junction would not obstruct the horizontal line of sight for westbound vehicles making a right-turn from Broadway to Bishops Road, nor would it obstruct the horizontal line of sight for southbound vehicles making a left-turn from Bishops Road to Broadway. Eastbound vehicle movements and southbound right vehicle movements would be unobstructed for horizontal stopping sight distance.

In addition, the vertical sight distance was evaluated to determine whether the traffic signal heads at the intersection of Bishops Road and Broadway would be seen by motorists on all approaches. Because the Junction is cantilevered with diagonal support columns, the vertical clearance from the roadway to the column varies, with the minimum being approximately 20 feet of clearance along the western curb face of Broadway, and the maximum being approximately 39 feet. Based on the speed limits stated above, the required stopping distance is 250 feet in both directions on

Broadway and 150 feet on Bishops Road. At these distances, there would not be an obstruction in the vertical line of sight to the overhead signal spanning over the roadway for Bishops Road and Broadway. Thus, there is no anticipated vertical sight distance issue for traffic signals due to the height of the platform. No visibility impact would result from operation of the Broadway Junction.

Stadium Tower

The Stadium Tower would be located on a vegetated hillside on private property north of Stadium Way between the Downtown Gate and SR-110. There are no intersections or pedestrian crossings in this location, and the Stadium Tower would not obstruct visibility, therefore, no visibility impact would result from operation of the Stadium Tower.

Dodger Stadium Station

The Dodger Stadium Station would be located in the southeast portion of the Dodger Stadium property near the Downtown Gate. The proposed Dodger Stadium Station would be located on an existing parking lot and partially located over the existing vegetative slope. The pedestrian connection to Dodger Stadium would be unobstructed and no visibility impact would result from operation of the Dodger Stadium Station.

Bicycle Facilities

There are no existing bicycle facilities along the proposed Project alignment. However, there are planned bicycle facilities identified in the Project area on Alameda Street, Spring Street, and Broadway. The Project components that would be located over the ROW include the Alameda Station, and the Broadway Junction.

The proposed Project would not introduce any driveways. The Alameda Station would span over the LAUS Forecourt and Esplanade Improvements Project bicycle facility and would not impede the movement of bicyclists along this future facility. No additional bicycle parking would be provided at Alameda Station next to LAUS, which has its own bicycle hub. The Chinatown/State Park Station is proposed to include a mobility hub, where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. The design of the bicycle facilities would be determined through the design process, but could include bicycle racks, lockers and/or a secured bicycle parking room. The Broadway Junction would be designed such that it would not affect the roadway or sidewalk so would not hinder the accommodation of a future bicycle facility on Broadway. Therefore, operation of the proposed Project would not introduce hazards to existing or future planned bicycle facilities. The proposed Project may provide bicycle share and individual bicycle lockers at the Dodger Stadium Station as part of a proposed potential mobility hub.

The proposed Project cabins would also accommodate bicycles on board and could be used to further bicycle access for riders.

Vehicle, Pedestrian, and Bicycle Safety Hazards

The section above details the Project components and their potential to affect vehicle, pedestrian, and bicycle visibility, which is the primary way that the Project could negatively impact transportation conditions. Though as detailed above, visibility enhancements have been proposed under Mitigation Measure TRA-A, as presented in Section 3.17.5, Mitigation Measures, below, at the Alameda Tower and Chinatown/State Park Station to reduce the potential for impact to less than significant. Outside of the visibility impacts described above, there are no geometric safety hazards. The streets surrounding the Alameda Station are mostly flat and do not have any substantial curves that would introduce safety hazards. Sidewalks are present adjacent to the proposed station location.

The streets immediately adjacent to the Chinatown/State Park Station are relatively flat and do not have any substantial curves that would introduce safety hazards. The sidewalks on the north side of Spring Street near the proposed station are wide and separated from cars by a large landscaped area.

The streets surrounding the Broadway Junction intersect at right angles. Bishops Road begins to have an incline north of the proposed junction location, but it is not a safety hazard due to the physical conditions of this component site and surrounding area. There are no sidewalks on the south side of Broadway near the junction, except for a brief portion at a bus stop, and none on the east side of Bishops Road north of the proposed junction site. No substantive increase in pedestrian volumes is anticipated at this location because the junction would not accommodate passengers.

The area surrounding the Dodger Stadium Station is a parking lot, with numerous drive aisles. The proposed pedestrian connection from the Dodger Stadium Station to Dodger Stadium would intersect the drive aisles at right angles, with high visibility crosswalks, pedestrian scaled lighting, and landscaping to define the pedestrian path of travel and enhance the walking experience. On game and event days, pedestrian crossings would be managed by employees controlling traffic to ensure safe and convenient crossings of the two internal roadways that would intersect with the Dodger Stadium Station connection. With the enhanced path of travel from the Dodger Stadium Station to Dodger Stadium and crossing management during games and events, no safety hazards due to the physical conditions of this component site and surrounding area are anticipated.

The proposed Project's junction and towers would not introduce any unsafe physical conditions with the implementation of Mitigation Measure TRA-A, as presented in Section 3.17.5, Mitigation Measures, below, which would be implemented at the Alameda Tower and the Chinatown/State Park Station. They would generally be located off street and would not impede the flow of vehicles in the roadway, and pedestrians and bicyclists on the sidewalk. The proposed curb extensions around the Alameda Tower would ensure that the sidewalk would not be negatively impacted by this tower. Therefore, no safety hazards due to the physical conditions of the proposed junction and tower sites and surrounding areas are anticipated.

High Injury Network and Safe Routes to School

None of the Project components are located within a Safe Routes to School program area, though Ann Street Elementary is located within ¼ mile of the Chinatown/State Park Station, so the area could be considered for a future Safe Routes to School program area. The only Project components located along an identified High Injury Network are the Alameda Station and the Alameda Tower. The Alameda Station would be located over the ROW on Alameda Street, which is on the High Injury Network. The proposed Project would provide connections to the station platform from either side of Alameda Street, thereby eliminating the need for riders to cross at grade at an intersection where there have been injuries and fatalities. Pedestrian circulation along the surrounding sidewalks at this location would not be limited by the proposed Project. The proposed Project would construct a curb extension adjacent to the Alameda Tower to ensure that pedestrian visibility would be maintained and the pedestrian crossing across Alhambra Avenue would be as short as possible. Therefore, no safety hazards due to location along a High Injury Network or Safe Routes to School program are anticipated.

Other Conditions that could Increase a Transportation Hazard

As a transit project, the proposed Project would increase transportation options in the area. The Project would not increase the number of routes or entrances for vehicles. The proposed Project would introduce columns into the ROW. Columns for bridges, freeway overpasses, elevated transit, etc., are a common feature of roadways in the Project area, such as the existing columns supporting the elevated Metro L Line (Gold) tracks and are not considered an incompatible use. The roadway design would be required to meet Highway Design Manual and California MUTCD standards. Thus, the proposed Project is not anticipated to result in other conditions that could increase a transportation hazard.

TRA-4: *Would the Project result in inadequate emergency access?*

Construction Impacts

Less Than Significant Impact with Mitigation. As discussed in the Project Description in Chapter 2, Project construction would occur in various phases, which would have different effects on the street system. The following section details anticipated construction period work areas, and temporary traffic handling measures such as temporary lane configuration changes. The purpose of this evaluation is to identify a likely construction scenario and its potential for impacts, but the ultimate design, construction process, and traffic handling would be subject to design review and approval by the City of Los Angeles and other reviewing agencies, so the potential construction work areas, and traffic handling could vary from the scenarios identified for the purposes of analysis in this EIR. However, impacts are expected to be less than significant with mitigation incorporated.

Alameda Station

Metro's LAUS Forecourt and Esplanade Improvements Project is currently being developed in coordination with the City of Los Angeles. The Esplanade improvements would include restriping and pedestrian and bicycle enhancements along Alameda Street and Los Angeles Street. The Draft EIR takes into account conditions with the planned Esplanade improvements. Upon completion of the Esplanade improvements, Alameda Street will include one northbound left turn lane, two northbound through lanes, one northbound through-right lane, a northbound curbside drop off zone, and two southbound through lanes. A two-way Esplanade bike path would be provided along the east side of Alameda Street. Conditions on Cesar E. Chavez remain the same as existing conditions.

There are two potential options for construction of Alameda Station – the Temporary Deck Option and the No Deck Option – depending on whether or not Metro's existing approximately 60-space parking lot in front of the Union Station Terminal and the future location of the planned LAUS Forecourt could be utilized for construction staging and location of the crane to be used during Alameda Station's construction. Both the Temporary Deck Option and No Deck Option are analyzed for construction of the Alameda Station.

<u>Temporary Deck Option</u>

Foundations and Columns (Full-Time Conditions): Under the Temporary Deck option, during the approximately 16-week foundations and columns phase of construction, the northbound through-right lane and one southbound through lane would remain open on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street.

The two northbound through lanes on Alameda Street would be partially shortened until reopening near the intersection of Cesar E. Chavez Avenue and Alameda Street to allow for northbound through traffic. No left turns would be allowed onto Cesar E. Chavez Avenue from Alameda Street during this phase, as construction would require the full-time closure of the northbound left turn lane. Construction during this phase would also require the full-time closure of one southbound through lane, as well as the northbound curbside drop-off zone, which would be used as a temporary northbound through lane.

The planned two-way Alameda Esplanade bike path along the eastern edge of Alameda Street along with Alameda Street's eastern and western sidewalks would remain open during this phase of construction, as well as the crosswalks at Los Angeles Street and Cesar E. Chavez Avenue, allowing for continued pedestrian access to LAUS and El Pueblo from Alameda Street.

The westbound left turn lane on Cesar E. Chavez Avenue would be closed full-time during Alameda Station's foundations and columns phase, but all other lanes (the eastbound left turn lane, two eastbound through lanes, the eastbound right turn lane, two westbound through lanes, and the westbound through-right lane) would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Deck Shoring, Cribbing, and Erection (Full-Time Conditions): Under the Temporary Deck Option, Alameda Station construction would include the installation and use of a temporary deck spanning over Alameda Street during the structural steel and gondola equipment erection phase.

The construction of the temporary deck would require that all lanes along Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street (the northbound left turn lane, two northbound through lanes, the northbound through-right lane/northbound curbside drop off zone, and two southbound through lanes) remain closed full-time for approximately two weeks.

Restricted local access to El Pueblo along with a service/loading area for El Pueblo would be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue. Emergency access to El Pueblo would also be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue.

Both the eastern and western sidewalks and the planned two-way Alameda Esplanade bike path along the eastern edge of Alameda Street would remain open during this phase of construction. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would also remain open, allowing for continued pedestrian access to LAUS and El Pueblo from Alameda Street. Pedestrian traffic on the eastern sidewalk would be controlled while specific construction activities are taking place during this construction phase to ensure safety. Bicycle traffic on the planned two-way Alameda Esplanade bike path would be controlled while specific construction activities are taking place during this construction phase to ensure safety.

The westbound left turn lane and eastbound right turn lane of Cesar E. Chavez Avenue would be closed full-time during the approximately two-week deck construction period, and all other lanes (the eastbound left turn lane, two eastbound through lanes, two westbound through lanes, and the westbound through-right lane) of Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection (Full-Time Conditions): Under the Temporary Deck Option, during the approximately 28-week structural steel and gondola equipment erection phase of construction, one northbound through lane, the northbound through-right lane, and two southbound through lanes would remain open on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street. The westernmost northbound through lane on Alameda Street would be partially shortened until reopening near the intersection of Cesar E. Chavez Avenue and Alameda Street to allow for through traffic. The northbound left turn pocket on Alameda Street would also be shortened, but not closed, allowing for left turns onto Cesar E. Chavez Avenue from Alameda Street. No full lane closures would be required.

A pedestrian detour would be required for a portion of the western sidewalk along Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street via existing sidewalks along the western edge of the Placita de Dolores. Pedestrians on the west side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. Pedestrians on the east side would primarily utilize a covered pedestrian sidewalk on the roadway along the eastern edge of Alameda Street. However, to ensure safety while certain, specific construction activities are taking place, pedestrians on the east side would be routed along the sidewalk within LAUS property and on a temporary sidewalk along the northern edge of the planned LAUS Forecourt. This temporary sidewalk may also be used to access LAUS. With the exception of the certain, specific construction activities, the planned two-way Alameda Esplanade bike path along Alameda Street would remain open. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would also remain open, allowing for continued pedestrian access to LAUS and El Pueblo.

All lanes along Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Deck Removal (Full-Time Conditions): The temporary deck would be removed following completion of the structural steel and gondola equipment erection phase of construction. Removal of the deck would require that all lanes along this portion of Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street (the northbound left turn lane, two northbound through lanes, the northbound through-right lane/northbound curbside drop off lane, and two southbound through lanes) remain closed full-time for approximately three weeks.

Restricted local access to El Pueblo along with a service/loading area for El Pueblo would be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue. Emergency access to El Pueblo would also be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue.

A pedestrian detour would be required for a portion of the western sidewalk along Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street. Pedestrians on the west side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. Pedestrian traffic on the eastern sidewalk would be controlled while certain construction activities are taking place during this construction phase to ensure safety. During these certain, specific construction activities, pedestrians on the east side would be routed along the sidewalk within LAUS property and on a temporary sidewalk along the northern edge of the planned LAUS Forecourt. This temporary sidewalk may also be used to access LAUS. With the exception of during these certain, specific construction activities, the planned two-way Alameda Esplanade bike path and the eastern sidewalk along Alameda Street would remain open. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would also remain open, allowing for continued access to LAUS and El Pueblo.

The westbound left turn lane and eastbound right turn lane of Cesar E. Chavez Avenue would be closed full-time during the approximately three-week deck removal phase, and all other lanes (the eastbound left turn lane, two eastbound through lanes, two westbound through lanes, and the westbound through-right lane) of Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Vertical Circulation, Hardscape and Landscape, Interior Work (Full-Time Conditions): Under the Temporary Deck Option, during the approximately 27-week vertical circulation, hardscape and landscape, and interior work phase of construction, no lanes would be closed on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street, with the exception of periodic closures for asphalt/re-striping on 10 non-consecutive working days. The northbound curbside drop off zone along Alameda Street would be closed full-time during this phase of construction.

A portion of the western sidewalk would require a pedestrian detour on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street via existing sidewalks along the western edge of the Placita de Dolores. Pedestrians on the west side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. However, the planned two-way Alameda Esplanade bike path and the eastern sidewalk along Alameda Street would remain open, as well as the crosswalks at Los Angeles Street and Cesar E. Chavez Avenue, allowing for continued access to LAUS and El Pueblo.

All lanes on Cesar E. Chavez Avenue would remain open through the entirety of this phase. All sidewalks on Cesar E. Chavez Avenue would remain open for pedestrian access.

<u>No Deck Option</u>

Foundations and Columns (Full-Time Conditions): Under the No Deck Option, during the approximately 16-week foundation and columns phase of construction, the northbound through-right lane would remain open on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street. The two northbound through lanes on Alameda Street as well as the northbound left turn lane would be partially shortened until reopening near the intersection of Cesar E. Chavez Avenue and Alameda Street to allow for northbound traffic. Construction during this phase would also require the full-time closure of the two southbound through lanes and the northbound curbside drop off lane.

Restricted local access to El Pueblo along with a service/loading area for El Pueblo would be provided on Alameda Street near its intersection with Los Angeles Street. Emergency access to El Pueblo would also be provided on Alameda Street near its intersection with Los Angeles Street.

The planned two-way Alameda Esplanade bike path along the eastern edge of Alameda Street along with Alameda Street's eastern and western sidewalks would remain open during this phase of construction, as well as the crosswalks at Los Angeles Street and Cesar E. Chavez Avenue, allowing for continued access to LAUS and El Pueblo from Alameda Street.

The westbound left turn lane and the eastbound right turn lane on Cesar E. Chavez Avenue would be closed full-time during Alameda Station's foundations and columns phase, but all other lanes (the eastbound left turn lane, two eastbound through lanes, two westbound through lanes, and the westbound through-right lane) of Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection

Construction Hours. During construction hours under the No Deck Option, the approximately 30-week structural steel and gondola equipment erection phase of construction would require the closure of all lanes on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street (one northbound left turn lane, two northbound through lanes, one northbound through-right lane/ northbound curbside drop off zone, and two southbound through lanes) as well as the planned two-way Alameda Esplanade bike path.

Restricted local access to El Pueblo along with a service/loading area for El Pueblo would be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue. Emergency access to El Pueblo would also be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue.

During construction hours of this phase of construction, partial closures of Alameda Street's western sidewalk would be required. Pedestrian detours would be required along the portion of the western sidewalk along the Placita de Dolores. Pedestrians on the west side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. Partial closures to the eastern sidewalk and a portion of the planned two-way Alameda Esplanade bike path would also be required. Pedestrian traffic on the eastern sidewalk would be controlled while certain construction activities are taking place during this construction phase to ensure safety. During these certain, specific construction activities, pedestrians on the east side would be routed along the sidewalk within LAUS property and on a temporary sidewalk along the northern edge of the planned LAUS Forecourt. This temporary sidewalk may also be used to access LAUS. A portion of the planned two-way Alameda Esplanade bike path would also be closed during construction hours, requiring bicyclists to utilize the same pedestrian detour outlined for the east side of Alameda Street. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would remain open, however. Accordingly, access to Union Station and El Pueblo would be maintained.

The westbound left turn lane and the eastbound right turn lane on Cesar E. Chavez Avenue would be closed during construction hours, but all other lanes (the eastbound left turn lane, two eastbound through lanes, two westbound through lanes, and the westbound through-right lane) of Cesar E. Chavez Avenue would remain open. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Non-Construction Hours. During non-construction hours of the structural steel and gondola equipment erection phase of construction under the No Deck Option, one northbound through lane, the northbound through-right lane, and one southbound through lane would remain open on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street. The northbound left turn lane and one northbound through lane would be shortened, but not closed, until reopening near the intersection of Cesar E. Chavez Avenue during non-construction hours. One southbound through lane, the eastern curbside drop off zone, and the planned Alameda Esplanade bike path would remain closed during non-construction hours due to construction staging.

A partial pedestrian detour would be required during non-construction hours along the portion of the western sidewalk along the Placita de Dolores due to the western sidewalk's partial closure. Pedestrians on the west side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. A partial pedestrian detour would also be required due to the closure of a portion of the eastern sidewalk along the planned LAUS Forecourt. Pedestrians on the east side would be routed along the sidewalk within LAUS property before crossing on a temporary sidewalk along the northern edge of the planned LAUS Forecourt to return to Alameda Street. This temporary sidewalk may also be used to access LAUS. A portion of the planned two-way

Alameda Esplanade bike path would also be closed during non-construction hours, requiring bicyclists to utilize the same pedestrian detour outlined for the east side of Alameda Street. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would remain open, however. Accordingly, access to Union Station and El Pueblo would be maintained.

All lanes on Cesar E. Chavez Avenue would remain open during non-construction hours. All sidewalks along Cesar E. Chavez Avenue would remain open for pedestrian access.

Vertical Circulation, Hardscape and Landscape, Interior Work (Full-Time Conditions): Under the No Deck Option, during the approximately 27-week vertical circulation, hardscape and landscape, and interior work phase of construction, no lanes would be closed on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street, with the exception of periodic closures for asphalt/re-striping on 10 non-consecutive working days. The northbound curbside drop off zone along Alameda Street would be closed full-time during this phase of construction.

A partial pedestrian detour would be required during this phase of construction along the portion of the western sidewalk along the Placita de Dolores. Pedestrians on the west side would be routed through the Placita de Dolores and along adjacent buildings to Alameda Street. A partial pedestrian detour would also be required due to the closure of a portion of the eastern sidewalk along the planned LAUS Forecourt. Pedestrians on the east side would be routed along the sidewalk within LAUS property and on a temporary sidewalk along the northern edge of the planned LAUS Forecourt. This temporary sidewalk may also be used to access LAUS. A portion of the planned two-way Alameda Esplanade bike path would also be closed, requiring bicyclists to utilize the same pedestrian detour outlined for the east side of Alameda Street. The crosswalks at Los Angeles Street and Cesar E. Chavez Avenue would remain open, however. Accordingly, access to Union Station and El Pueblo would be maintained.

All lanes on Cesar E. Chavez Avenue would remain open through the entirety of this phase. All sidewalks on Cesar E. Chavez Avenue would remain open for pedestrian access.

Alameda Tower

Foundations and Columns (Full-Time Conditions): During the approximately 16-week foundations and columns phase of construction, the northbound left turn lane, one northbound through lane, and three southbound through lanes on Alameda Street between Main Street and Alhambra Avenue would remain open. Construction of this phase would require the full-time closure to one northbound through lane on Alameda Street between Main Street and Alhambra Avenue, as well as the parking lane on the east side of Alameda Street.

The western sidewalk on Alameda Street would remain open for pedestrian access during this phase, and the eastern sidewalk along the Alameda Triangle on Alameda Street between Main Street and Alhambra Avenue would be closed.

The westbound left turn lane would be closed full-time on Alhambra Avenue while the shared westbound left/westbound right turn lane would remain open. The sidewalk on Alhambra Avenue would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection: The structural steel and gondola equipment erection phase of construction would last approximately 26 weeks.

Weeks 1-3 Full-Time Conditions. During the first three weeks of the structural steel and gondola equipment erection phase, conditions would be the same as described for the foundations and columns phase above.

Weeks 4-26 Construction Hours. During construction hours of weeks 4 through 26 of the structural steel and gondola equipment erection phase of construction, no lanes on Alameda Street between Main Street and Alhambra Avenue would be open, except for the westernmost southbound through lane which would remain open for local and emergency access during construction hours to allow continued access to businesses along this portion of Alameda Street. All other travel lanes on Alameda Street between Main Street and Alhambra Avenue (the northbound left turn lane, two northbound through lanes, and three southbound through lanes), and the parking lane on the east side of Alameda Street would be closed.

The western sidewalk would remain open for pedestrian access during construction hours. The eastern sidewalk along the Alameda Triangle on Alameda Street between Main Street and Alhambra Avenue would be closed during construction hours.

Closures along other portions of Alameda Street would be required to facilitate the construction road closures on Alameda Street between Main Street and Alhambra Avenue.[15]

The westbound left turn lane on Alhambra Avenue would require full-time closure, while the shared westbound left/westbound right turn lane would remain open. The sidewalk on Alhambra Avenue would remain open for pedestrian access.

Weeks 4-26 Non-Construction Hours. During non-construction hours of weeks 4 through 26 of the structural steel and gondola equipment erection phase of construction, three southbound through lanes would be open. The parking lane on the east side of Alameda Street, the northbound left turn lane, and two northbound through lanes on Alameda Street between Main Street and Alhambra Street would remain closed during non-construction hours.

The western sidewalk would remain open for pedestrian access during non-construction hours, but the eastern sidewalk would remain closed along the Alameda Triangle on Alameda Street between Main Street and Alhambra Avenue.

---

15 All northbound through travel in this section of Alameda Street would be rerouted to Main Street or to Ord Street. One existing northbound through lane would be used as a right turn only lane from Alameda Street onto Main Street, and the existing right turn lane onto Main Street would be maintained. The existing northbound left turn pocket from Alameda Street onto Ord Street would be closed, and all northbound left turns would occur from the westernmost existing through lane. All southbound lanes on Alameda Street between Bauchet Street and Main Street would remain open along with both eastern and western sidewalks.
All northbound lanes on Alameda Street between Alhambra Avenue and Alpine Street would remain open along with both eastern and western sidewalks. Two southbound lanes on Alameda Street between Alhambra Avenue and Alpine Street would be closed during construction hours, while the westernmost southbound through lane would remain open for local and emergency access to allow continued access to businesses along this section of Alameda Street.
All northbound lanes on Alameda Street between Alpine Street and College Street would remain open along with both eastern and western sidewalks. Two southbound through lanes in this section of Alameda Street would be tapered towards closure at the Alameda Street and Alpine Street intersection, and the southbound through right lane would be restricted to right turn only. The southbound left turn lanes/center striped median on Alameda Street and College Street would remain open.
The westbound left turn lane on Alpine Street would be closed during construction hours, while the rest of the lanes on Alpine Street would remain open. Both sidewalks on Alpine Street would remain open for pedestrian access.

Closures along other portions of Alameda Street would be required to facilitate the construction road closures on Alameda Street between Main Street and Alhambra Avenue.[16]

All lanes to the north of the intersection of Alameda Street and Alhambra Avenue would remain open during non-construction hours.

The westbound left turn lane on Alhambra Avenue would require full-time closure, while the shared westbound left/westbound right turn lane would remain open. The sidewalk on Alhambra Avenue would remain open for pedestrian access.

Hardscape and Landscape, Interior Work (Full-Time Conditions): The approximately 14-week hardscape and landscape, interior work phase of construction would require no lane closures nor the closure of the parking lane on the east side of Alameda Street between Main Street and Alhambra Avenue, with the exception of periodic closures for asphalt/re-striping on 10 non-consecutive working days on the northbound left turn lane, two northbound through lanes, and the parking lane on the east side of Alameda Street, as well as the northbound left turn pocket directly to the south of the intersection of Alameda Street and Main Street.

This phase would require the full-time closure of the eastern sidewalk along the Alameda Triangle on Alameda Street between Main Street and Alhambra Avenue. The western sidewalk would remain open for pedestrian access.

No lane closures on Alhambra Avenue are required during this phase, with the exception of periodic closures for asphalt/re-striping on 10 non-consecutive working days on the westbound left turn lane on Alhambra Avenue. The sidewalk on Alhambra Avenue would remain open for pedestrian access.

Alpine Tower

Foundations and Columns (Full-Time Conditions): During the approximately 15-week foundations and columns phase of construction, to the north of the intersection of Alameda Street and Alpine Street, one northbound through lane, the southbound left turn lane, two southbound through lanes, and the southbound through-right lane would remain open on Alameda Street. This phase of construction would require full-time closure of one northbound through lane and a portion of the northbound parking lane on Alameda Street to the north of its intersection with Alpine Street.

Additional road closures on Alameda Street would be required to facilitate the construction road closures near of the intersection of Alameda Street and Alpine Street.[17]

The western sidewalk on Alameda Street would remain open for pedestrian access, but a portion of the eastern sidewalk on Alameda Street to the north of its intersection with Alpine Street would be closed during this phase.

---

16 All northbound through travel in this section of Alameda Street would be rerouted to the right onto Main Street or to the left onto Ord Street. One existing northbound through lane would be used as a right turn only lane from Alameda Street onto Main Street, and the existing right turn lane onto Main Street would be maintained. The existing northbound left turn pocket from Alameda Street onto Ord Street would be closed, and all northbound left turns would occur from the westernmost existing through lane. All southbound lanes on Alameda Street between Bauchet Street and Main Street would remain open along with both eastern and western sidewalks.

17 To the south of the intersection of Alameda Street and Alpine Street, the northbound right turn lane would be closed and the eastern northbound through lane would be used as a right turn only lane from Alameda Street onto Alpine Street.

On Alpine Street between Main Street and Alameda Street, two westbound through lanes, the westbound left turn lane, and two eastbound through lanes would remain open. The northernmost westbound through lane would be reconfigured to be a through-right turn lane to allow for a right turn onto Alameda Street because construction of this phase would require the closure of Alpine Street's westbound right turn lane onto Alameda Street.

The southern sidewalk on Alpine Street would remain open for pedestrian access. The northern sidewalk on Alpine Street between Alameda Street and Main Street would be closed during this phase. To the west of the intersection of Alpine Street and Alameda Street, all lanes and sidewalks would remain open on Alpine Street.

Structural Steel and Gondola Equipment Erection: The structural steel and gondola equipment erection phase for the Alpine Tower would last approximately 28 weeks.

Weeks 1-3 Full-Time Conditions. During the first three weeks of the structural steel and gondola equipment erection phase, conditions would be the same as described for the foundations and columns phase above.

Weeks 4-28 Construction Hours. During construction hours of weeks 4 through 28 of the structural steel and gondola equipment erection phase of construction, to the north of the intersection of Alameda Street and Alpine Street, two southbound through lanes and the southbound through-right lane would remain open on Alameda Street. The easternmost southbound through lane would be reconfigured to be a through-left turn lane because Alameda Street's southbound left turn lane would be closed during construction hours. During construction hours, two northbound through lanes and the northbound parking lane would also be closed.

Additional road closures on Alameda Street would be required to facilitate the construction road closures near the intersection of Alameda Street and Alpine Street.[18]

The western sidewalk would remain open on Alameda Street for pedestrian access both north and south of the intersection of Alameda Street and Alpine Street. A portion of the eastern sidewalk on Alameda Street to the north of its intersection with Alpine Street would be closed during construction hours. The eastern sidewalk south of the intersection would remain open during construction hours.

On Alpine Street between Main Street and Alameda Street, the two eastbound through lanes would remain open during construction hours. The westbound right turn lane, two westbound through lanes, and the westbound left turn lane would be closed during construction hours.

The southern sidewalk on Alpine Street between Main Street and Alameda Street would remain open for pedestrian access during construction hours. The northern sidewalk on Alpine Street would be closed during construction hours.

[18] To the south of the intersection of Alameda Street and Alpine Street, the western northbound through lane and the northbound right turn lane would be closed, and the eastern northbound through lane would be used as a right turn only lane from Alameda Street onto Alpine Street.

Additional road closures on Alpine Street would be required to facilitate the construction road closures near of the intersection of Alameda Street and Alpine Street.[19]

Weeks 4-28 Non-Construction Hours. During non-construction hours for weeks 4 through 28 of this phase of construction, to the north of the intersection of Alameda Street and Alpine Street, the southbound left turn lane, two southbound through lanes, and the southbound through-right lane would remain open. The northbound parking lane and two northbound through lanes would be closed.

The western sidewalk on Alameda Street both north and south of its intersection with Alpine Street would remain open for pedestrian access. The eastern sidewalk north of the intersection would be closed during non-construction hours. The eastern sidewalk south of the intersection would remain open during non-construction hours.

On Alpine Street between Main Street and Alameda Street, the two eastbound through lanes would remain open during non-construction hours. The westbound right turn lane, two westbound through lanes, and the westbound left turn lane would remain closed during non-construction hours.

Additional road closures on Alpine Street would be required to facilitate the construction road closures near of the intersection of Alameda Street and Alpine Street.[20]

The southern sidewalk on Alpine Street would remain open for pedestrian access during construction hours. The northern sidewalk on Alpine Street between Alameda Street and Main Street would be closed during non-construction hours.

Hardscape and Landscape, Interior Work (Full-Time Conditions): During the approximately 12-week hardscape and landscape, interior work phase of construction, all travel lanes would remain open during this phase of construction with the exception of periodic closures for asphalt/ re-striping on 10 non-consecutive working days. Construction of this phase would require full-time closures of a portion of the eastern sidewalk on Alameda Street to the north of its intersection with Alpine Street and the northern sidewalk on Alpine Street between Alameda Street and Main Street; however, the western sidewalk on Alameda Street and the southern sidewalk on Alpine Street would remain open for pedestrian access full-time during this phase.

Chinatown/State Park Station

Foundations and Columns (Full-Time Conditions): During the approximately 21-week foundations and columns phase of construction, both northbound through lanes and the northbound parking lane would remain open on Spring Street near the southern end of the Los Angeles State Historic Park. The westernmost northbound lane would be operated as a center reversible lane which would serve the peak travel direction, i.e., southbound travel during the weekday morning commute periods, and northbound travel during the weekday evening commute periods. The two-way left turn lane would also remain open but would be reconfigured to be used

19 To the west of the intersection of Alpine Street and Alameda Street, two westbound through lanes, one eastbound through lane, and one eastbound through-right lane would remain open on Alpine Street, while the eastbound left turn lane would be closed during construction hours. The northern and southern sidewalks on this section of Alpine Street would remain open for pedestrian access.

20 To the west of the intersection of Alpine Street and Alameda Street, two westbound through lanes, one eastbound through lane, and one eastbound through-right lane would remain open on Alpine Street, while the eastbound left turn lane would be closed during non-construction hours. The northern and southern sidewalks on this section of Alpine Street would remain open for pedestrian access.

as a southbound through lane because construction of this phase would require the full-time closure of the two southbound through lanes. The southbound parking lane on Spring Street near the southern end of the Los Angeles State Historic Park would also be closed during this phase of construction.

While construction would occur along existing access points to nearby properties, local and emergency access to these properties would be maintained during this phase of construction.

While the western sidewalk would be closed during this phase of construction, one southbound through lane will be reconfigured to be used as a rerouted covered pedestrian path on the roadway along the western edge of Spring Street. The eastern sidewalk along Spring Street would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection (Full-Time Conditions): During the approximately 28-week structural steel and gondola equipment phase of construction, one northbound through lane would remain open on Spring Street near the southern end of the Los Angeles State Historic Park, which would be operated as a center reversible lane to serve the peak travel direction, i.e., southbound travel during the weekday morning commute periods, and northbound travel during the weekday evening commute periods. The northbound parking lane would be reconfigured to be used as a northbound through lane during this phase of construction. The two-way left turn lane and portions of one northbound through lane would be reconfigured to be used as a southbound through lane because construction of this phase would require full-time closure of the two southbound through lanes and the southbound parking lane.

While construction would occur along existing access points to nearby properties, local and emergency access to these properties would be maintained.

The eastern sidewalk along Spring Street would remain open for pedestrian access. While a portion of the western sidewalk would be closed, a covered pedestrian sidewalk on the roadway along the western side of Spring Street would be provided to maintain pedestrian access.

Vertical Circulation, Hardscape and Landscape, Interior Work (Full-Time Conditions): During the approximately 40-week vertical circulation, hardscape and landscape, and interior work phase of construction, all travel lanes on Spring Street would remain open during this phase of construction with the exception of periodic closures on one southbound through lane and the southbound parking lane for asphalt/re-striping on 10 non-consecutive working days.

While this phase of construction would require full-time closure of a portion of the western sidewalk on Spring Street near the southern end of the Los Angeles State Historic Park, a rerouted covered pedestrian sidewalk on the roadway within the existing southbound parking lane along the western side of Spring Street would be provided to maintain pedestrian access. The southbound parking lane would be closed during this phase of construction to allow for this covered pedestrian sidewalk. However, the rerouted pedestrian access would be closed during the 10 non-consecutive days of asphalt/restriping, occurring on the existing southbound parking lane. The eastern sidewalk on Spring Street would remain open for pedestrian access at all times.

Broadway Junction

Foundations and Columns (Full-Time Conditions): During the approximately 28-week foundations and columns phase of construction, one northbound through lane, one southbound through lane, and the southbound through-right lane would remain open on North Broadway. The other northbound through lane would also remain open and would be reconfigured to be a through-left turn lane, as this phase of construction requires the closure of the northbound left turn lane onto Bishops Road. Construction of this phase would also require the full-time closure of the southbound parking lane on North Broadway.

A portion of the eastern sidewalk on North Broadway close to its intersection with Bishops Road would be closed during this phase of construction, however, a protected pedestrian sidewalk along the east side of North Broadway would be provided to maintain pedestrian access. While a portion of the western sidewalk on North Broadway would be closed, pedestrian detours would be provided along Savoy Street.

All Bishops Road travel lanes would remain open during this phase of construction, while the eastbound parking lane and the westbound parking shoulder would be partially closed. The Bishops Road southern sidewalk would remain open for pedestrian access.

Deck Shoring, Cribbing, and Erection (Full-Time Conditions): Following completion of the foundations and columns phase, a temporary deck would be constructed over portions of North Broadway and Bishops Road in order to minimize the closures of North Broadway and Bishops Road that would otherwise be required to close for the duration of the Broadway Junction's structural steel and gondola equipment phase. Installation of the temporary deck would take approximately two weeks and would require the full-time closure of all travel and parking lanes (the northbound left/center left turn lane, two northbound through lanes, the southbound through lane, the southbound through-right lane, and the northbound and southbound parallel parking lanes) on North Broadway between Cottage Home Street and Savoy Street, and all travel and parking lanes and shoulders on Bishops Road (the shared eastbound left/eastbound right turn lane, the westbound through lane, and the eastbound parallel parking lane and westbound parking shoulder) between North Broadway and Savoy Street.

Restricted local and emergency access would be provided to allow access to properties along North Broadway from southbound travel along North Broadway. Restricted local and emergency access would be provided for the properties along North Broadway from Cottage Home Street up until the area of closure located just south of the intersection of North Broadway and Bishops Road. Restricted local access would be provided to allow access to Cathedral High School's driveways. Emergency access would also be provided to Cathedral High School.

A protected pedestrian sidewalk along the east side of North Broadway would be provided to maintain pedestrian access. While a portion of the western sidewalk on North Broadway would be closed, pedestrian detours would be provided along Savoy Street.

The sidewalk along Bishops Road would remain open for pedestrian access.

Structural Steel and Gondola Equipment Erection (Full-Time Conditions): During the approximately 38-week structural steel and gondola equipment phase of construction, one northbound through lane, the southbound through lane and the southbound through-right lane would remain open on North Broadway. The other northbound through lane would also remain open and would be reconfigured to be a through-left turn lane, as this phase of construction requires the closure of the northbound left turn lane onto Bishops Road. Construction of this phase would also require the full-time closure of the southbound parking lane on North Broadway.

A portion of the eastern sidewalk on North Broadway close to its intersection with Bishops Road would be closed during this phase of construction, however, a protected pedestrian sidewalk along the east side of North Broadway will be provided to maintain pedestrian access. While a portion of the western sidewalk on North Broadway would be closed, pedestrian detours would be provided along Savoy Street.

All Bishops Road travel lanes would remain open during this phase of construction. The eastbound parking lane and the westbound parking shoulder would be partially closed. The Bishops Road sidewalk would remain open for pedestrian access.

Deck Removal (Full-Time Conditions): The temporary deck would be removed following completion of the structural steel and gondola equipment erection phase of construction. Removal of the deck would require the full-time closure of all travel and parking lanes on North Broadway (the northbound left/center left turn lane, two northbound through lanes, the southbound through lane, the southbound through-right lane, and the northbound and southbound parallel parking lanes) between Cottage Home Street and Savoy Street, and all travel and parking lanes and shoulders on Bishops Road (the shared eastbound left/eastbound right turn lane, the westbound through lane, and the eastbound parallel parking lane and westbound parking shoulder) between North Broadway and Savoy Street during the approximately three-week deck removal phase.

Restricted local and emergency access would be provided to allow access to properties along North Broadway from southbound travel along North Broadway throughout construction of the Broadway Junction. Restricted local and emergency access would be provided for the properties along North Broadway from Cottage Home Street up until the area of closure located just south of the intersection of North Broadway and Bishops Road. Restricted local access would be provided to allow access to Cathedral High School's driveways. Emergency access would also be provided to Cathedral High School.

A protected pedestrian sidewalk along the east side of North Broadway will be provided to maintain pedestrian access. While a portion of the western sidewalk on North Broadway would be closed, pedestrian detours would be provided along Savoy Street.

The sidewalk along Bishops Road would remain open during this phase of construction.

Vertical Circulation, Hardscape and Landscape, Interior Work (Full-Time Conditions): During the approximately 29-week vertical circulation, hardscape and landscape, and interior work phase of construction, all travel lanes on North Broadway and Bishops Road would remain open, with the exception of periodic closures for asphalt/re-striping on 10 non-consecutive working days. All sidewalks would remain open, with the exception of periodic closures of the western sidewalk on North Broadway for asphalt/re-striping on 10 non-consecutive working days.

Stadium Tower

The Stadium Tower would be constructed on private property and would not require any road closures.

Dodger Stadium Station

The Dodger Stadium Station would be constructed on private property and would not require any road closures.

Figures 3.17-8 through 3.17-12 illustrate the worst-case simultaneous construction detours associated with the proposed Project. These worst-case detours would generally occur during the installation of construction decks (for the Alameda Station and Broadway Junction), foundations, columns, and/or steel erection, when Project construction would have the biggest footprint within the roadway ROW. Figure 3.17-13 includes the conceptual construction haul routes.

Figure 3.17-12 represents the potential worst-case closure assuming that it is determined to be infeasible to construct the Alameda Station deck, which would increase the full-time closure of Alameda Street five weeks with the deck to 30 weeks without the deck option. However, during non-construction hours, a lane would be open in each direction on Alameda Street, so the figure represents the detours associated with work hours.

A shown on the figures, the detours would generally shift to parallel corridors. However, local access would be retained for all parcels, as denoted with green routes on the figures. Emergency responders would have multiple detour options around each closure and could also be flagged through a worksite if necessary in addition to using routes designated as “Permitted Local Access.”

The temporary lane closures during construction would, by necessity, increase traffic volumes on the detour routes, which could increase traffic congestion on those routes. However, the Project alignment is located in an established urban area that is well-served by the surrounding roadway network, and multiple routes exist parallel to Alameda Street and Spring Street and a single route (Cottage Home Street to Bishops Road to Savoy Street) exists parallel to Broadway and Bishops Road for emergency vehicles and evacuation. Drivers of emergency vehicles normally have a variety of options for avoiding congestion, such as using sirens to clear a path of travel, driving in the lanes of opposing traffic or center turn lanes, and bypassing signals and stopped traffic. Nonetheless, implementation of a Construction Traffic Management Plan, as outlined in Mitigation Measure TRA-B, as presented in Section 3.17.5, Mitigation Measures, below, would be required to ensure adequate emergency access is maintained in and around the Project alignment and component sites throughout all construction activities to ensure that the impact is less than significant with mitigation incorporated.

As discussed in Section 3.15, Public Services, three Los Angeles Fire Department (LAFD) stations serve the Project area: Station 1, located at 2230 Pasadena Avenue approximately 2 miles northeast of the Project study area; Station 3, located at 108 North Fremont Avenue approximately 0.5-mile southwest of the Project study area; and Station 4, located at 450 East Temple Street approximately 0.4-mile southeast of the Project study area. Additionally, two Los Angeles Police Department (LAPD) stations serve the Project area: Central Community Police Station, located at 251 6th Street, which serves all of the Project area except Dodger Stadium, and the Northeast Police Station, located at 3353 San Fernando Road, which serves the Dodger Stadium portion of the Project area. There are no LAFD stations, LAPD stations, or hospital emergency rooms within the Project study area. As such, direct access to or from a fire station, police station, or emergency room would not be affected by proposed Project construction.

Figure 3.17-8: Alameda Station Deck Construction Conceptual Traffic Detour Plan

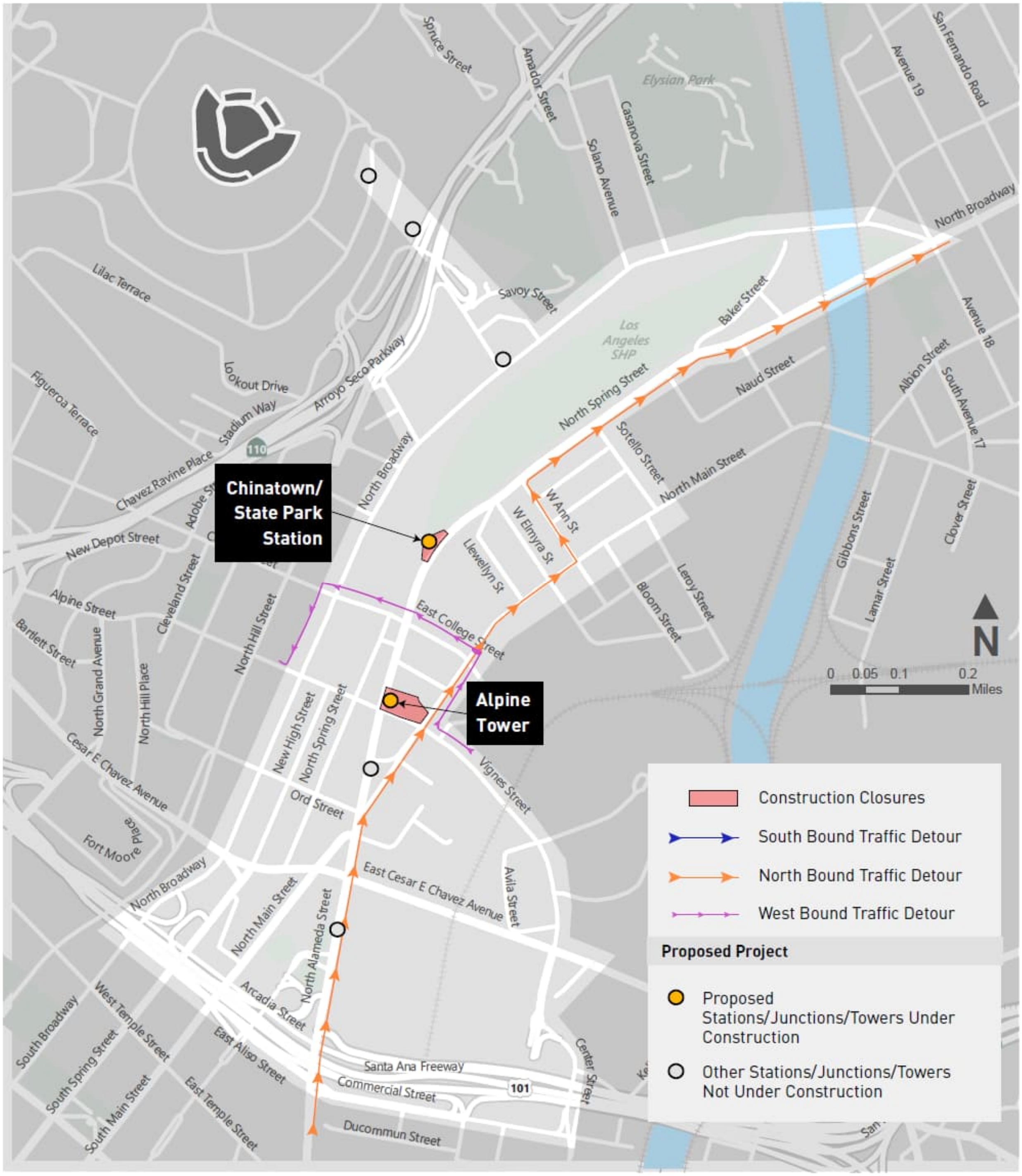


Figure 3.17-9: Chinatown/State Park Station, Alpine Tower & Alameda Station Construction Conceptual Traffic Detour Plan

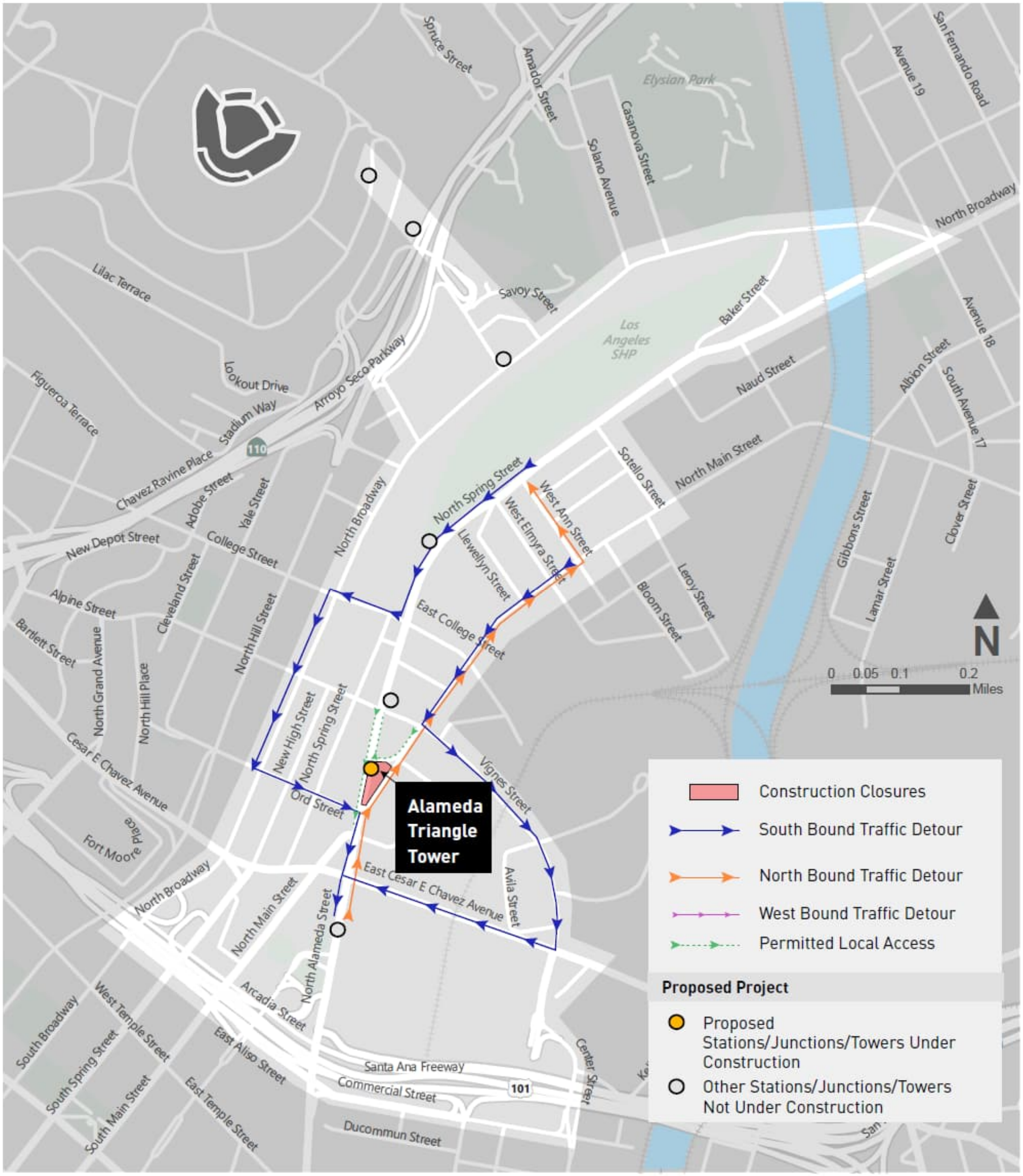


Figure 3.17-10: Alameda Tower Construction Conceptual Traffic Detour Plan

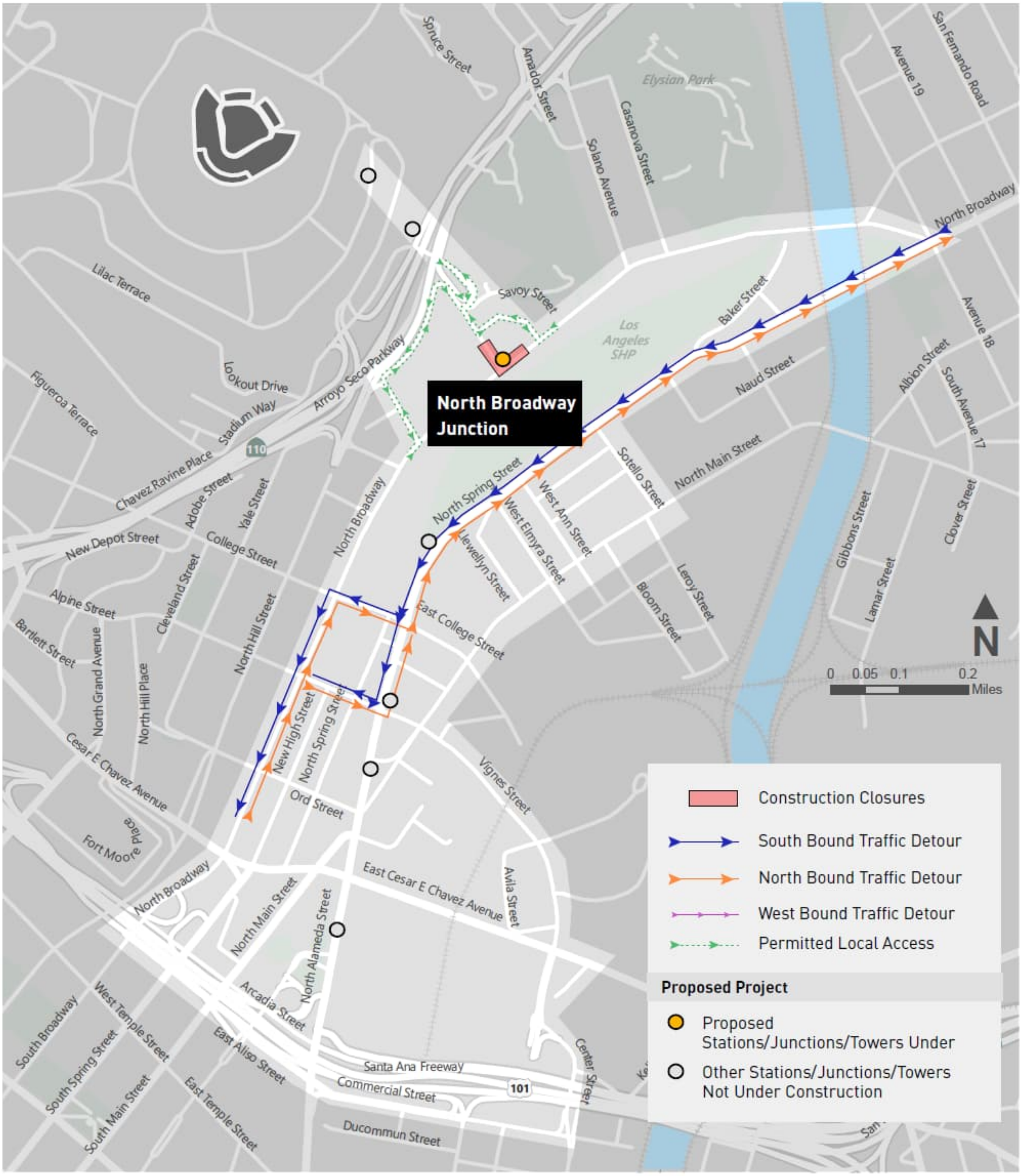


Figure 3.17-11: Broadway Junction Deck Construction Conceptual Traffic Detour Plan

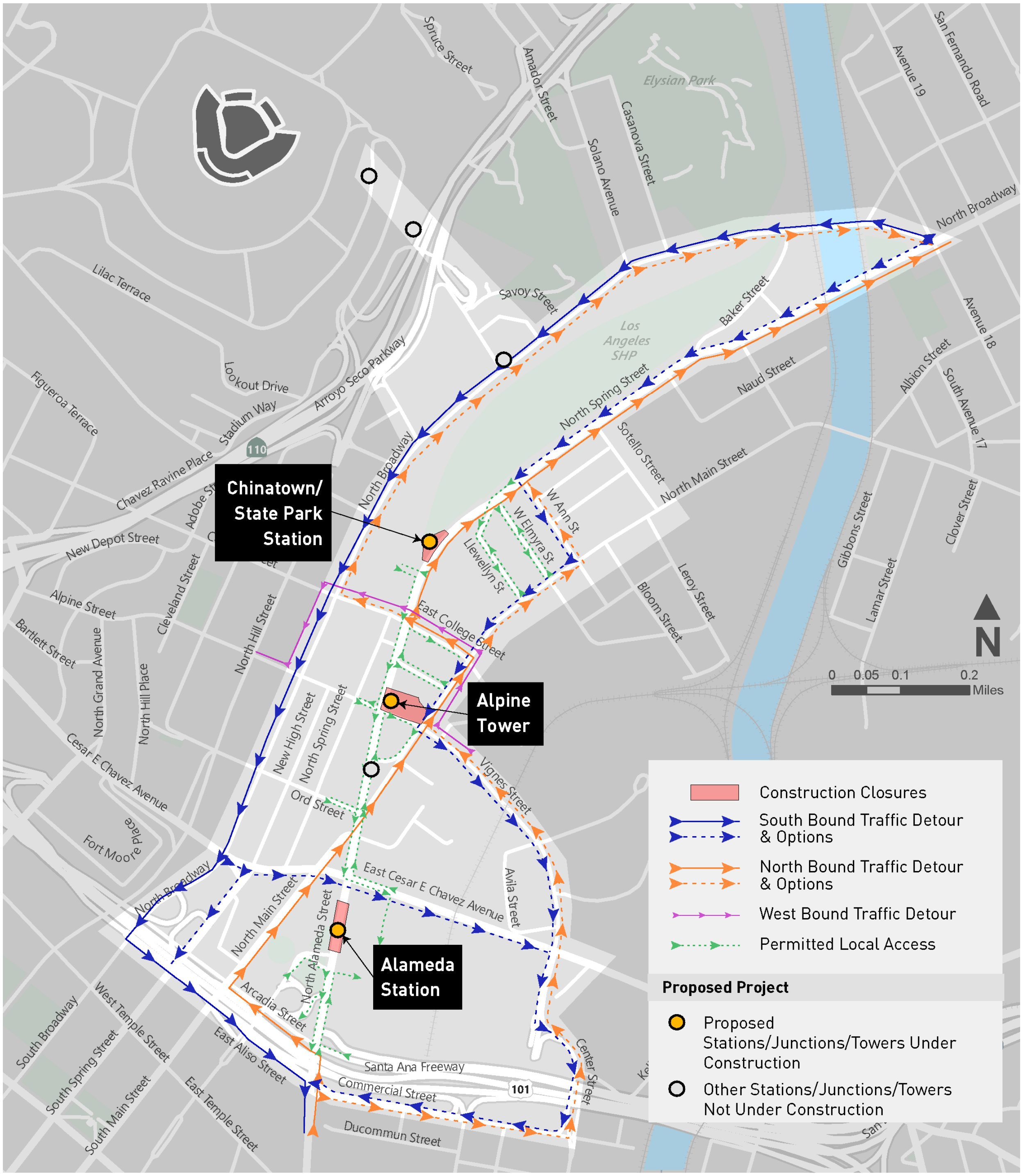


Figure 3.17-12: Chinatown/State Park Station, Alpine Tower & Alameda Station Construction (with no Alameda Station Deck) Conceptual Traffic Detour Plan

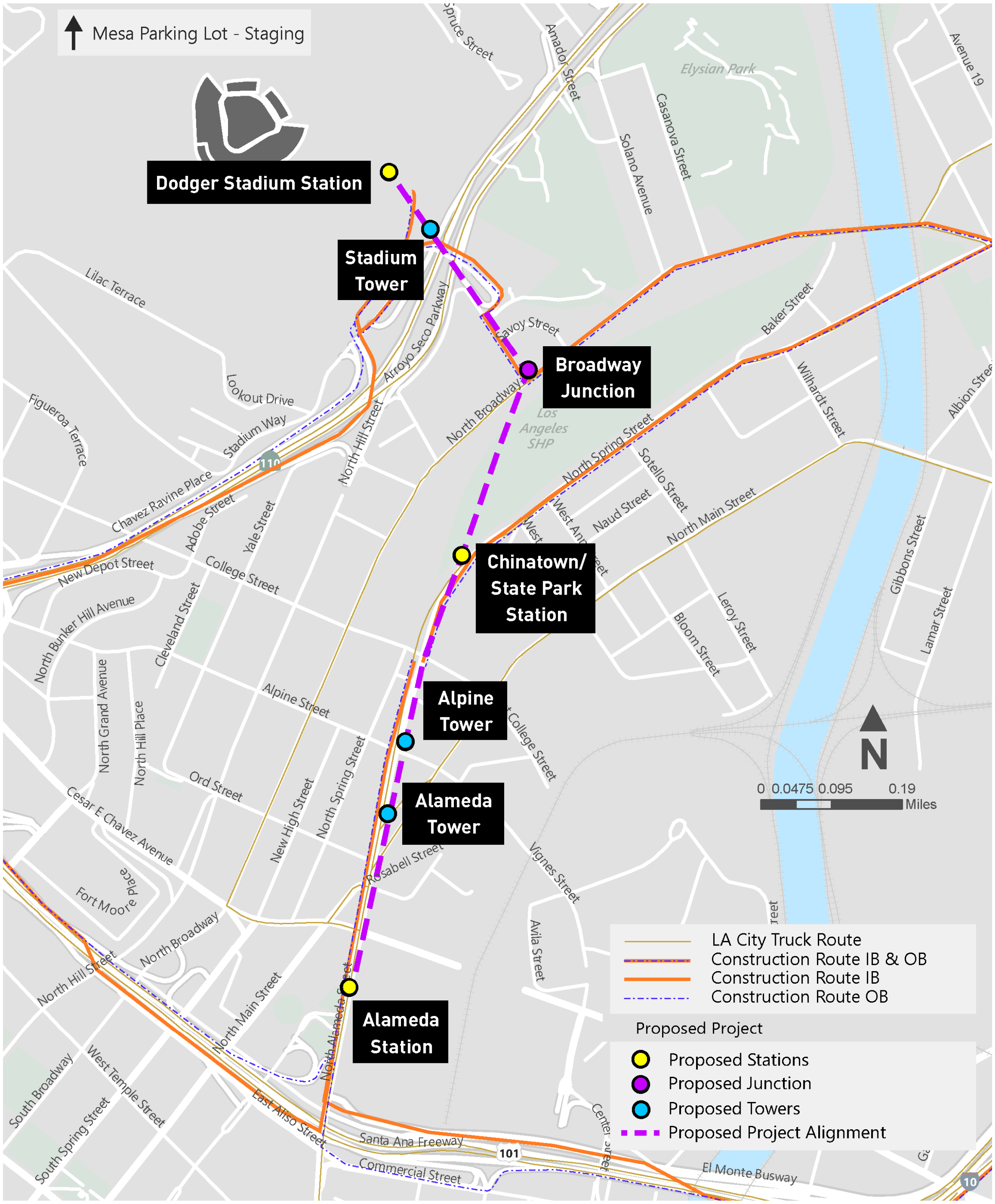


Figure 3.17-13: Conceptual Construction Haul Routes

Due to the length and geometry of the proposed Project alignment, two ropeway systems would be used. The first section would carry passengers from Alameda Station to the Broadway Junction. The second section would carry passengers from the Broadway Junction to the Dodger Stadium Station. Installation of the cables for the proposed Project requires the placement of an initial, thin light, line rope from one end to the other, which would be used to pull progressively larger cables. The initial placement is anticipated to be flown either by drone or helicopter. Rope pulling activities for each of the two ropeway systems would require temporary closure of roadways underneath each ropeway system of the Project alignment. In order to minimize traffic disruption, rope pulling activities for each ropeway system would not occur simultaneously. Rope pulling activities for the ropeway system from Alameda Station to Broadway Junction would require temporary closure of Alameda Street, Spring Street and North Broadway, as well as portions of roadways that intersect with these roadways, for up to two non-consecutive days. Rope pulling activities for the ropeway system from Broadway Junction to Dodger Stadium Station would require temporary closure of North Broadway, Bishops Road, Savoy Street, SR-110, and Stadium Way, for up to two non-consecutive days. Rope pulling is not expected to significantly impact emergency response due to the use of the thin, light line rope and the short duration of roadway closures associated with flying the line and rope pulling activities, which could be quickly be halted in the event of an emergency, thereby allowing the roadways to be used during an emergency.

Rope pulling activities for the ropeway system from Alameda Station to Broadway Junction would require the Metro L (Gold) Line to temporarily suspend operation in the vicinity of the Chinatown Station for up to two non-consecutive days. Bus bridges would be implemented between LAUS and the Lincoln Heights/Cypress Stations during this period.

Additionally, as discussed in Section 3.9, Hazards and Hazardous Materials, Alameda Street Spring Street, Cesar E. Chavez Avenue, and SR-110 are designated as Disaster Routes by both the City of Los Angeles and the County of Los Angeles[21]. Disaster routes are transportation routes designated by the County, such as freeway, highway or arterial routes, that are pre-identified for use during times of crisis.[22] These routes are utilized to bring in emergency personnel, equipment, and supplies to impacted areas in order to save lives, protect property and minimize impact to the environment. During a disaster, these routes have priority for clearing, repairing and restoration over all other roads. Full or partial closure of segments of these streets during Project construction could affect emergency access. As illustrated above, segments of Alameda Street and Spring Street would experience partial or full closures with detours to parallel corridors. The segments with closures are illustrated on the figures and in more detail in the *Transportation Appendices* (Appendix N) Construction Assumptions. As shown in Appendix N, the closures are generally on portions of blocks only. However, the proposed standard detours illustrated in Figures 3.17-8 through 3.17-12 may take into account shifts for multiple blocks due to one-way roadways or convenience of limiting turns. Portions of the detours designated as “Permitted Local Access” could continue to be used as disaster routes.

The following portions of the designated disaster routes would be closed during the worst-case detour scenarios:

- Alameda Station Deck Construction – The closure would be located on Alameda Street between Cesar E. Chavez Avenue and Los Angeles Street. Alternative disaster routes for

21 City of Los Angeles, Department of City Planning, General Plan Safety Element, Exhibit H, Critical Facilities & Lifeline Systems, adopted November 26, 1996.

22 County of Los Angeles, Disaster Routes, Los Angeles County Operational Area, https://dpw.lacounty.gov/dsg/DisasterRoutes/, accessed July2021.

this construction phase would be Main Street (northbound traffic) and Spring Street (southbound traffic) between Cesar E. Chavez Avenue and Arcadia Street.

- Chinatown/State Park Station, Alpine Tower and Alameda Station – No designated disaster routes would have full lane closures during this construction phase. However, northbound lanes on Alameda Street would be closed adjacent to the Alpine Tower work zone and southbound lanes on Spring Street would be closed adjacent to the Chinatown/State Park Station work zone. Alternative disaster routes for this construction phase would be Main Street (northbound traffic) between Ord Street and College Street and Main Street (southbound traffic) between Ann Street to College Street.
- Alameda Tower – No designated disaster routes would have full lane closures during this construction phase. However, northbound lanes on Alameda Street would be closed adjacent to the Alameda Tower work zone. The alternative disaster route for this construction phase would be Main Street (northbound traffic) between Ord Street and Vignes Street. Southbound traffic could remain on Alameda Street.
- Broadway Junction – No designated disaster routes would have lane closures during this construction phase, and therefore no alternative disaster routes would be required.
- Chinatown/State Park Station, Alpine Tower and Alameda Station (without Alameda Station Deck Construction Option) – No designated disaster routes would have full lane closures during this construction phase. However, northbound lanes on Alameda Street would be closed adjacent to the Alpine Tower work zone and southbound lanes on Spring Street would be closed adjacent to the Chinatown/State Park Station work zone. Alternative disaster routes for this construction phase would be Main Street (northbound traffic) between Ord Street and College Street and Main Street (southbound traffic) between Ann Street to College Street. Construction of the Alameda Station under this Construction Option would close all southbound lanes during the construction of foundations and columns and would keep one northbound lane open. Alternative disaster routes for this construction phase would be Main Street (northbound traffic) and Spring Street (southbound traffic) between Cesar E. Chavez Avenue and Arcadia Street. Other phases of construction would close all lanes during construction hours, but open up lanes in both directions during off-construction hours. During a disaster event, work would cease and lanes would be reopened to traffic consistent with the non-work hour lane configurations detailed in the *Transportation Appendices* (Appendix N).

No closures would occur on the Cesar E. Chavez Avenue disaster route.

Implementation of Mitigation Measure TRA-C, as presented in Section 3.17.5, Mitigation Measures, below, includes the identification of temporary disaster routes during construction and other traffic handling measures during a disaster, would be required. With implementation of Mitigation Measures TRA-B and TRA-C, as presented in Section 3.17.5, Mitigation Measures, below, construction impacts would be less than significant.

Operational Impacts

Less Than Significant Impact. The proposed Project stations would be readily accessible from adjacent City streets during an evacuation or fire situation affecting Project operations. Daily operations would not affect emergency response at the street level or to adjacent roadways or parcels because the cabins would be suspended above the public ROW. The proposed Project is designed so that it would not affect roadway through lane capacity by any of the in-roadway structures proposed (i.e., Alameda Station). In addition, off-roadway structures would not hinder emergency response because the bases of stations, junction, and towers would not be in travel lanes. The only proposed traffic capacity reduction would be the shortening of the northbound left turn pocket from Alameda Street to Cesar E. Chavez Avenue to accommodate the columns for the Alameda Station. Emergency responders who are traveling northbound on Alameda Street could bypass the turn pocket. California State law requires drivers to yield the right-of-way to emergency vehicles and permits emergency vehicles to use opposing lane of travel, the center turn lanes, or bus-only lanes. Emergency responders also routinely use the center left-turn lanes, or even travel in opposing travel lanes if needed. Generally, multi-lane roadways allow the emergency vehicles to travel at higher speeds and permit other traffic to maneuver out of the path of the emergency vehicle. Therefore, the proposed Project would have no substantive effect on emergency response during operations. Impacts related to emergency access during operation of the proposed Project would be less than significant.

Project operations would reduce vehicle trips on the roadway network by facilitating improved transit connections to Dodger Stadium. While the Project would reduce vehicle trips overall, it may shift some vehicle trips from Dodger Stadium to LAUS. These trips are not expected to materially affect intersection performance in the vicinity of LAUS and would have no substantive effect on emergency response times. Therefore, the impact would be less than significant.

3.17.5 Mitigation Measures

The following mitigation measures would be implemented to reduce impacts related to transportation.

TRA-A **Visibility Enhancements:** Prior to the completion of construction of the proposed Project, and in coordination with and subject to the approval of LADOT, the Project Sponsor shall design visibility enhancements for the following locations sufficient to alert drivers to the presence of pedestrians:

- Alameda Tower
- Chinatown/State Park Station

Visibility enhancement features could include high visibility crosswalk treatments, advanced crossing warning signs, flashing beacons, upgraded lighting, and new or upgraded traffic controls, such as traffic signals and all-way stops and right turn on red restrictions and channelization of pedestrians to marked crosswalk locations via fencing. The mitigation measure would be implemented during the construction phase and would be completed prior to proposed Project operations.

TRA-B **Construction Traffic Management Plan:** Prior to the issuance of a building permit for the proposed Project, a detailed Construction Traffic Management Plan (CTMP), including street closure information, detour plans, haul routes, and a staging plan, shall be prepared and submitted to the City for review and approval. The CTMP shall formalize how construction will be carried out and identify specific actions that will be required to reduce effects on the surrounding community. The CTMP shall be based on the nature and timing of the specific construction activities at each of the Project construction sites. This coordination will ensure construction activities of the concurrent related projects and associated hauling activities are managed in collaboration with one another and the proposed Project. The CTMP may be updated as construction progresses to reflect progress at the various Project construction sites. The CTMP will include, but not be limited to, the following elements as appropriate:

- As traffic lane, parking lane, and sidewalk closures are anticipated, worksite traffic control plans, approved by the City of Los Angeles, shall be developed and implemented to route vehicular traffic, bicyclists, and pedestrians around any such closures.
- Visibility to open pedestrian crossings will be maintained, or temporary or permanent measures consistent with Mitigation Measure TRA-A shall be implemented if determined to be appropriate in coordination with LADOT. In absence of measures to mitigate or eliminate visual obstructions for pedestrians crossing the street, pedestrian crossings may be closed or relocated to more visible locations.
- Existing school crossings, as denoted by yellow crosswalk striping consistent with the Manual on Uniform Traffic Control Devices (MUTCD) along proposed detour routes shall be evaluated in coordination with LADOT to determine if crossing guards should temporarily be assigned. If it is determined that crossing guards should be assigned, on days/times when detours are active, the proposed Project shall fund crossing guards during morning school arrival and afternoon school departure periods during periods when adjacent schools are in session. If school crossings along detour routes are unsignalized, temporary traffic signals will be evaluated in coordination with LADOT and would be implemented by the proposed Project if deemed necessary.
- As partial and full street closures are anticipated at various locations during portions of the Project construction, detour plans, approved by the City of Los Angeles, shall be developed and implemented to route vehicular traffic and bicyclists to alternative routes during these periods.
- Ensure that access will remain accessible for land uses in proximity to the Project alignment and component sites during project construction. In some cases, alternative access locations would be provided or supervised temporary access through the worksite would be accommodated during construction phases where access is hindered, such as foundation construction.
- Coordinate with the City and emergency service providers to ensure emergency access is provided to the Project alignment and component sites and neighboring businesses and residences. Emergency access points will be marked accordingly in consultation with LAFD, as necessary.
- Conduct construction management meetings with City staff and other surrounding construction-related project representatives (i.e., construction contractors) whose projects will potentially be under construction at around the same time as the Project bimonthly, or as otherwise determined appropriate by City Staff.
- Provide off-site truck staging in a legal area furnished by the construction truck contractor.
- Schedule deliveries and pick-ups of construction materials during non-peak travel periods to the extent possible and coordinate to reduce the potential of trucks waiting to load or unload for protracted periods.
- During construction activities when construction worker parking cannot be accommodated at the Project component sites, identify alternate parking location(s) for construction workers and the method of transportation to and from

the Project component sites (if beyond walking distance) for approval by the City 30 days prior to commencement of construction.

- Provide all construction contractors with written information on where their workers and their subcontractors are permitted to park and provide clear consequences to violators for failure to follow these regulations.

TRA-C **Temporary Disaster Route Plan:** Prior to the issuance of a building permit for the proposed Project, and in coordination with and subject to the approval of LADOT, the Project Sponsor shall submit a temporary disaster route plan to LADOT, which shall include street closure information and detour plans in order to facilitate the movement of emergency vehicles through the study area and minimize effects on emergency response during a disaster. Construction activities and temporary lane closures could quickly be halted in event of an emergency to allow emergency vehicles to travel through the work zones. In addition to detours, the temporary disaster route plan could also include temporary operational measures that would be implemented by the City during a disaster, including temporary contra-flow lanes or reversing directions to flush vehicles during a disaster situation. The temporary disaster route plan would be prepared for the following locations:

- During those periods when construction of the Alameda Station, the Chinatown/State Park Station, and the Alameda and Alpine Towers require partial closure of one direction or full closure of both directions of Alameda Street or Spring Street.

3.17.6 Level of Significance after Mitigation

With implementation of the visibility enhancements under Mitigation Measure TRA-A, the Construction Traffic Management Plan under Mitigation Measure TRA-B, and identification of temporary disaster routes as outlined in Mitigation Measure TRA-C, transportation impacts would be reduced to a less than significant level.

This page intentionally left blank.

3.18 Tribal Cultural Resources

This section evaluates the potential impacts of the proposed Project as it relates to tribal cultural resources. The analysis in this section is based in part on information from the *Archaeological and Paleontological Resources Assessment for The Los Angeles Aerial Rapid Transit Project* prepared for the proposed Project (Appendix F of this Draft EIR). Additionally, the analysis in this section is based on the results of consultation with California Native American Tribes conducted by Los Angeles County Metropolitan Transportation Authority (Metro) for the proposed Project, as required by California Environmental Quality Act (CEQA), as amended by Assembly Bill (AB) 52.

3.18.1 Regulatory Setting

Federal

National Register of Historic Places

The National Historic Preservation Act of 1966 (NHPA; 16 United States Code [U.S.C.] 470 et seq.) established the National Register of Historic Places (NRHP or National Register) to recognize resources associated with the United States of America's history and heritage. The NRHP is the federal government's official list of districts, sites, buildings, structures, and objects deemed worthy of preservation for their historical significance and is maintained by the National Park Service (NPS). To be eligible for listing in the National Register, a property must be at least 50 years of age (unless the property is of "exceptional importance") and possess significance in American history, architecture, archaeology, engineering, and culture. A property less than 50 years of age may be eligible if it can be demonstrated that sufficient time has passed to understand its historical importance. A property of potential significance must meet one or more of the following four established criteria:

a. Associated with events that have made a significant contribution to the broad patterns of our history; or

b. Associated with the lives of persons significant in our past; or

c. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d. Yield, or may be likely to yield, information important in prehistory or history.[1]

Context

To be eligible for listing in the National Register, a property must be significant within a historic context. National Register Bulletin #15 states that the significance of a resource can be judged only when it is evaluated within its historic context. Historic contexts are "those patterns, themes, or trends in history by which a specific...property or site is understood and its meaning...is made

1 Title 36 Code of Federal Regulations Part 60.4.

clear."[2] A resource must represent an important aspect of the area's history or prehistory and possess the requisite integrity to qualify for the NRHP.

Integrity

In addition to possessing significance within a historic context, to be eligible for listing in the NRHP a resource must have integrity. Integrity is defined in *National Register Bulletin #15* as "the ability of a property to convey its significance."[3] Within the concept of integrity, the NRHP recognizes the following seven aspects or qualities that in various combinations define integrity: feeling, association, workmanship, location, design, setting, and materials. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. It must also be judged with reference to the particular criteria under which a resource is proposed for nomination.

Historic Districts

The NRHP includes significant properties, which are classified as buildings, sites, districts, structures, or objects. A historic district "derives its importance from being a unified entity, even though it is often composed of a variety of resources. The identity of a district results from the interrelationship of its resources, which can be an arrangement of historically or functionally related properties."[4]

A district is defined as a geographically definable area of land containing a significant concentration of buildings, sites, structures, or objects united by past events or aesthetically by plan or physical development.[5] A district's significance and historic integrity should help determine the boundaries. Other factors include:

- Visual barriers that mark a change in the historic character of the area or that break the continuity of the district, such as new construction, highways, or development of a different character;

- Visual changes in the character of the area due to different architectural styles, types, or periods, or to a decline in the concentration of contributing resources;

- Boundaries at a specific time in history, such as the original city limits or the legally recorded boundaries of a housing subdivision, estate, or ranch; and

- Clearly differentiated patterns of historical development, such as commercial versus residential or industrial.[6]

---

[2] National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation (Washington D.C.: National Park Service, Department of the Interior, 1997), 7-8.
[3] National Register Bulletin #15, 44-45.
[4] *Ibid*.
[5] Title 36 Code of Federal Regulations Part 60.3(d).
[6] National Register Bulletin #21: Defining Boundaries for National Register Properties Form (Washington D.C.: U.S. Department of the Interior, 1997), 12.

Within historic districts, properties are identified as contributing and noncontributing. A contributing building, site, structure, or object adds to the historic associations, historic architectural qualities, or archeological values for which a district is significant because:

- It was present during the period of significance, relates to the significance of the district, and retains its physical integrity; or
- It independently meets the criterion for listing in the National Register.[7]

Traditional Cultural Properties

Some resources are considered Traditional Cultural Properties for their embodiment of the traditions, beliefs, practices, lifeways, arts, crafts, and social institutions of a community. The identification and evaluation of these properties is outlined in *Guidelines for Evaluating and Documenting Traditional Cultural Properties*[8]*.*

State

Assembly Bill 52

On September 25, 2014, Governor Jerry Brown signed into law AB 52. AB 52 amended California Public Resources Code (PRC) Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3.

AB 52 established a new category of protected resources in CEQA called tribal cultural resources. AB 52 requires that agencies consult with tribal representatives and consider tribal cultural values in addition to scientific and archaeological values when determining project impacts and mitigation measures during the planning process. According to PRC Section 21074:

A. Tribal cultural resources consist of either of the following:

    1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

        a. Included or determined to be eligible for inclusion in the California Register of Historical Resources.

        b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

    2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

---

7 National Register Bulletin #16: How to Complete the National Register Registration Form (Washington D.C.: U.S. Department of the Interior, 1997), 16.

8 National Register Bulletin #38: Guidelines for Evaluating and Documenting Traditional Cultural Properties (Washington D.C.: U.S. Department of the Interior, 1992).

B. A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

C. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

The following includes a general summary of the PRC Sections added by AB 52:

- PRC Section 21073 defines California Native American tribe to mean a Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004.

- PRC Section 21080.3.1 declares that California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources. It also provides requirements for lead agencies to consult with California Native American tribes.

- PRC Section 21080.3.2 identifies potential topics for consultation, including the significance of tribal cultural resources, the significance of a project’s impacts on tribal cultural resources, and measures for preservation or mitigation, if necessary, and defines when consultation shall be considered concluded. Consultation is concluded when: (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

- PRC Section 21082.3 states that mitigation measures agreed upon in consultation shall be recommended for inclusion in the environmental document if determined to avoid or lessen impacts. The section also states that a lead agency may certify an environmental impact report with a significant impact on an identified tribal cultural resource if consultation has occurred, consultation was requested by a California Native American tribe but has not provided comments or engaged, or the Native American Tribe fails to request consultation within 30 days.

- PRC Section 21083.09 revises Appendix G of the CEQA Guidelines to include consideration of tribal cultural resources.

- PRC Section 21084.2 declares that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant impact on the environment.

- PRC Section 21084.3 provides example mitigation measures that may be considered to avoid or minimize significant adverse impacts to any tribal cultural resource.

California Register of Historical Resources

In 1992, Governor Wilson signed Assembly Bill 2881 into law establishing the California Register of Historical Resources (CRHR or California Register). The CRHR is an authoritative guide used by state and local agencies, private groups, and citizens to identify historical and archaeological resources and to indicate what resources are to be protected, to the extent prudent and feasible, from substantial adverse impacts.

The criteria for listing historical resources in the CRHR are consistent with those developed by the NPS for listing in the NRHP, but they have been modified for state use to include a range of historical resources that better reflect the history of California. A historical resource is significant at the local, state, or national level under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

2. Is associated with the lives of persons important to local, California, or national history;

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or

4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

The CRHR consists of historical resources that are (a) listed automatically, (b) listed following procedures and criteria adopted by the State Historical Resources Commission, and/or (c) nominated by an application and listed after a public hearing process. The CRHR automatically includes the following:

- California properties listed in the NRHP and those formally Determined Eligible for the NRHP;

- California Historical Landmarks (CHL) from Number 0770 onward; and

- Those California Points of Historical Interest that have been evaluated by the State Office of Historic Preservation (SOHP) and have been recommended to the State Historical Resources Commission for inclusion on the CRHR.

Properties eligible for listing in the CRHR may include buildings, sites, structures, objects, and historic districts. A property less than 50 years of age may be eligible if it can be demonstrated that sufficient time has passed to understand its historical importance. It is possible that properties may not retain sufficient integrity to meet the criteria for listing in the NRHR, but they may still be eligible for listing in the CRHR. An altered property may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.[9]

The CRHR may also include properties identified during historic resource surveys. However, the survey must meet all of the following criteria:

1. The survey has been or will be included in the State Historical Resources Inventory;

2. The survey and the survey documentation were prepared in accordance with office [SOHP] procedures and requirements;

3. The resource is evaluated and determined by the office [SOHP] to have a significance rating of Category 1 to 5 on a Department of Parks and Recreation (DPR) Form 523; and

[9] Title 14 California Code of Regulations § 4852 (c).

4. If the survey is five or more years old at the time of its nomination for inclusion in the CRHR, the survey is updated to identify historical resources that have become eligible or ineligible due to changed circumstances or further documentation and those that have been demolished or altered in a manner that substantially diminishes the significance of the resource.

California Health and Safety Code

California Health and Safety Code Section 7050.5 requires that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions of Section 27491 of the California Government Code or any other related provisions of law concerning investigation of the circumstances, manner, and cause of any death. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the California Native American Heritage Commission (NAHC). The NAHC shall identify the most likely descendant who shall be consulted regarding treatment or repatriation of the remains.

Los Angeles State Historic Park General Plan

The Los Angeles State Historic Park General Plan serves as a long-range management tool that provides guidelines for achieving the vision and purpose of the park. The purpose of the plan is "to provide the public with a place to learn and celebrate the ethnically diverse history and cultural heritage of Los Angeles…" Park principles for developing the Preferred Park Concept include (1) Promote a "Touchstone" Landscape for Reflecting on Los Angeles' Natural and Cultural Heritage; and (2) Emphasize the Importance of the Historic Site to Los Angeles, California, and the World.

The Los Angeles State Historic Park General Plan includes a discussion of the tribal cultural significance of Los Angeles State Historic Park, stating that the park property is located in the known territory of the Tongva/Gabrieleno tribes. Additionally, the Los Angeles State Historic Park General Plan states that the park is identified and recorded as an archaeological site and is listed as a designated Historic-Cultural Monument by the City of Los Angeles. The Los Angeles State Historic Park General Plan acknowledges the park has archaeological sensitivities. As described in the plan, prehistoric and protohistoric activities attributed to the Tongva/Gabrieleno are known to have existed nearby but no archaeological materials have yet been found on the site. The plan recommends continued study of existing and potential resources. Goals of the Los Angeles State Historic Park General Plan for cultural resources are to "Identify, document, evaluate, and interpret cultural resources at the Park," and "Protect, stabilize, and preserve significant cultural resources within the Park."[10]

[10] California Department of Parks and Recreation. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf, accessed April 2022.

Local

City of Los Angeles General Plan

The City of Los Angeles General Plan Conservation Element sets forth objectives and policies to protect archaeological, paleontological, cultural, and historical resources.[11] For archaeological and paleontological resources, the General Plan states the following objective: protect the city's archaeological and paleontological resources for historical, cultural, research and/or education purposes. The policy to achieve this objective is to, "continue to identify and protect significant archaeological and paleontological sites and/or resources known to exist or that are identified during land development, demolition, or property modification activities." For cultural and historical resources, the General Plan objective is to: protect important cultural and historical sites and resources for historical, cultural, research, and community educational purposes. The policy regarding protection of cultural resources is to, "continue to protect historic and cultural sites and/or resources potentially affected by proposed land development, demolition or property modification activities."

El Pueblo de Los Angeles General Plan[12]

The City of Los Angeles signed an agreement in 1953 with the County of Los Angeles and State of California creating El Pueblo State Historic Park. This agreement allowed the State to purchase most of the property comprising the park. In cooperation with the City and County, in 1980 the State prepared the El Pueblo General Plan to provide guidelines for the preservation, rehabilitation, and interpretation of the historic buildings as well as for new development within the park. With regard to the eastern side of the park where the proposed Project would be located, the General Plan states:

- The relationship and connection from the Plaza Substation to Placita de Dolores should be studied and improved.
- The transition between the Plaza and Placita de Dolores needs special design attention.
- To successfully relate El Pueblo to Los Angeles Union Station (LAUS), pedestrian crossings should be studied.
- Improvements to Placita de Dolores for expanded function, landscaping, and connections with other site areas are recommended. This should be coordinated with the development of the Plaza Substation and its facade restoration, as well as with the designs for possible connection to LAUS.
- Strong design relationships should be established between the Plaza, Placita de Dolores, Father Serra Park, and possible linkage to LAUS.

In 1992, the property within the park was transferred to the City; in 1994 a separate department was created, and the name was changed to El Pueblo de Los Angeles Historical Monument.

---

11 City of Los Angeles. 2001. City of Los Angeles General Plan Conservation Element. Available at: https://planning.lacity.org/odocument/28af7e21-ffdd-4f26-84e6-dfa967b2a1ee/Conservation_Element.pdf. Accessed April 2022.

12 City of Los Angeles. 1981. El Pueblo de Los Angeles State Historic Park General Plan.

El Pueblo de Los Angeles Strategic Plan

The El Pueblo de Los Angeles Strategic Plan[13] has as one of its objectives, "historic preservation and asset management." The goal of that objective is to "continue to implement and adhere to El Pueblo's General Plan by restoring and renovating properties to their highest and best use."

3.18.2 Environmental Setting

A detailed overview of the prehistoric, ethnographic, and historic conditions associated with the proposed Project alignment and its surrounding vicinity is provided in the *Archaeological and Paleontological Resources Assessment for the Los Angeles Aerial Rapid Transit Project* (Appendix F). The following overview briefly describes the natural setting, the different time periods and people who used and settled the area around the proposed Project alignment.

3.18.2.1 Natural Setting

The proposed Project alignment is located in a relatively flat area of the northern Los Angeles Basin, with the exception of the northwest end of the alignment, which is located in the southeast Elysian Hills. The basin is formed by the Santa Monica Mountains to the northwest, the San Gabriel Mountains to the north, and the San Bernardino and San Jacinto Mountains to the east. The basin was formed by alluvial and fluvial deposits derived from these surrounding mountains. Prior to urban development and the channelization of the Los Angeles River, the area west of the current Los Angeles River channel was likely covered with marshes, thickets, riparian woodland, and grassland. Prehistorically, the floodplain forest of the Los Angeles Basin formed one of the most biologically rich habitats in Southern California. Although, historically most of the Los Angeles River was dry for at least part of the year, shallow bedrock in what is now the Elysian Park area north of downtown Los Angeles forced much of the river's underground water to the surface. This allowed for a steady year-round flow of water through the area that later became known as downtown Los Angeles.

3.18.2.2 Tribal Cultural Setting

In the Southern California coastal region, the earliest evidence of human occupation comes from a handful of sites with early tools and some human remains that have been dated from 7,000 to around 13,000 years old[14]. The first people to settle into Southern California appear to have practiced a generalized hunting, gathering, and fishing subsistence strategy which relied heavily on fish and shellfish.

The Late Prehistoric period, spanning from approximately 1000 AD to the start of the Spanish Mission era in the late 1700s, is the period associated with the florescence of contemporary Native American groups. The Late Prehistoric period is notable for a dramatic increase in the number of habitation and food processing sites, which included bone tools, numerous types of Olivella shell beads, circular fishhooks, and occasional pottery vessels. Between 1000 AD and 1250, bow and arrow technology was adopted along with what is now the Southern California coast, indicated by small arrow-sized projectile points, of the Desert side-notched and Cottonwood triangular series.

---

13 City of Los Angeles. 2016. El Pueblo de Los Angeles Strategic Plan. Pg 9 https://elpueblo.lacity.org/sites/g/files/wph1641/files/2021-01/Low.Res_.EP%20Strategic%20Plan.2016.2021.pdf Accessed August 2022.

14 Erlandson, Jon M. 2012. A Land by the Sea: An Ocean View of California Archaeology. In Contemporary Issues in California Archaeology, edited by Terry L. Jones and Jennifer E. Perry, Chapter 2, pp. 21–36. Left Coast Press.

Following European contact, glass trade beads and metal items also appeared in the archaeological record. Burial practices shifted to cremation in what is now the Los Angeles Basin and northern Orange County[15].

At the time of European contact, the Project vicinity was occupied by Uto-Aztecan or Shoshonean-speaking Gabrielino people who controlled what is now the Los Angeles Basin, the southern Channel Islands, and Orange County south to Aliso Creek[16]. The northern San Fernando Valley was the northernmost extent of the territory occupied by people who the Spanish referred to as the *Fernandeño*, whose name was derived from nearby Mission San Fernando. The *Fernandeño* spoke one of four regional Uto-Aztecan dialects of Gabrielino, a Cupan language in the Takic family, and were culturally identical to the Gabrielino. The Tataviam and Chumash, of the Hokan Chumashan language family, lived to the north and west of this territory, respectively, and it is likely that the territorial boundaries between these linguistically distinct groups fluctuated in prehistoric times[17]. The Gabrielino are reported to have been second only to their Chumash neighbors in terms of population size, regional influence, and degree of sedentism[18]. The Gabrielino are estimated to have numbered around 5,000 in the pre-contact period[19]. Maps produced by early explorers indicate the existence of at least 40 Gabrielino villages, but as many as 100 may have existed prior to contact with Europeans[20].

With an expansive territory that encompassed resource rich island, coastal, and inland environments, the Gabrielino developed a robust society with intensive regional economic interactions by the time the Spanish arrived in California. Structurally, families were organized into lineage groups that were headed by a chief or *tomyaar*. Sedentary communities consisted of one or more of these lineage groups in which power relations and political authority were variable. Communities were regularly in contact with one another through a system of annual "ritual congregations" in which elites and non-elites were able to forge strong social, political, and economic bonds. Religious and craft-based organizations and guilds were a major structuring element of Gabrielino society as well. Soapstone, bone, wood, and plant-based crafts were produced by skilled individuals and were exchanged in local and regional settings. Some Gabrielino shamans have been documented as participating in the elite Chumash religious and political group known as the *antap*. Additionally, the Gabrielino religion associated with the

15 Erlandson, Jon M., Torben C. Rick, Terry L. Jones, and Judith F. Prcasi. 2007. One if by Land, Two if by Sea: Who were the First Californians? In *California Prehistory*, edited by Terry L. Jones and Kathryn Klar, pp. 53–62; Glassow, Michael A., Lynn H. Gamble, Jennifer E. Perry, and Glenn S. Russell, 2007, Prehistory of the Northern California Bight and the Adjacent Transverse Range. In *California Prehistory*, edited by Terry L. Jones and Kathryn Klar, pp. 191–205.

16 Kroeber, A. L. 1925. *Handbook of Indians of California*. Bureau of American Ethnology Bulletin 78, Smithsonian Institution, Washington, DC.

17 Bean, Lowell John, and Charles R. Smith. 1978. Gabrielino. In California, edited by Robert F. Heizer, pp. 538–562. Handbook of North American Indians, Vol. 9, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC.; Shipley, William F., 1978, 1978 Native Languages of California. In Handbook of North American Indians, Vol. 8 (California), edited by William C. Sturtevant and Robert F. Heizer. Washington, D.C.: Smithsonian Institution.

18 Bean, Lowell John, and Charles R. Smith. 1978. Gabrielino. In California, edited by Robert F. Heizer, pp. 538–562. Handbook of North American Indians, Vol. 9, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC.

19 Kroeber, A. L. 1925. *Handbook of Indians of California*. Bureau of American Ethnology Bulletin 78, Smithsonian Institution, Washington, DC.

20 Bean, Lowell John, and Charles R. Smith. 1978. Gabrielino. In California, edited by Robert F. Heizer, pp. 538–562. Handbook of North American Indians, Vol. 9, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC; McCawley, William, 1996, *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki Museum Press, Banning, CA.; Reid, Hugo, 1939 [1852], Letters on the Los Angeles County Indians. In A Scotch Paisano in Old Los Angeles, by Susanna Bryant Dakin, pp. 215–286. University of California Press, Berkeley, CA.

creator-god *Chengiichngech* spread through much of Southern California and persisted through missionization[21].

Gabrielino villages are reported by early explorers to have been most abundant near the Los Angeles River, in the area north of what is now downtown known as the Glendale Narrows, and those areas along the river's various outlets into the ocean. Three notable Gabrielino settlements are reported to have been located in the vicinity of the proposed Project. The first is the village of *Maawnga*, reportedly located on the Rancho de los Feliz. The exact location of this village is unknown, but the southernmost part of Rancho de los Feliz occupied part of today's Elysian Park[22]. The community of *Ya'angna* was located somewhere in the vicinity of the Los Angeles Civic Center and is generally believed to be the unnamed settlement visited and described in 1769 by the Portolá expedition[23]. At the time of Portolá's visit, the village of *Ya'angna* is reported to have supported a population of at least 200. *Ya'angna* was later reported to have contained anywhere from 500 to 1,500 huts, implying an even greater population[24]. Jose Zalvidea, a Gabrielino informant of Kroeber and Harrington, stated that *Ya'angna* was the Pueblo of Los Angeles. Though the exact location of the village is unknown, a cemetery and Native American artifacts found during construction work in 1999 suggest that the village may have been located in the vicinity of today's LAUS[25]. Finally, a settlement referred to as *Geveronga* is known to have been located adjoining the Pueblo of Los Angeles[26].

The Portolá Expedition of 1769 was likely the first time that Europeans made direct contact with the people living in the vicinity of the Project site[27]. Passing through what is now the Los Angeles area, Portolá reached the San Gabriel Valley and traveled west through a pass between two hills where they encountered the Los Angeles River and camped on its eastern bank near the present-day North Broadway Bridge. Missions were established in the years that followed the Portolá expedition, the fourth being the Mission San Gabriel Arcángel founded in 1771 near the present-day city of Montebello. By the early 1800s, the majority of the surviving Gabrielino population had entered the mission system. The Gabrielino inhabiting present-day Los Angeles County were under the jurisdiction of either Mission San Gabriel or Mission San Fernando[28].

On September 4, 1781, *El Pueblo de la Reina de los Angeles* was established, not far from the site where Portolá and his men camped at the eastern bank of the Los Angeles River. Watered by the river's ample flow and the area's rich soil, the original pueblo occupied 28 square miles

---

21 McCawley, William. 1996. *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki Museum Press, Banning, CA. Available at LA Public Library Central Library location, shelf location: 970.3 G118Mc

22 Ibid:55

23 Ibid: 57

24 Reid, Hugo. 1939 [1852]. Letters on the Los Angeles County Indians. In A Scotch Paisano in Old Los Angeles, by Susanna Bryant Dakin, pp. 215–286. University of California Press, Berkeley, CA. Available at the following link: http://www.tobevisible.org/uploads/1/1/7/9/117979276/reid_final_11x17.pdf

25 Goldberg, Susan K., Bradley J. Adams, Carole Denardo, Scott A. Williams, Marilyn J. Wyss, Mark C. Robinson, Jill A. Onken, Cari M. Inoway, Melinda C. Horne, Kenneth Moslak, Suzanne Griset, Virgina S. Popper, Steve L. Martin, M. Steven Shackley, Thomas M. Origer, Janet L. McVickar, Beta Analytic, Inc., Suzanne Bircheff, Susan Rapp, and Patrick Knisely. 1999. The Metropolitan Water District of Southern California Headquarters Facility Project. The People of Yaanga?: Archaeological Investigations at CA-LAN-1575/H. Document prepared by Applied Earth Works and the Metropolitan Water District of Southern California for Union Station Partners. Document on file, South Central Coastal Information System. Available at LA Public Library Central Library location, shelf location: 970.4 C153Met 1999.

26 McCawley, William. 1996. *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki Museum Press, Banning, CA.:75. Available at LA Public Library Central Library location, shelf location: 970.3 G118Mc

27 Johnston, Bernice. 1962. California's Gabrielino Indians. Southwest Museum, Los Angeles, CA. vailable at LA Public Library Central Library location, shelf location: 970.3 G118Jo.

28 Jackson, Robert H. 1999. Agriculture, Drought and Chumash Congregation in the California Missions (1782–1834). *California Mission Studies Association Articles*. May 1999 Newsletter.

and consisted of a central square surrounded by 12 houses and a series of 36 agricultural fields occupying 250 acres, plotted to the east between the town and the river. Los Angeles' original central square was located near the present-day intersection of North Broadway and Cesar E. Chavez Boulevard[29].

Alta California became a state when Mexico won its independence from Spain in 1821. After independence, the authority of the Alta California missions gradually declined, culminating with their secularization in 1834, and nearly all of the Gabrielinos went north. Gabrielino populations were particularly devastated by early Spanish colonization efforts, such that, by the late 1800s, very few Gabrielino people remained in their native homeland. Some fled to refuges farther inland or to villages of neighboring tribes to the north or south, while others perished from disease and conflict with the invading Spanish, who established the Pueblo of Los Angeles in the middle of Gabrielino territory.[30] However, some Gabrielino stayed on in the vicinity of Los Angeles. Their numbers were supplemented by the numerous Native Americans who flooded into Los Angeles after secularization, many of whom came from Baja California, San Diego, San Luis Rey, and even Yuma, bringing their material culture traditions with them.[31]

Towards the end of the Mexican period, a number of Native American workers' settlements were located around Los Angeles, at least two of which appear to have stood near the Project area. The *Rancheria de los Poblanos* was located southeast of the corner of the intersection of Alameda Street and Commercial Street from 1836 to 1845, when it was razed by the City of Los Angeles. Another rancheria, the history of which is less well-known, was said to have been located approximately one mile up-slope from the Los Angeles Plaza.[32]

3.18.2.3 Archival Research and Survey

As presented in above, the Project area is situated on lands that were once inhabited by the Gabrielino people. As discussed in detail in Section 3.5, Cultural Resources, of this Draft EIR, archival research for the Area of Direct Impacts for archaeological resources and within a 1/8-mile radius of the Area of Direct Impacts was conducted in May and July 2019 at the South Central Coastal Information Center. Pedestrian field surveys of the Area of Direct Impacts were conducted on March 18, 2020, and July 15, 2020, to identify archaeological resources within the Area of Direct Impacts.

The records search revealed that approximately 75 percent of the Area of Direct Impacts has been previously surveyed and/or investigated and 103 cultural resource investigations were previously conducted within 1/8-mile of the Area of Direct Impacts. The records search also indicated that 51 cultural resources have been previously recorded within 1/8 mile of the Area of Direct Impacts.

Archival research and the survey resulted in the identification of one multi-component (prehistoric and historic) and eight historic-age archaeological sites, 45 years or older, that have been

29 Gumprecht, Blake. 1999. *The Los Angeles River: Its Life, Death, and Possible Rebirth*. John Hopkins University Press, Baltimore, MD. Available at LA Public Library Central library location, shelf location: 627.109794 G974-1

30 Kroeber, A. L. 1925. *Handbook of Indians of California*. Bureau of American Ethnology Bulletin 78, Smithsonian Institution, Washington, DC.

31 Beherec, Marc A. 2019. John Romani's Forgotten 1984 Excavations at CA-LAN-007 and the Archaeology of Native American Los Angeles. Proceedings of the Society for California Archaeology 33: 145-164. Available at: https://scahome.org/wp-content/uploads/2019/11/16-Beherec.final_paginated.pdf

32 Robinson, W. W. 1979. Land in California: The Story of Mission Lands, Ranchos, Squatters, Mining Claims, Railroad Grants, Land Scrip, Homesteads. University of California Press, Berkeley, CA.: 16-17. Available at LA Public Library Central Library location, shelf location: 333.3 R666.

previously recorded. Each of these sites was revisited during the archaeological survey. However, the archaeological sites are currently paved over and were not encountered on the survey. The pedestrian survey did not reveal any new surface-visible archaeological resources in the Area of Direct Impacts.

Of the nine sites, one has the potential to be a TCR because the age and nature of the site is eligible for the NRHP. As described in Section 3.2, Cultural Resources, of this Draft EIR, Resource 19-001575 is a large multicomponent archaeological site located under and around LAUS. The prehistoric or contact period component consists of a lithic reduction activity area, and a prehistoric and contact-period cemetery. The historic component consists of a wealth of architectural and structural features and other materials related to the development of nineteenth and early twentieth century Los Angeles, including the City's old Chinatown. The Native American cemetery is located approximately 500 feet east of the Area of Direct Impacts.

3.18.3 Methodology

Tribal cultural resources are defined by and in consultation with tribal representatives. Tribal consultation was formally initiated on October 1, 2020, and is ongoing, as is further discussed below under Sacred Land Files Search and AB 52 Consultation.

Furthermore, as noted in PRC Section 21084.2, a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. PRC Section 21084.3 states that:

a) Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.

b) If the Lead Agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process provided in PRC Section 21080.3.2, the following are examples of mitigation measures that, if feasible, may be considered to avoid or minimize the significant adverse impacts:

   1. Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

   2. Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

      i. Protecting the cultural character and integrity of the resource;

      ii. Protecting the traditional use of the resource; and

      iii. Protecting the confidentiality of the resource.

   3. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

   4. Protecting the resource.

Sacred Land Files Search and AB 52 Consultation

A Native American Sacred Land Files (SLFs) search and contact program were conducted to inform interested parties of the proposed Project and to request any information that may indicate an impact to tribal cultural resources within the Project area. The program involved contacting Native American tribal representatives identified by the NAHC and individuals and groups known to have knowledge about the Project area, in order to solicit comments and concerns regarding the Project.

An SLF request was sent to the NAHC on September 17, 2020. The NAHC responded to the request in a letter sent via e-mail and dated September 30, 2020. The letter stated that the SLF search had been conducted, and “The results were positive. Please contact the Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation) on the attached list for more information.” The list provided eight Native American Tribes (composed of nine representatives), including the Gabrieleno Band of Mission Indians – Kizh Nation, to contact “who may also have knowledge of cultural resources in the Project area.”

Metro is conducting consultation with eight tribes pursuant to AB 52. Representatives for these tribes were contacted with a letter mailed on October 1, 2020. Metro sent a followup e-mail with the consultation letter to one tribe on October 8, 2020, as Metro did not receive a delivery confirmation. Two tribes responded to the letter via e-mail. Metro sent follow-up e-mails and made calls to the six tribes that did not respond to, accept, or decline consultation on October 26, 2020.

Metro received a response from the Gabrielino Tongva Indians of California Tribal Council on October 14, 2020, with an outline of cultural resource monitoring recommendations. Metro sent an e-mail requesting a consultation meeting on November 9, 2020, and December 2, 2020, to the Gabrielino Tongva Indians of California Tribal Council tribe and did not receive a response.

Metro received a response from the Fernandeño Tataviam Band of Mission Indians on October 30, 2020, stating that the proposed Project location was outside of the ancestral boundaries of the tribe.

Kizh Nation requested direct government-to-government consultation on October 21, 2020. On April 8, 2021, Metro consulted with two tribal representatives from the Kizh Nation via a teleconference meeting, where an overview of the Tribe’s connection and history to the area was given.

During this time, Metro did not receive any comments or requests for consultation from the tribal representatives for the Santa Rosa Band of Cahuilla Indians, Soboba Band of Luiseno Indians, Gabrielino/Tongva Nation, Gabrielino-Tongva Tribe, or Gabrieleno/Tongva San Gabriel Band of Mission Indians.

Therefore, Metro mailed a letter to all eight tribes on July 2, 2021, notifying the tribes of the close of the consultation period prior to the release of the Draft EIR. On September 21, 2021, the Kizh Nation sent a letter with suggested mitigation measures, which reopened the consultation.

Thresholds of Significance

For purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on tribal cultural resources if it would:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or,

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

3.18.4 Environmental Impacts

TCR-1: *Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, in in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*

Construction Impacts

Less Than Significant Impact with Mitigation. For purposes of impact analysis, a tribal cultural resource is considered a site, feature, place, cultural landscape, sacred place, or object which is of cultural value to a California Native American Tribe and is either on or eligible for the California Register or a local historic register.

As discussed above, archival research for the Area of Direct Impacts for archaeological resources and within a 1/8-mile radius of the Area of Direct Impacts was conducted. Archival research and the survey resulted in the identification of one multi-component (prehistoric and historic) site, Resource 19-001575. Resource 19-001575 consists of a prehistoric to contact period Native American cemetery as well as structural remains and refuse deposits associated with the nineteenth to early twentieth century development of Los Angeles. The site was determined eligible for the NRHP and SHPO concurred in 2018. It is, therefore, automatically considered eligible for the CRHR. It is also possibly considered a TCR. Construction of the vertical circulation elements for the proposed Alameda Station in the area of the planned LAUS Forecourt would require ground-disturbing activities of up to 10 feet within the resource boundaries. The Native American cemetery is located approximately 500 feet east of the Area of Direct Impacts, and is not anticipated to be impacted by construction. However, as Resource 19-001575 is known to exist in this area, impacts related to construction of the vertical elements for the proposed Alameda Station in the area of the planned LAUS Forecourt could be potentially significant if unknown TCR are identified during construction. As such, Mitigation Measure CUL-D, as described in Section 3.2, Cultural Resources, of this Draft EIR, would be required to mitigate potential impacts to the resource. Mitigation Measure CUL-D would require an archaeological testing plan and data recovery plan for the Area of Direct Impacts. The testing plan would propose limited archaeological excavations of a portion of the site overlapping the Area of Direct Impacts intended to identify the location, integrity, and significance of archaeological deposits that may be impacted by the proposed Project. If significant archaeological remains are encountered that appear to contribute to the site's NRHP and CRHR eligibility during the test excavations, the data recovery plan would be implemented. The data recovery plan would specify a statistically significant sample of the site to be excavated, describe the specific tools, screening size, and methods to be used, and describe how structural remains, if any, would be exposed and mapped. Therefore, with implementation of Mitigation Measure CUL-D, impacts related to a substantial adverse change in the significance of TCR, defined in PRC Section 21074 and listed in the CRHR would be less than significant.

Operational Impacts

No Impact. Archaeological sites, including tribal cultural sites, would only be potentially subject to adverse effects during construction activities as all the archaeological resources, including tribal cultural resources, within the Project area are buried or inaccessible to the public. Operation of the proposed Project, including routine maintenance activities, would not require any ground disturbing activities that could expose archaeological sites, including tribal cultural sites, and result in disturbance of the resources. Therefore, operation of the proposed Project would result in no impact related to a substantial adverse change in the significance of a TCR, defined in PRC Section 21074 and listed in the CRHR.

TCR-2: *Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?*

Construction Impacts

Less Than Significant Impact with Mitigation. As required by AB 52, Metro contacted representatives of eight tribes with a letter invitation for consultation mailed on October 1, 2020. On October 14, 2020, Metro received a response from the Gabrielino Tongva Indians of California Tribal Council with an outline of cultural resource monitoring recommendations. On April 8, 2021, Metro consulted with two tribal representatives from the Gabrieleno Band of Mission Indians - Kizh Nation via a teleconference meeting. The tribal representatives noted that the Project area is in an area that is culturally significant for the pre-history of the cities that used to exist in the area, specifically with the *Ya'angna* community. The tribal representatives emphasized that tribal cultural resources could easily be discovered through excavation and the Kizh Nation letter from

September 21, 2021, which outlines potential for cultural resources to be present within the project area, also provides suggested mitigation measures, some of which have been incorporated into Mitigation Measure TCR-A below as appropriate.

Metro received a response from the Fernandeño Tataviam Band of Mission Indians on October 30, 2020, stating that the proposed Project location was outside of the ancestral boundaries of the tribe. Metro did not receive any comments or request for consultation from the tribal representatives for the Santa Rosa Band of Cahuilla Indians, Soboba Band of Luiseno Indians, Gabrielino/Tongva Nation, Gabrielino-Tongva Tribe, or Gabrieleno/Tongva San Gabriel Band of Mission Indians.

As discussed in TCR-1, the proposed Project would result in a less than significant impact to Resource 19-001575 with the implementation of Mitigation Measure CUL-D. Although no other tribal cultural resources with significance to a California Native American tribe have been identified through AB 52 consultation as of the writing of this Draft EIR, ground-disturbing activities have the potential to reveal additional unidentified subsurface deposits of prehistoric and historic-age, and Native American burials. The Kizh Nation letter dated September 21, 2022, also generally alludes to the potential for resources to be within the project area as the proposed Project is located in the Tribe's cultural and ancestral territory. However, no specifics were provided. If previously unidentified archaeological resources, including tribal cultural resources, are encountered during construction, the possibility exists that those resources could be disturbed or damaged during construction, resulting in a potentially significant impact.

Mitigation Measure TCR-A would require a Native American monitor, to be identified in the Cultural Resources Monitoring and Mitigation Plan (CRMMP) from Mitigation Measure CUL-A, to be present during ground-disturbing activities and would include procedures in the event of unanticipated discovery. Specifically, the CRMMP and Native American monitoring would be applicable to ground-disturbance activities extending into native soil within known tribal cultural sites and other areas of high sensitivity. In the event the Native American monitor identifies potential cultural or archeological resources, the monitor shall be given the authority to temporarily halt construction to investigate the find and contact the archaeological Principal Investigator who meets the Secretary of Interior's Professional Qualification Standards for Archaeology (36 Code of Federal Regulations [CFR] Section 61), Construction Contractor, and Metro. The Native American monitor and consulting tribe(s) would be provided an opportunity to participate in the documentation and evaluation of the find. With implementation of Mitigation Measure TCR-A, impacts related to causing a substantial adverse change in the significance of a TCR of a California Native American tribe would be less than significant.

Operational Impacts

No Impact. Tribal cultural resources would only be subject to adverse effects during construction activities as all the archaeological resources, including tribal cultural resources, within the Project area are buried or inaccessible to the public. Operation of the proposed Project, including routine maintenance activities, would not require any ground disturbing activities that could expose archaeological sites, including tribal cultural sites, and result in disturbance of the resources. Therefore, operation of the proposed Project would result in no impact related to causing a substantial adverse change in the significance of a TCR of a California Native American tribe.

3.18.5 Mitigation Measures

Mitigation Measure CUL-A and Mitigation Measure CUL-D, as presented in Section 3.5, Cultural Resources, in this Draft EIR, would mitigate or reduce potential impacts to archaeological resources that may be tribal cultural resources to a level that is less than significant. Mitigation Measure TCR-A, provided below, is proposed to reduce significant impacts related to tribal cultural resources to a level less than significant for the proposed Project.

CUL-A **Cultural Resources Monitoring and Mitigation Plan** (as described in Section 3.5, Cultural Resources, in this Draft EIR)

CUL-D **Archaeological Testing Plan for LAUS Forecourt** (as described in Section 3.5, Cultural Resources, in this Draft EIR)

TCR-A **Native American Monitor.** Because of the potential to encounter tribal cultural resources, a Native American monitor shall be retained to monitor project-related, ground-disturbing construction activities (e.g., boring, grading, excavation, drilling, trenching) that occur after existing pavement and structures are removed at the location of the Alameda Station. If cultural resources are encountered elsewhere along the alignment during construction that, in the opinion of the archaeological Principal Investigator (as defined in 32 CFR Section 767.8), are likely of Native American origin, then Native American monitoring may be extended to include the area of the find. The Principal Investigator will make the recommendation to the Project Sponsor and Metro if it seems the Native American monitoring should be extended. The appropriate Native American monitor shall be selected based on ongoing coordination with consulting tribes and shall be identified in the CRMMP. The CRMMP is described in Mitigation Measure CUL-A. Specifically, the CRMMP and Native American monitoring would be applicable to ground disturbance activities extending into native soils at the location of the Alameda Station and, if cultural resources are encountered elsewhere along the alignment during construction that, in the opinion of the archaeological Principal Investigator, are likely of Native American origin. Monitoring procedures and the role and responsibilities of the Native American monitor shall be outlined in the CRMMP. In the event the Native American monitor identifies cultural or archeological resources, the monitor shall be given the authority to temporarily halt construction (if safe) within 50 feet (15 meters) of the discovery to investigate the find and contact the archaeological Principal Investigator. The Native American monitor and consulting tribe(s) shall be provided an opportunity to participate in the documentation and evaluation of the find. If a data recovery plan is prepared, the consulting tribe(s) shall be provided an opportunity to review and provide input on the plan.

3.18.6 Level of Significance after Mitigation

Upon implementation of Mitigation Measures CUL-A, CUL-D, and TCR-A, potentially significant impacts related to tribal cultural resources would be reduced to less than significant under the proposed Project.

This page intentionally left blank.

3.19 UTILITIES AND SERVICE SYSTEMS

This section describes existing utilities that serve the Project area and surrounding areas. Specifically, the utilities addressed include water supply, delivery, and treatment facilities; drainage systems; wastewater collection and treatment; solid waste disposal; electrical supply; natural gas supply; and telecommunications. For a detailed description of energy demand and conservation, refer to Section 3.6, Energy of this Draft Environmental Impact Report (Draft EIR).

3.19.1 Regulatory Setting

State

California Urban Water Management Planning Act of 1984

The California Urban Water Management Planning Act of 1984 requires every urban water supplier prepare and adopt an urban water management plan every five years to confirm that cities are performing the advance planning necessary to forecast future water demands and water supplies under average and dry year conditions and management strategies, identify future water supply projects including recycled water, and provide water conservation best management practices (BMPs). Local agencies are required to report passive conservation savings, energy intensity, climate change, and measures being both implemented and planned for implementation to meet a 20-percent demand reduction target by December 31, 2020.[1, 2]

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939) was enacted to reduce, recycle, and reuse solid waste generated in the State to the maximum extent feasible. Specifically, this Act requires City and County jurisdictions to identify an implementation schedule to divert 50 percent of the total waste stream from land disposal by the year 2000 through source reduction, recycling, and composting activities, and requires the participation of the residential, commercial, industrial, and public sectors.

AB 939 requires all Counties and Cities to prepare a comprehensive solid waste management program that includes a Source Reduction and Recycling Element to address waste characterization, source reduction, recycling and composting, solid waste facility capacity, education and public information, funding, special waste (asbestos, sewage sludge, etc.), and household hazardous waste. Annual reports are required to document the jurisdiction's achievements in meeting the requirements of AB 939, including planned and implemented solid waste diversion programs and facilities and all required supporting documentation. The Countywide Integrated Waste Management Plan (CoIWMP) also has to include a Non-Disposal Facility Element to identify non-disposal facilities to be used in order to assist Counties in reaching AB 939's diversion mandates. Non-disposal facilities include material recovery facilities, transfer stations, large-scale composting facilities, and other facilities that require a solid waste facility

[1] California Department of Water Resources. 2021. Urban Water Management Plans. Available at: https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans. Accessed April 2022.

[2] California Department of Water Resources. 2020. *Urban Water Management Plan Guidebook. Appendix B: Changes to the California Water Code Since 2015 Urban Water Management Plan*. Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans/Final-2020-UWMP-Guidebook/Appendix-B---UWMP-2020.pdf. Accessed April 2022.

permit. Lastly, the CoIWMP has to include a Household Hazardous Waste Element to reduce the amount of hazardous household waste generated and to provide the County with convenient collection services and promote waste minimization/reduction techniques. It also requires Counties to develop a Siting Element that addresses how each County, and Cities within that County, will manage their solid waste disposal over 15-year planning periods. The Siting Elements also include goals and policies to ease the use of out-of-county/remote landfills and foster the development of alternatives to landfill disposal (e.g., conversion technologies). Oversight of these activities was set up under the charge of the California Integrated Waste Management Board. The duties and responsibilities of the California Integrated Waste Management Board were transferred to the California Department of Resources, Recycling, and Recovery (CalRecycle) as of January 1, 2010.

Senate Bill 1374

Adopted on September 12, 2002, Senate Bill 1374 amends Sections 41821 and 41850 of, and adds Section 42912 to, the Public Resources Code, relating to solid waste. As stated above, AB 939 requires all Counties and Cities to prepare a comprehensive solid waste management program. This bill additionally requires that the report include a summary of progress made in diversion of construction and demolition (C & D) waste materials, including information on programs and ordinances implemented by the local government and quantitative data, where available.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 was enacted to assist local jurisdictions with accomplishing the goals of AB 939 by requiring CalRecycle to adopt a model ordinance for adoption of recyclable materials in development projects by March 1, 1993. In accordance with the California Solid Waste Reuse and Recycling Access Act, any development project that has submitted an application for a building permit must include adequate, accessible areas for the collection and loading of recyclable materials. Furthermore, the areas to be utilized must be adequate in capacity, number, and distribution to serve the proposed Project. Moreover, the collection areas are to be located as close to existing exterior refuse collection areas as possible.

Assembly Bill 341 (Chesbro, Chapter 476, Statutes of 2011)

AB 341 sets forth the requirements of the Statewide mandatory commercial recycling program to reduce greenhouse gas emissions by diverting commercial solid waste to recycling efforts to expand the opportunity for additional recycling services and recycling facilities in California.[3] This law requires any business (including public entities) generating four cubic yards or more of commercial solid waste per week to arrange for recycling services.

General Orders Administered by the California Public Utilities Commission

The California Public Utilities Commission regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies to ensure access to safe, clean, and affordable utility services and infrastructure. The California Public Utilities Commission establishes rules called general orders by which these services are

3 CalRecycle. 2021. Mandatory Commercial Recycling. Available at: https://www.calrecycle.ca.gov/recycle/commercial. Accessed April 2022.

regulated to protect the public, safeguard the environment, and assure access to safe and reliable utility infrastructure and services.[4]

California Green Building Standards Code (CALGreen)

Effective on January 1, 2020, Section 5.408 of the 2019 California Green Building Standards Code (CALGreen) (Part 11 of California Code of Regulations [CCR] Title 24) requires that at least 65 percent of the nonhazardous C & D waste from non-residential construction operations be recycled and/or salvaged for reuse, or that the conditions of a local C & D waste management ordinance are met, whichever is more stringent. Additionally, Section 5.304 states that nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance, whichever is more stringent.

Local

Los Angeles Countywide Integrated Waste Management Plan

The County of Los Angeles Department of Public Works (LADPW) is responsible for preparing the CoIWMP and the Countywide Siting Element per AB 939. The CoIWMP, approved by CalRecycle in 1999, was prepared by the County of Los Angeles to describe the steps to be taken by individual jurisdictions, acting independently and in concert, to achieve the 50-percent waste diversion mandate. Since 1999, the County and its cities have experienced several changes in regional solid waste management, demographics, economics, and public awareness of environmental stewardship. The County and its cities continue to enhance and expand their waste reduction efforts while also adapting these strategies to changing conditions.[5, 6]

Individual jurisdictions within the County continue to implement and enhance waste reduction, recycling, special waste, and public education programs identified in their Source Reduction and Recycling Elements, Household Hazardous Waste Element, and Non-Disposal Facility Element (as updated through their Annual Reports). Through the Countywide and regional programs implemented by the County and the Cities, most jurisdictions have already met the 50-percent mandate and achieved significant, measurable results. The County's latest Five-Year Review Report was approved by CalRecycle on October 13, 2020, and determined that an update to the CoIWMP was not necessary.[7]

The Countywide Siting Element,[8] approved by CalRecycle on June 24, 1998, identifies how the County and its cities would meet their long-term disposal capacity needs for a 15-year planning period to safely handle solid waste generated in the County that cannot be reduced, recycled, or composted. The LADPW revised the Countywide Siting Element and released the document for

4 California Public Utilities Commission. 2021. Overview. Available at: https://www.cpuc.ca.gov/about-cpuc/cpuc-overview. Accessed April 2022.
5 LADPW. 1997. *Countywide Integrated Waste Management Plan (CoIWMP).*
6 LADPW. 2020. *CoIWMP: 2019 Annual Report*. Available at: https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=14372&hp=yes&type=PDF. Accessed April 2022.
7 LADPW. 2020. *CoIWMP: Five-Year Review Report*.
8 LADPW. 1997. Countywide Siting Element. Available at: https://dpw.lacounty.gov/epd/cse/docs/1997%20CSE/Volume%20I%20-%20The%20Element/LACCSitingElement_VolumeI_TheElement_061997.pdf. Accessed September 2022.

review and comment in 2021. The Final Draft Countywide Siting Element was released in July 2022.[9]

One Water LA 2040 Plan

The One Water LA 2040 Plan was completed by the City of Los Angeles to identify projects, programs, and policies to yield sustainable, long-term water supplies for Los Angeles and to provide greater resiliency to drought conditions and climate change. The One Water LA 2040 Plan considers all of the City of Los Angeles' water resources including surface water, groundwater, potable water, wastewater, recycled water, dry-weather runoff, and stormwater and identifies multi-departmental and multi-agency integration opportunities to manage water more sustainably, efficiently, and cost-effectively. The One Water LA 2040 Plan guides strategic decisions for integrated water projects, programs, and policies within the City of Los Angeles.

Objectives of the Plan include:

1. Integrate management of water resources and policies by increasing coordination and cooperation between all City departments, partners, and stakeholders.

2. Balance environmental, economic, and societal goals by implementing affordable and equitable projects and programs that provide multiple benefits to all communities.

3. Improve health of local watersheds by reducing impervious cover, restoring ecosystems, decreasing pollutants in our waterways, and mitigating local flood impacts.

4. Improve local water supply reliability by increasing capture of stormwater, conserving potable water, and expanding water reuse.

5. Implement, monitor, and maintain a reliable wastewater system that safely conveys, treats, and reuses wastewater while also reducing sewer overflows and odors.

6. Increase climate resilience by planning for climate change mitigation and adaptation strategies in all City actions.

7. Increase community awareness and advocacy for sustainable water by active engagement, public outreach and education. [10]

The One Water LA 2040 Plan integrates information from the 2006 Water Integrated Resources Plan, 2015 Urban Water Management Plan, 2015 Stormwater Capture Master Plan, 2015 Enhanced Watershed Management Plans, 2015 LA Basin Stormwater Conservation Study, and 2015 Sustainable City pLAn and builds upon them to identify additional opportunities in a Stormwater and Urban Runoff Facilities Plan and Wastewater Facilities Plan.[11]

---

[9] LADPW. 2022. Final Draft Countywide Siting Element. Available at: https://dpw.lacounty.gov/epd/cse/docs/Final%20Draft%20Revised%20CSE.pdf. Accessed September 2022.

[10] Los Angeles Sanitation & Environment (LASAN). 2022. About One Water LA 2040 Plan. Available at: https://www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-owla/s-lsh-es-owla-au?_adf.ctrl-state=zf22b5gop_5&_afrLoop=15166652381721998#!. Accessed April 2022.

[11] LASAN. 2018.One Water LA 2040 Plan.

Los Angeles' Green New Deal: Sustainable City pLAn 2019

Los Angeles' Green New Deal Sustainable City pLAn 2019 expands upon the original 2015 Sustainable City pLAn by including goals for securing clean air and water, a stable climate; improving community resilience, expanding access to healthy food and open space, and promoting justice for all. One of the key principles associated with utilities and service systems of the Green New Deal Sustainable City pLAn is the "commitment to the Paris Climate Agreement and to urgent action with a scientifically-driven strategy for achieving a zero carbon grid, zero carbon transportation, zero carbon buildings, zero waste, and zero waste water."[12]

Los Angeles County Metropolitan Transportation Authority (Metro) Sustainability Strategic Plan 2020

Approved in September 2020, Moving Beyond Sustainability, Metro's Sustainability Strategic Plan, is a comprehensive sustainability planning document which sets goals, targets, strategies, and actions that align with and emanate from other key Metro guidance documents, including: *Vision 2028, Long Range Transportation Plan, Equity Platform Framework* and *Climate Action and Adaptation Plan*. It is also designed to align with and support parallel efforts and plans underway at the County and City of Los Angeles, including *LA's Green New Deal* and *Our County*. The vision of the plan is to create an organizational culture and workforce that continually integrates the principles of sustainability into all aspects of decision-making and execution to enhance communities and lives through mobility and access to opportunity. Moving Beyond Sustainability sets targets for water quality and conservation, solid waste, emissions and pollution control, resilience and climate adaptation, materials, construction and operations, energy resource management, and economic and workforce development.[13]

City of Los Angeles Urban Water Management Plan

The Urban Water Management Plan is a master plan prepared by LADWP in 2020 to forecast future water demands and water supplies under average and dry hydrologic conditions; identify future water supply projects; and provide a reliability assessment for average, single dry year, and multi-dry years and assess near term drought risk.

LADWP's 2020 Urban Water Management Plan presents the general policies which guide LADWP's decision-making process to maintain and secure a sustainable water supply for the City. The Urban Water Management Plan is the master plan for water supply and resources management consistent with LADWP's goals and policy objectives; and it provides full compliance with the requirements of the California Urban Water Management Planning Act.[14]

City of Los Angeles General Plan

Conservation Element and Infrastructure Systems Element

The City of Los Angeles General Plan Conservation Element and Infrastructure Systems Element include goals and policies for conservation of gas and objectives for solid waste disposal, power, sewerage, and water infrastructure and development. The policies for recycling and diversion of

---

12 City of Los Angeles Mayor's Office. 2019. LA's Green New Deal Sustainable City pLAn 2019.

13 Metro. 2020. Moving Beyond Sustainability: Sustainability Strategic Plan 2020. Available at: http://media.metro.net/2020/Moving-Beyond-Sustainability-Strategic-Plan-2020.pdf. Accessed April 2022.

14 LADWP. 2020. Urban Water Management Plan. Available at: https://www.ladwp.com/cs/groups/ladwp/documents/pdf/mdaw/nzyy/~edisp/opladwpccb762836.pdf. Accessed September 2022.

solid waste comply with the California Integrated Waste Management Act (AB 939), the California Solid Waste Reuse and Recycling Act, and the Solid Waste Diversion Rule (AB 341).[15,16]

Framework Element, Chapter 9 Infrastructure and Public Services

Chapter 9 of the City of Los Angeles General Plan Framework Element describes the existing infrastructure and public service systems in the City that assist in supporting City operations. Specifically, the chapter includes goals, objectives, and policies related to wastewater, stormwater, water, and solid waste.[17]

Land Use Element

The Silver Lake-Echo Park-Elysian Valley Community Plan contains several policies related to utilities within its plan area[18]. No utility-related policies were identified in the Central City and Central City North Community Plans. The City of Los Angeles is currently in the process of updating the Central City and Central City North Community Plans through the Downtown Los Angeles 2040 Draft Community Plan. Because it is unknown when the new community plan would be adopted and its EIR certified, the analysis in this section is based on the current Community Plans. The relevant City of Los Angeles General Plan goals, objectives, and policies related to utilities are listed in Table 3.19-1 below.

Table 3.19-1: City of Los Angeles General Plan Goals, Objectives, and Policies Related to Utilities

Element/Plan	Goal/Objective/Policy
Conservation Element	Section 20: Resource Management (Fossil Fuels) Gas refers to Section 19: Resource Management (Fossil Fuels) Petroleum (oil and gas) objective, policies and programs. *Policy 1* – Continue to encourage energy conservation and product reuse.
Infrastructure Systems Element	*City-Collected Refuse Disposal Plan Objectives:* • To serve as a guide to meet or exceed City, County, and State refuse disposal requirements in the acquisition, maintenance, and operation of existing and future landfill sites. • To provide a basis for the site acquisition program to meet future needs, considering proximity to collection areas and proposed uses for the reclaimed land. *Power System Plan Objectives:* • To facilitate the utilization of advancements in technology, as they become practicable for application, to meet the ever-increasing demand for the most reliable power supply possible at the most economical rates.

15 Los Angeles Department of City Planning. 2001. City of Los Angeles General Plan Conservation Element. Accessed April 2022.

16 Los Angeles Department of City Planning and the Bureau of Sanitation. 1972. City of Los Angeles General Plan Infrastructure Systems Element: City-Collected Refuse Disposal Plan. Accessed April 2022.

17 Los Angeles Department of City Planning. 2011. City of Los Angeles General Plan Framework Element, Chapter 9 Infrastructure and Public Services. Accessed April 2022.

18 City of Los Angeles Department of City Planning, Silver Lake-Echo Park-Elysian Valley Community Plan, August 2004, available at: https://planning.lacity.org/plans-policies/community-plan-area/silver-lake-echo-park-elysian-valley. Accessed April 2022.

Table 3.19-1: City of Los Angeles General Plan Goals, Objectives, and Policies Related to Utilities

Element/Plan	Goal/Objective/Policy
	• To provide a basis for the linking of the Power System with power systems of other utilities so as to diversify sources of power and optimize reliability of service on a reciprocal basis. *Sewerage Plan Objectives:* • To provide a basis for the development of a safe, efficient, and economical sewerage system for the City of Los Angeles. • To utilize the best current estimate of future land use in the areas to be served as a basis for determining quantitative requirements for sewerage facilities. • To provide a basis for the improvement of existing sewerage facilities, the development of proposed facilities, and the accommodation of future technical improvements and alternative concepts of City development. • To recognize that the system should not be limited by political boundaries. *Water System Plan Objectives:* • To identify the needs for land and facilities necessary to provide an adequate and reliable water supply throughout the City of Los Angeles and to designate general locations for such facilities. • To introduce and utilize new technologies for the improvement of the water system in order to meet the ever-increasing demand for water at the most economical rates possible. • To periodically re-evaluate the capability of the water system facilities in order to reflect changes in the demand for water resulting from technological developments and new patterns in the City's land use. • To provide water pressure and supply necessary for normal domestic needs and for efficient fire protection. • To set forth design standards for the water system relating to the total water demand and availability of supply, number and size of facilities, and to assure construction of facilities to be aesthetically compatible with adjacent lands and development.
Framework Element	*Wastewater Treatment Facilities* – The unused capacities of the City's wastewater treatment facilities will be less as the City continues to grow. To sustain growth, Los Angeles must continue to plan for increases in total treatment capacities. Wastewater Collection – The wastewater collection and conveyance systems are aging and experiencing structural deterioration and hydraulic deficiencies with approximately 50 percent of the sewers older than 50 years (with a normal life expectancy of 50-100 years). This will necessitate the rehabilitation or replacement of existing facilities, new sewers, new storage facilities, pumping plant modification and rehabilitation, and development of accessory and control structures. *Water Supply* – Future increases in the use of reclaimed wastewater will help make the total water supply more reliable. Reclaimed wastewater will be used for groundwater recharge, recreation, landscaping, industry, etc. The use of reclaimed wastewater will displace or supplement potable water supplies and, therefore, increase the reliability of the City's water supply.

Table 3.19-1: City of Los Angeles General Plan Goals, Objectives, and Policies Related to Utilities

Element/Plan	Goal/Objective/Policy
Silver Lake-Echo Park-Elysian Valley Community Plan	Policy 1-6.2. Ensure the availability of adequate sewers, drainage facilities, fire protection services and facilities, and other public utilities to support development within hillside areas.

City of Los Angeles Municipal Code

Low-impact Development

Under the City of Los Angeles Municipal Code (LAMC), the City of Los Angeles Stormwater Ordinance prohibits the entry of illicit discharges into the municipal storm drain system and allows the City to enforce the National Pollutant Discharge Elimination System municipal stormwater permit issued by the Los Angeles Regional Water Quality Control Board.[19]

The City of Los Angeles adopted the Low Impact Development (LID) Ordinance in November 2011 for stormwater to ensure that development and redevelopment projects mitigate runoff in a manner that captures rainwater at its source, while utilizing natural resources. The LID Ordinance amended LAMC Sections 64.70.01 and 64.72 and expanded on the existing Standard Urban Stormwater Mitigation Plan requirements by incorporating LID practices and principles and expanding the applicable development categories. Depending on the scope and size of the project (and the impervious surfaces involved), all development and redevelopment projects that create, add, or replace impervious area must comply with the LID Ordinance. Projects subject to the LID Ordinance must prepare and submit a LID Plan.

The LID Ordinance was updated in September 2015 (Ordinance Number [No.] 183833) to amend the LAMC Section 64.70 et seq., expanding on the LID requirements and eliminating the requirement for a Standard Urban Stormwater Mitigation Plan. Under the LID Ordinance, projects must implement LID BMPs, as recommended in the City of Los Angeles Planning and Land Development Handbook for Low Impact Development and the City of Los Angeles Best Management Practices Handbook, which include stormwater-related BMPs for construction and operation. [20]

LID stormwater management practices seek to mitigate the stormwater runoff and pollution impacts as close to its source as possible. LID practices involve a combination of site designs and BMPs that promote the use of natural drainage systems that favor infiltration, evapotranspiration, and stormwater re-use such that the proposed project will have features that mimic the site's predevelopment drainage characteristics. These practices improve the removal of nutrients, bacteria, and metals from stormwater while reducing the volume and intensity of site runoff. By promoting infiltration design features in a project, impervious surface area can be reduced that simultaneously minimizes off-site stormwater discharge. Where infiltration is

[19] LASAN. 1998. City of Los Angeles Stormwater Program Ordinance. Available at: https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-wp/s-lsh-wwd-wp-ec/s-lsh-wwd-wp-ec-o?_afrLoop=15167753252276687&_afrWindowMode=0&_afrWindowId=null&_adf.ctrl-state=zf22b5gop_818#!%40%40%3F_afrWindowId%3Dnull%26_afrLoop%3D15167753252276687%26_afrWindowMode%3D0%26_adf.ctrl-state%3Dzf22b5gop_822. Accessed April 2022.

[20] City of Los Angeles. Ordinance No. 183833. Adopted November 2011 and amended September 2015.

infeasible, the use of bioretention, rain gardens, vegetated rooftops, and rain barrels that can store, evaporate, detain, and/or treat runoff are also useful.

Citywide Construction and Demolition Waste Recycling Ordinance

LAMC also requires that all mixed C & D waste generated within City limits be disposed of at a City-certified C & D waste processor under the Citywide Construction and Demolition Waste Recycling Ordinance.[21]

RENEW LA Plan

Article 6, Chapter VI, Sections 66.33 through 66.33.10 of the LAMC establishes the City's RENEW LA Plan. Under the RENEW LA Plan, the City is committed to reaching zero waste by diverting 70 percent of the solid waste generated in the City by 2013, diverting 90 percent by 2025, and becoming a zero-waste city by 2030. State law currently requires at least 50 percent for solid waste diversion and established a Statewide goal of 75-percent diversion by 2020. Moreover, State law requires mandatory commercial recycling in all businesses and multifamily complexes and imposes additional reporting requirements on local agencies, including the City. Increasing recycling and diversion in the commercial and multifamily waste sectors is needed in order to meet these requirements and goals. Under the RENEW LA Plan, the City will use an exclusive, competitive franchise system for the collection, transportation and processing of commercial and multifamily solid waste. Using an exclusive competitive franchise system will aid the City in meeting its diversion goals by:

- (i) requiring franchisees to meet diversion targets;
- (ii) increasing the capacity for partnership between the City and solid waste haulers;
- (iii) allowing the City to establish consistent methods for diversion of recyclables and organics;
- (iv) increasing the City's ability to track diversion, which will enable required reporting and monitoring of State-mandated commercial and multifamily recycling;
- (v) increasing the City's ability to ensure diversion quality in the processing facilities handling its waste and recyclables; and
- (vi) increasing the City's capacity to enforce compliance with federal, State, County, and local standards.

The Los Angeles Green Building Code

The Los Angeles Green Building Code (LAGBC) is based on the 2013 CALGreen that was developed and mandated by the State to attain consistency among the various jurisdictions within the State, reduce the building's energy and water use, reduce waste, and reduce the carbon footprint. The LAGBC applies to development projects that include all new buildings, all additions, and substantial alterations. Project plans are submitted to the Green Building Division for plan check. Approval from the Green Building Division is required prior to issuance of the Building

[21] LASAN. 2022. Construction and Demolition Recycling. Available at: https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s/s-lsh-wwd-s-r/s-lsh-wwd-s-r-cdr. Accessed April 2022.

Permit. Programs under the LAGBC regulate solar energy, water conservation, electric vehicle chargers, Existing Buildings Energy & Water Efficiency Program, cool roof, waste hauling, and fireplaces.[22]

Water Conservation Ordinance

Under the LAGBC, Ordinance No. 184248 amends certain provisions of Articles 4 and 9 of Chapter IX of the LAMC to establish citywide water efficiency standards and require water-saving systems and technologies in buildings and landscapes to conserve and reduce water usage.[23]

Citywide Construction and Demolition Waste Recycling Ordinance

Under the LAGBC, on March 5, 2010, the Los Angeles City Council approved Council File 09-3029 pertaining to the Citywide Construction and Demolition Waste Recycling Ordinance that requires ALL mixed C & D waste generated within city limits be taken to City-certified C & D waste processors. The LASAN is responsible for the C & D waste recycling policy.

C & D materials make up a large percentage of the waste stream, but much of the C & D materials can be reused or recycled. All haulers and contractors responsible for handling C & D waste must obtain a Private Waste Hauler Permit from LASAN prior to collecting, hauling, and transporting C & D waste, and C & D waste can be taken to only City-certified C &D processing facilities.[24]

City of Los Angeles Sewer System Management Plan

The Sewer System Management Plan (SSMP) was prepared pursuant to the State Water Resources Control Board Statewide General Waste Discharge Requirements by LASAN. The original SSMP was adopted in February 2009 and was recently updated in January 2019. The SSMP provides a plan and schedule to properly manage, operate, and maintain all parts of the City's three collection systems: Hyperion System, Terminal Island System, and Los Angeles Regional System. The goals of the plan include, but are not limited to, providing sufficient sewage capacity, maintaining an effective sanitary sewer overflow (SSO) response plan, and improving operational reliability and flexibility. Consistent with the City policy and its mission to protect public health and the environment, the LASAN has adopted and is dedicated to achieving the following broad objectives which correspond with the State Waste Discharge Requirements provisions that require enrollees to maintain all parts of the system, provide adequate capacity to minimize sewer overflows, and maintain a plan to respond to and mitigation overflows when they do occur:

- Repair, rehabilitate, replace, and upgrade system components as/when needed;
- Provide sufficient sewage capacity to accommodate current and projected flows;
- Eliminate all preventable dry-weather overflows;
- Eliminate wet-weather overflows from all storm events less severe than or equal to 10-year design storm;

---

22 LASAN. 2022. Green Building and Sustainability. Available at: https://www.ladbs.org/services/green-building-sustainability. Accessed April 2022.

23 Los Angeles City Clerk. 2014. *Ordinance No. 184248*. Available at: http://clkrep.lacity.org/onlinedocs/2015/15-0458_ORD_184248_6-6-16.pdf. Accessed April 2022.

24 LASAN. 2022. Green Building and Sustainability. Available at: https://www.ladbs.org/services/green-building-sustainability. Accessed April 2022.

- Maintain an effective SSO response plan to mitigate any SSOs that do occur in a timely manner;
- Control corrosion and minimize odor releases; and
- Provide operational reliability and flexibility.

Chapter 5 of the SSMP, describes the design and construction standards and specifications for sewers. Standards and specifications are composed of the Sewer Design Manual, Standard Plans, Construction Manual, Approved Products and Materials Lists, “Green Book” Standard Plans for Public Works Construction, and “Brown Book” (i.e., amendments to the Green Book). The City of Los Angeles Department of Public Works, Bureau of Contract Administration, enforces construction and performance standards for projects in the public right-of-way (ROW). As discussed in the SSMP, specific standards are included in LAMC Chapter VI, Article 4 – Sewers, Watercourses, and Drains (Section 64.00), which codifies the City’s policy for the design and construction of sewers and connections. The LAMC requires that all sewers constructed in the City comply with the Los Angeles Bureau of Engineering’s (LABOE’s) standard plans, specifications, policies, and practices.[25]

City of Los Angeles Solid Waste Integrated Resources Plan

The City of Los Angeles Solid Waste Integrated Resources Plan was developed in 2013 and establishes the City’s zero-waste, long-range master plan to reach the goal of 90-percent diversion by 2025. This targeted diversion would be implemented through an enhancement of existing policies and programs, implementation of new policies and programs, and the development of future facilities to meet the City’s recycling and solid waste infrastructure needs over a 20-year planning period.[26] The guiding principles for implementation include:

- Protect public health and the environment,
- City leadership as a model for zero-waste practices,
- Manufacturer responsibility,
- Incentives,
- City leadership to increase recycling,
- Convenience,
- Economic efficiency,
- Education and outreach to decrease wasteful consumption,
- New, safe technology,
- Equity,
- Education and outreach to increase recycling, and
- Consumer responsibility.

---

[25] LASAN. 2019. Sewer System Management Plan, Version 3.0. Available at: https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdm1/~edisp/cnt035427.pdf. Accessed September 2022.

[26] LASAN. 2013. City of Los Angeles Solid Waste Integrated Resources Plan – A Zero Waste Master Plan.

3.19.2 Environmental Setting

This section provides an overview of the existing utility services and providers serving the Project area, followed by a summary of the specific utilities that serve each of the Project component sites.

Water Service

Water service for the Project area and the surrounding area is provided by the Los Angeles Department of Water and Power (LADWP), which serves approximately 4 million people within 472 square miles. The LADWP supplies approximately 159 billion gallons of water annually and an average of 435 million gallons per day (GPD) to its customers. Approximately 121 million GPD of water use is by commercial, industrial, and institutional customers. The LADWP's water system infrastructure comprises 115 tanks and reservoirs, 85 pump stations, 31 ammoniation and chlorination stations, 329 regulator and relief stations, 111 system pressure zones, and approximately 7,340 miles of distribution mains and trunk lines. The total storage capacity is approximately 323,820 acre-feet.[27] Table 3.19-2 provides a breakdown of the LADWP water supply sources.

Table 3.19-2: Los Angeles Department of Water and Power, Water Supply Sources (5-Year Average, Fiscal Year 2016-2020)

WATER SOURCE	PERCENT
Los Angeles Aqueduct (Eastern Sierra Nevada)	48
Purchased Water (from Metropolitan Water District) • *Bay Delta* • *Colorado River*	41 *35* *6*
Groundwater	9
Recycled Water	2

Source: Los Angeles Department of Water and Power. 2021. *Briefing Book 2020-21*.

A multi-year drought that ran from 2012 through 2016 resulted in the State mandating water-use reductions throughout the state and the investment of local agencies to develop new, local, drought-resilient sources of potable water supply. Currently, Los Angeles County has entered its third year in a state of extreme drought.[28] Many of the LADWP's traditional water sources are affected by these climate extremes, in addition to environmental regulations and groundwater basin contamination. Although the LADWP continues to purchase water from the Metropolitan Water District, the LADWP continues to expand its recycled water program to ensure a safe and reliable local water supply for the City.[29]

---

27 Los Angeles Department of Water and Power. 2021. *Briefing Book 2020-2021*.

28 National Integrated Drought Information System. 2022. *Drought Conditions for Los Angeles County.* Available at: https://www.drought.gov/states/california/county/Los%20Angeles. Accessed April 2022.

29 LADWP. 2020. *Recycled Water Annual Report 2019-2020*. Available at: https://www.ladwp.com/cs/groups/ladwp/documents/pdf/mdaw/nzmw/~edisp/opladwpccb730153.pdf?_afrLoop=264909380777697. Accessed April 2022.

In addition, pursuant to Ordinance No. 181,288, LAMC Section 121.08 establishes varied water consumption limitations arranged by phase, whereby the level of restriction for each phase is tied to the level of water conservation required, and each successive phase creates additional restrictions on water use to address increasingly severe water shortage emergencies. Water conservation measures include such restrictions as limited watering of hard surfaces and automobiles and rationed watering of landscaping. The phases start with the least stringent conservation measures at Phase I and increase to Phase IV, which does not allow any landscape irrigation. Phase V allows the LADWP Board of Water and Power Commissioners to implement additional prohibited uses based on the water supply situation, and also applies all restrictions from the previous phases.[30]

Effective on June 1, 2022, the LADWP moved to Phase III of its emergency water conservation plan, which cut the number of outdoor watering days from three to two. This transition also includes an outreach and education campaign to help spread awareness of the coming changes, offers its customers incentives such as rebates for conservation compliance, and issues citations for those in violation of the restrictions.[31]

The LADWP has also adopted the Urban Water Management Plan and other long-term water management plans that ensure adequate water supplies are available to the City. The Urban Water Management Plan provides a strategy for meeting the local water supply goals under normal year, dry year, and multiple dry year conditions. During multiple dry year conditions, the LADWP is implementing strategies to increase stormwater capture and groundwater augmentation. Additionally, an initiative to recycle 100 percent of the City's wastewater by 2035 to increase water independence will help meet the Sustainable City pLAn goal to source 70 percent of water locally by 2035 from a combination of recycled water, groundwater, stormwater, and new conservation.

Drainage Systems

Most of the land surfaces in the Project area are developed and covered by impervious surfaces, except for existing public parks and landscaped areas. The majority of runoff flows to drain inlets along the streets and is then discharged directly to the Los Angeles River. Elevation within the Project area slopes gently from north to south. Refer to Section 3.10, Hydrology and Water Quality of this Draft EIR, for further discussion on drainage systems.

Wastewater Service

Wastewater collection and treatment services are provided by LASAN. The City of Los Angeles owns and operates three collection systems: the Hyperion system (Hyperion Water Reclamation Plant), Terminal Island system (Terminal Island Water Reclamation Plant), and the Los Angeles Regional (Harbor Gateway: County Sanitation Districts' Joint Pollution Control Plant) System with approximately 6,500 miles of pipeline for conveyance. The three collection systems have sufficient capacity to handle peak dry-weather flows and to convey wet-weather flows from 10-year storms. Currently, an average wastewater flow rate of approximately 272 million gallons per day (MGD) is generated in these systems.[32] The City of Los Angeles also co-owns the Los Angeles-Glendale Water Reclamation Plant, which processes approximately 20 MGD of

---

[30] City of Los Angeles. Ordinance No. 181,288.

[31] LADWP. 2022. LADWP News: Mayor Garcetti Announces New Water Restrictions for LADWP Customers. Available at: https://www.ladwpnews.com/mayor-garcetti-announces-new-water-restrictions-for-ladwp-customers/. Accessed July 2022.

[32] LASAN. 2019. *Sewer System Management Plan Version 3.0*.

wastewater from the eastern San Fernando Valley.[33] Wastewater from the Project area flows to the Hyperion Water Reclamation Plant, located approximately 15 miles southwest from the Project alignment, where approximately 260 MGD is conveyed.[34] The Hyperion Water Reclamation Plant can accommodate up to a maximum flow of 450 MGD and a peak wet weather flow of 800 MGD. The wastewater treatment systems remove pollutants from sewage, urban runoff, and wastewater to produce recycled water that can be used in place of potable water for industrial, landscape, and recreational purposes.[35]

The City of Los Angeles maintains a database to track flows, failed pipes, or required maintenances. The database also feeds into a hydraulic model to estimate potential future capacity constraints due to economic and population growth. For development projected to add no more than 10,000 GPD, a standard permit is issued if the model shows no capacity constraints. For additions larger than 10,000 GPD, the City Planning Department works with LASAN to determine if additional capacity is needed.[36]

Solid Waste

LASAN is also responsible for the collection and removal of all solid materials and waste in the City of Los Angeles. The City of Los Angeles collects an average of 6,652 tons per day of refuse, recyclables, and other solid wastes. The refuse goes to landfills, and the recycling goes to centers that are able to make new products of the materials. All commercial waste and refuse are collected by LASAN's collection vehicles and hauled to the Central Los Angeles Recycling and Transfer Station located approximately 2.5 miles south of the Project alignment for temporary storage until the solid waste can be transferred to the Sunshine Canyon Landfill.[37,38] Located approximately 22 miles northwest of the Project alignment, the Sunshine Canyon Landfill receives roughly 8,300 tons of waste per day with a maximum of 12,100 tons per day permitted. With a disposal acreage of 363 acres, it is a Class III landfill (landfill for nonhazardous solid waste) that has a remaining capacity of 77,900,000 cubic yards (as of 2018).[39]

Electrical Power

The LADWP provides electrical power to the Project area. The LADWP's power generation, transmission, and distribution system spans five western states and delivers electricity to about four million people in the City of Los Angeles. In fiscal year 2019-2020, the LADWP supplied more than 21,130 gigawatt-hours to 1.5 million residential and business customers. The LADWP has 24 generation plants, over 4,093 miles of overhead transmission circuits, 130 miles of underground transmission circuits, 15,452 transmission towers, 177 substations, and over 10,000 miles of distribution lines and cables (7,268 miles overhead distribution lines and 3,756 miles of

33 LASAN. 2022. Water Reclamation Plants: Los Angeles-Glendale Water Reclamation Plant. Available at: https://www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-lagwrp?_adf.ctrl-state=nkhkqbyio_5&_afrLoop=3070955396514702#!. Accessed April 2022.

34 LASAN. 2019. *Sewer System Management Plan Version 3.0*.

35 LASAN. 2022. Hyperion Water Reclamation Plant. Available at: https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-p/s-lsh-wwd-cw-p-hwrp. Accessed April 2022.

36 Ibid.

37 LASAN. 2022. Solid Resources. Available at: https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s?_adf.ctrl-state=tm7hsvn38_5&_afrLoop=1714306588080092#!. Accessed April 2022.

38 Los Angeles Department of City Planning. 2022. Sunshine Canyon Landfill. Available at: https://planning.lacity.org/resources/sunshine-canyon-landfill. Accessed April 2022.

39 CalRecycle. 2019. Solid Waste Information System. *Facility/Site Activity Details for Sunshine Canyon City/County Landfill (19-AA-2000)*. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/259?siteID=4702. Accessed April 2022.

underground distribution cables). The LADWP has an electrical capacity of over 8,019 megawatts (MW) per day with business and industry consuming about 62 percent of the electricity in the City of Los Angeles.[40] Table 3.19-3 shows the LADWP's breakdown of power sources that provide electricity to its customers.

Table 3.19-3: Los Angeles Department of Water and Power, Power Sources (Calendar Year 2020)

POWER SOURCE	PERCENT
Renewable Energy	37%
• *Solar*	*14%*
• *Wind*	*11%*
• *Geothermal*	*10%*
• *Small Hydroelectric*	*2%*
• *Biomass and waste*	*0%*
Natural Gas	24%
Nuclear	14%
Large Hydroelectric	4%
Coal	21%
Other/Unspecified Sources of Power	0%

Source: Los Angeles Department of Water and Power. 2021. *Briefing Book 2020-21*.

Natural Gas

In 2019, consumers used approximately 1,315,820,749 million British thermal units of natural gas in California.[41] Of this total, Los Angeles County consumed 304,832,096 million British thermal units of natural gas.[42] The Project area is served by Southern California Gas Company (SoCalGas) for natural gas distribution. SoCalGas provides natural gas to 21.8 million consumers over approximately 24,000 square miles throughout Central and Southern California.[43] SoCalGas owns and operates 3,526 miles of transmission pipelines, 49,715 miles of distribution pipelines, and 48,888 miles of service lines. SoCalGas also operates 11 transmission compressor stations and four underground storage facilities with a combined capacity to store 134.1 billion cubic feet of natural gas.[44]

40 Los Angeles Department of Water and Power. 2021. *Briefing Book 2020-2021*.

41 A British thermal unit (BTU) is the amount of energy needed to raise the temperature of one pound of water by one degree Fahrenheit. A kBTU is 1,000 BTUs. A MMBtu is 1,000,000 BTUs. A therm is 100,000 BTUs.

42 California Energy Commission. 2019. Gas Consumption by County. Available at: https://ecdms.energy.ca.gov/gasbycounty.aspx. Accessed April 2022.

43 Southern California Gas Company (SoCalGas). 2021. Company Profile. Available at: https://www.socalgas.com/about-us/company-profile. Accessed April 2022.

44 SoCalGas. 2013. Service Territory Fact Sheet. Available at: https://www.socalgas.com/documents/news-room/fact-sheets/ServiceTerritory.pdf. Accessed April 2022.

Telecommunications

Existing communication facilities within the Project area include cable and television lines, telecommunication lines, and fiber optic cables. These facilities are owned and managed by various providers including AT&T, Sprint, and Verizon communications.

Existing Utility Lines at the Project Component Sites

The existing utility lines at and near each of the proposed Project component sites are listed in Table 3.19-4. These existing utility lines are based on surveys and utility plans prepared for the proposed Project.

Table 3.19-4: Existing Utilities by Project Component for the Proposed Project

PROJECT COMPONENT	EXISTING UTILITIES
Alameda Station	• LADWP Water Lines (8”, 20”, and 36” pipelines) • LASAN Sewer Line (30”, 16” and an abandoned 12” pipeline) • Storm Drain Lines (66” and 111” pipelines and connecting laterals and catch basins) • LADWP Electric (underground power lines and services) • SoCalGas Natural Gas Line • 20” Oil Pipeline • Telecommunications • Fiber Optic Cables
Alameda Tower	• Storm Drain Line (66” pipeline) • LADWP Electric (underground and aboveground power lines) • 20” Oil Pipeline • Fiber Optic Cables *An abandoned gas line exists near this Project component site
Alpine Tower	• LADWP Water Line • Storm Drain Line • LADWP Electric (underground power lines) • SoCalGas Natural Gas Line
Chinatown/State Park Station	• LADWP Water Line (12” pipeline) • LASAN Sewer Line (15” pipeline) and Sanitary Sewer Manhole • Storm Drain Line (126” pipeline) • LADWP Electric (underground power line) • 20” Oil Pipeline • Telecommunications • Fiber Optic Cables • SoCalGas Natural Gas Line

Table 3.19-4: Existing Utilities by Project Component for the Proposed Project

PROJECT COMPONENT	EXISTING UTILITIES
Broadway Junction	• LADWP Water Lines (24" pipeline on Broadway; 4" pipeline on Bishops Road) • LASAN Sewer Line (12" pipeline on Broadway and 1 pipeline on Bishops Road) • Storm Drain Line (drainage pipelines ranging from 12" to 32") • LADWP Electric (one underground power line and one aboveground power line) • SoCalGas Natural Gas Line • Telecommunications • Fiber Optic Cables
Stadium Tower	• LADWP Water Lines (31.5" underground pipeline and 4" aboveground pipeline) • LADWP Buried Water Vault • LASAN Sewer Line (18" pipeline) • Storm Drain Line (36" pipeline) • Telecommunications
Dodger Stadium Station	• LASAN Sewer Line (18" pipeline) • Storm Drain Line (36" pipeline) • Telecommunications

Sources: SCJ Alliance Consulting Services, 2020, Utility Exhibits, December 14, 2020; Mollenhauer Group, 2020, LA ART Utility Survey, March 1, 2020; Kimley-Horn, 2021.

Notes: All utilities listed are located underground unless otherwise noted. Utility descriptions and locations are an approximation and will be confirmed upon final design of the proposed Project.
" = inch/inches

3.19.3 Methodology

The previously described plans and online databases from the City of Los Angeles General Plan, LADWP, LASAN, site plans developed with water, electric, gas, and telecommunication providers, and site surveys prepared for the proposed Project were used to evaluate the utilities and service systems within the Project area. The following thresholds were used to determine the significance of impacts to utilities and service systems.

Thresholds of Significance

For purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on utilities and service systems if it would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;

- Have insufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments;
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
- Not comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

3.19.4 Environmental Impacts

USS-1: *Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

Construction Impacts

Less Than Significant Impact with Mitigation. Construction of the proposed Project would not require the construction of new or expanded utilities. Construction of the proposed Project would require the use of electricity due to the presence of on-site trailers and uses of various types of equipment, and some temporary power poles are anticipated to be installed in the vicinity of the Project component sites. Water required for construction activities, such as for mixing with concrete and for dust abatement, would be provided by existing water hydrants or water trucks. In areas with nearby fire hydrants, temporary water lines would be connected to the hydrants with a water meter from the LADWP, but no permanent water infrastructure would be required for construction. For areas with no water hydrants, water trucks would be used. The proposed Project may require the removal of nuisance water that seeps into boreholes during construction; however, the proposed Project does not involve the extraction and/or use of groundwater. Water removed from the boreholes would be containerized and analyzed consistent with existing applicable regulations to determine the proper disposal method (refer to Section 3.10, Hydrology and Water Quality, of this Draft EIR for additional details related to nuisance water). No expanded stormwater drainage would be necessary for construction of the proposed Project. Therefore, while temporary power poles and water lines would be required, no new or expanded utilities would be required for construction of the proposed Project.

Construction of the proposed Project would require relocations of existing utilities, which would be coordinated with the utility providers and conducted in compliance with the applicable State and local codes and regulations. The environmental impacts associated with the relocations of these utilities as part of the proposed Project would not result in any physical environmental effects beyond those identified in other sections of this Draft EIR, such as Section 3.3, Air Quality; Section 3.4, Biological Resources; Section 3.5, Cultural Resources; Section 3.6, Energy; Section 3.9, Hazards and Hazardous Materials; Section 3.10, Hydrology and Water Quality; Section 3.13, Noise; and Section 3.17, Transportation.

Table 3.19-4 above lists the existing utilities located within and near each of the Project component sites. The following provides a summary of those utilities that may be impacted by ground-disturbing activities. Ground-disturbing activities include the construction of the foundation, which typically includes the installation of caissons, piles, pile caps, and columns for each Project component. The existing utility locations are estimates and would be confirmed upon final design of the proposed Project.

Construction of the foundation for the Alameda Station is anticipated to include the installation of 21 piles, one pile cap, and two columns within Alameda Street. The maximum depth of excavation for the pile cap would be 10 feet, and the maximum depth for the drilled piles would be 125 feet. In addition, ground-disturbing activities would occur within the future planned Los Angeles Union Station (LAUS) Forecourt and north of Placita de Dolores for the vertical circulation elements. Construction activities for the Alameda Station may require the relocations of the LADWP water pipelines, LASAN sewer pipelines, storm drain pipelines, two underground LADWP power lines, transformers and services, a 20-inch oil pipeline, a telecommunications line, and a natural gas pipeline.

Construction of the foundation for the Alameda Tower is anticipated to require the installation of 36 piles, two pile caps, and one column within the Alameda Triangle, a City ROW between Alameda Street, North Main Street, and Alhambra Avenue. The maximum depth of excavation for the pile caps would be 10 feet, and the maximum depth for the drilled piles would be 120 feet. Construction activities may require the relocations of a storm drain pipeline, LADWP underground and aboveground power lines, and a natural gas pipeline.

Construction of the foundation for the Alpine Tower is anticipated to include the installation of 45 piles, one pile cap, and one column on a City-owned parcel on the northeastern corner of the intersection of Alameda Street and Alpine Street. The maximum depth of excavation for the pile caps would be 10 feet, and the maximum depth for the drilled piles would be 120 feet. Construction activities may require relocation of a storm drain catch basin.

Construction of the foundation for the Chinatown/State Park Station is anticipated to require the installation of 154 piles, two pile caps, and four columns within the southernmost portion of the Los Angeles State Historic Park and on the City ROW. The maximum depth of excavation for the pile caps would be 10 feet, and the maximum depth for the drilled piles would be 80 feet. Construction activities may require the relocations of a LASAN sewer pipeline, a storm drain pipeline, a sanitary sewer manhole, and a telecommunications line.

Construction of the foundation for Broadway Junction is anticipated to require the installation of 45 piles, one pile cap, and four columns on privately owned property at the intersection of North Broadway and Bishops Road with a portion of the junction and overhead cable infrastructure cantilevered and elevated above the public ROW. The maximum depth of excavation for the pile caps would be 7 feet, and the maximum depth for the drilled piles would be 120 feet. Additionally, the existing building located at 1201 North Broadway would be demolished. Construction activities may require the relocations of a storm drain pipeline, one underground LADWP power line, SoCalGas natural gas pipelines, and a telecommunications line. Construction activities may require the aboveground LADWP power line and telecommunications to be undergrounded along Bishops Road, Savoy Street, and along North Broadway.

Construction of the foundation for the Stadium Tower is anticipated to require the installation of 22 piles, three pile caps, and one column on hillside private property north of Stadium Way between Downtown Gate and SR-110. The maximum depth of excavation for the pile caps would be 7 feet, and the maximum depth for the drilled piles would be 120 feet. Construction activities are not anticipated to require any utility relocations for this Project component.

Construction of the foundation for the Dodger Stadium Station is anticipated to require the installation of 64 piles, 15 pile caps, and 14 columns on the Dodger Stadium property near the Downtown Gate. There would be two pile caps for the two main support columns consisting of nine piles each, 12 individual pile caps for the basement columns, and a pile cap for the perimeter wall consisting of 34 piles to support the subterranean area below the platform for storage and maintenance of cabins. The maximum depth of excavation for the pile caps would be 42 feet, and the maximum depth for the drilled piles would be 55 feet. Construction activities are not anticipated to require any utility relocations for this Project component.

As described above, the utilities listed in Table 3.19-4 exist within and near the Project components, and some of these utilities may need to be relocated to another part of the public ROW during construction. Prior to beginning construction, it would be necessary to relocate, modify, or protect in place all utilities and below-grade structures that would conflict with excavations for street level and underground structures (foundation and pile installation). Shallow utilities that would interfere with excavation work, such as maintenance holes or pull boxes, would be modified and moved away from the construction area. Travel lanes would need to be temporarily occupied during utility relocation for approximately two to three blocks at a time.

The environmental impacts associated with the relocations are covered in the construction impacts analyzed throughout this Draft EIR for each resource topic, as discussed in Section 3.3, Air Quality; Section 3.4, Biological Resources; Section 3.5, Cultural Resources; Section 3.6, Energy; Section 3.9, Hazards and Hazardous Materials; Section 3.10, Hydrology and Water Quality; Section 3.13, Noise; and Section 3.17, Transportation.

Construction activities would adhere to applicable State and local codes and regulations, such as the City's Building and Safety Code and the Citywide Construction and Demolition Waste Recycling Ordinance. In addition, all construction activities would be conducted through coordination with the appropriate agencies, including the LADPW, LASAN, and LABOE in following their standard plans, specifications, policies, and practices.

However, the relocations of existing utilities may cause a significant impact related to interruption of services for the surrounding area. To minimize the potential interference with existing utilities associated with the construction of the proposed Project, Mitigation Measure USS-A, the development of a Utility Relocation Plan, would be implemented prior to and during construction. The Utility Relocation Plan would determine the existing utilities that will need to be relocated, plans that identify the utility infrastructure elements, including access for utility providers and easements, safety measures, measures to minimize any loss of service during utility relocations, community notification of planned outages, and preparation and approval by a licensed civil engineer. In addition, final Project designs and the Utility Relocation Plan would be coordinated with the utility providers to determine which utilities would be relocated.

Although construction activities would include the relocation of existing utilities within the ROW to accommodate the proposed Project and could potentially result in the interruption of service while utilities are being relocated, the proposed Project would adhere to applicable State and local codes and regulations mentioned above. In addition, the proposed Project would coordinate utility relocations under the terms of each provider's franchise or other agreements defining the provisions for relocation work. Mitigation Measure USS-A will be implemented to develop a Utility Relocation Plan to minimize interference with existing utilities. Therefore, with implementation of

Mitigation Measure USS-A, impacts related to relocation of water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities during construction of the proposed Project would be less than significant.

Operational Impacts

Less Than Significant Impact. Operation of the proposed Project would require connections to existing utilities systems, as described below.

The proposed Project would require new connections to existing LADWP water pipelines and facilities as the Project would include restrooms, landscaping, and require washing down of facilities and other maintenance operations. As further discussed below in Threshold USS-2, LADWP would have adequate capacity to supply water for the proposed Project and meet the demands for LADWP's service area. Operation of the proposed Project would not increase water usage that would exceed the current supply. Therefore, it is not anticipated that the operation of the proposed Project would result in the construction of new or expanded water facilities.

The proposed Project would require new connections to LASAN wastewater pipelines to handle the wastewater generated from the proposed restrooms at the proposed stations. As further discussed below in Threshold USS-3, the Hyperion Water Reclamation Plant has more than adequate treatment capacity to meet the treatment requirements from the wastewater generated from the proposed restrooms at the proposed stations. Additionally, the proposed Project would generate runoff water associated with landscaping. However, the proposed Project would adhere to the City of Los Angeles Best Management Practices Handbook and the City's LID requirements, as applicable; as such, runoff from landscaping is not anticipated to generate a substantial increase in runoff from the component sites that would require expanded storm drain facilities. Therefore, it is not anticipated that the operation of the proposed Project would result in the construction of new or expanded wastewater or storm drain facilities.

Additionally, operation of the proposed Project would require connections to the LADWP power grid through installation of permanent, underground power lines to connect conduit from the proposed Project to existing underground electrical vaults in order to operate the gondola system and the non-gondola system components (i.e., lights, ventilation, escalators, elevators). It is estimated that the Aerial Rapid Transit (ART) system would require a total estimated power requirement of approximately 2.5 MW to operate the entire gondola system and other station functions such as elevators, escalators, and heating, ventilation, and air conditioning system. The electrical power for the operation of the proposed Project would be supplied by the LADWP through the utility's Green Power Program. Accordingly, the primary electricity usage associated with the Project would come from renewable resources, and it is anticipated that the existing power supply provided for the proposed Project would be sufficient for Project operation. Therefore, it is not anticipated that operation of the proposed Project would result in the construction of new or expanded electric power facilities. For a detailed description of energy demand and conservation, refer to Section 3.6, Energy of this Draft EIR.

Natural gas is not anticipated to be needed for operation of the proposed Project; therefore, the proposed Project would not result in the construction of new or expanded natural gas facilities during operation.

Operation of the proposed Project would require an internal fiber optic line for communications along the entire system between the Alameda Station and Dodger Stadium Station. The fiber optic line would likely be placed inside of the ropeway cables prior to operation of the proposed

Project. The fiber optic line required for the proposed Project would be internal to the gondola system, connecting to one or more station locations. Communications to telecommunications facilities would be anticipated at station/junction locations and at tower locations.

Impacts related to construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities for operation of the proposed Project would be less than significant.

USS-2: *Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?*

Construction Impacts

Less Than Significant Impact. Construction of the proposed Project would have sufficient water supply. During construction of the proposed Project, water from water trucks and gallon drums would be required for various activities, such as controlling dust, compacting soil, and mixing concrete. Project construction would require the use of locally available water supplies, which are distributed by the LADWP. As discussed in Section 3.19.2 of this Draft EIR, the LADWP supplies an average of approximately 435 million GPD of water to its customers. The LADWP has the ability to meet local water supply goals under normal year, dry year, and multiple dry year conditions; however, a multi-year drought that started in 2012 has resulted in the LADWP investing in drought-resilient sources of potable water including stormwater capture and groundwater augmentation. The existing water supply sources are adequate to meet the demands for LADWP's service area, and construction of the proposed Project would not increase water usage that would exceed the current supply. Impacts related to water supply during construction of the proposed Project would be less than significant.

Operational Impacts

Less Than Significant Impact. Operation of the proposed Project would have sufficient water supply. Operational water usage for the proposed Project would include restrooms, concessions, landscaping, and washing down of facilities and other maintenance operations. Public restrooms would be located at Dodger Stadium Station. Additionally, approximately 20 employees would use additional employee-only restrooms located at Dodger Stadium Station. The restrooms at Dodger Stadium Station would require approximately 1,792 GPD of water for operation of the proposed Project. The Project also proposes Park amenities, to be operated by the Los Angeles State Historic Park, including approximately 770 square feet of restrooms and 740 square feet of concessions, which would require approximately 1,024 GPD and 2,048 GPD of water, respectively, and would be operated by the Los Angeles State Historic Park. The proposed Project would also include landscaping, requiring approximately 1,691 GPD of water. Landscaped elements at the Project component sites would connect to the nearest water pipeline with sufficient capacity. The washing down of facilities including cabins and other maintenance operations would require approximately 100 GPD for the proposed Project. Therefore, the proposed Project would require a total of approximately 6,655 GPD of water, of which approximately 3,072 GPD of water would be used by Park amenities, operated by the Los Angeles State Historic Park. Table 3.19-5 lists the operational water usage for the proposed Project.

Table 3.19-5: Operational Water Usage

Operational Activity Requiring Water	Estimated Water Usage (GPD)
Restrooms at Dodger Stadium Station [a]	1,792
Restrooms at Chinatown/State Park Station [a,b]	1,024
Concessions [c,d]	2,048
Landscaping	1,691
Wash Down and Other Maintenance Operations	100
Total	6,655

a. Restroom water usage was estimated using the LASAN sewerage generation factor for self-serve gas station, which is 100 GPD per water closet. Water usage is estimated as 128 percent of wastewater generation for non-residential land uses.
b. Restrooms would be operated by the Los Angeles State Historic Park.
c. Concessions are proposed only at the Chinatown/State Park Station and would be operated by the Los Angeles State Historic Park.
d. Concessions water usage was estimated using the LASAN sewerage generation factor for "Restaurant: Fast Food Outdoor Seat", which is 25 GPD per seat. Water usage is estimated as 128 percent of wastewater generation for non-residential land uses.
Note: GPD = gallons per day

As discussed in Section 3.19.2 of this Draft EIR, the LADWP supplies an average of approximately 435 million GPD of water to its customers, and the proposed Project's required water usage is considered nominal (6,655 GPD); therefore, the LADWP would have adequate capacity to supply water for the proposed Project and meet the demands for LADWP's service area. Operation of the proposed Project would not increase water usage that would exceed the current supply.

As such, impacts related to water supply during operation of the proposed Project would be less than significant.

USS-3: *Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Construction Impacts

Less Than Significant Impact. Construction of the proposed Project would not result in a determination by the wastewater treatment provider serving the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Construction activities associated with the proposed Project would not result in substantial discharges of wastewater to the City's sewer collection system. Construction of the proposed Project would require approximately 100 total workers at one time during the peak period of construction, depending on the number of active construction crews working on various Project components at the same time.[45] These personnel would work on the construction of the stations, junction, and towers, including foundations, concrete, steel, and ancillary activities, and would utilize portable restrooms for the duration of the construction period.

As previously discussed, although construction activities would generate potential sources of wastewater such as nuisance water that may seep into boreholes during construction, the water

45 It is assumed that the foundation construction phase of the Alameda Station, Chinatown/State Park Station, Broadway Junction, and Dodger Stadium Station will be concurrent and require approximately 25 workers on-site at each location.

removed from the boreholes would be containerized and analyzed consistent with existing applicable regulations to determine the proper disposal method. Adherence to existing regulations would require treatment of water prior to discharge. Therefore, impacts related to adequate wastewater treatment capacity during construction of the proposed Project would be less than significant.

Operational Impacts

Less Than Significant Impact. Operation of the proposed Project would not result in a determination by the wastewater treatment provider serving the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Operation of the proposed Project would include approximately 20 employees, in addition to the passengers. The proposed restrooms at Dodger Stadium Station would generate a total of approximately 1,400 GPD of wastewater. The proposed Project also proposes to include Park amenities, to be operated by the Los Angeles State Historic Park, consisting of approximately 770 square feet of restrooms and 740 square feet of concessions to be operated by the Los Angeles State Historic Park, which would generate approximately 800 GPD and 1,600 GPD of wastewater, respectively.

Table 3.19-6: Operational Wastewater Generation

Proposed Use Generating Wastewater	Estimated Wastewater Generation (GPD)
Restrooms at Dodger Stadium Station[a]	1,400
Restrooms at Chinatown/State Park Station[a,b]	800
Concessions[c,d]	1,600
Total	**3,800**

a. Restroom wastewater generation was estimated using the LASAN sewerage generation factor for self-serve gas station, which is 100 GPD per water closet.
b. Restrooms would be operated by the Los Angeles State Historic Park.
c. Concessions are proposed only at the Chinatown/State Park Station and would be operated by the Los Angeles State Historic Park.
d. Concessions water usage was estimated using the LASAN sewerage generation factor for Restaurant: Fast Food Outdoor Seat", which is 25 GPD per seat.

Note: GPD = gallons per day

As discussed in Section 3.19.2 of this Draft EIR, the Hyperion Water Reclamation Plant typically treats approximately 260 MGD of wastewater and can accommodate up to a maximum daily flow of 450 MGD and a peak wet weather flow of 800 MGD. As such, the Hyperion Water Reclamation Plant has more than adequate treatment capacity to meet the treatment requirements of approximately 1,400 GPD of wastewater generated from the proposed public and employee restrooms at Dodger Stadium Station and approximately 2,400 GPD of wastewater generated from the proposed Park amenities, operated by the Los Angeles State Historic Park, at the Chinatown/State Park Station. Therefore, impacts related to adequate wastewater treatment capacity during operation of the proposed Project would be less than significant.

USS-4: *Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Construction Impacts

Less Than Significant Impact With Mitigation. Construction of the proposed Project would generate construction waste from building demolition (1201 North Broadway), site clearing, removal of asphalt, and excavation. It is estimated that approximately 78,500 cubic yards of demolition debris would be generated, of which approximately 62,600 cubic yards would be soil, which is anticipated to not go to landfills. Excavated soil and land clearing debris would be sold and/or reused or recycled for backfill, as the majority of the soil is anticipated to be uncontaminated.

However, as described in Section 3.9, Hazards and Hazardous Materials, of this Draft EIR, there is the potential to encounter contaminated soil during construction activities. Therefore, the proposed Project would implement Mitigation Measure HAZ-A, as described in Section 3.9, Hazards and Hazardous Materials, of this Draft EIR, which would include sampling and analyzing soil and required methods and procedures for the proper handling and removal of impacted soil for off-site disposal. For the remaining approximately 15,900 cubic yards of demolition debris that would be generated, an anticipated 65 percent or more would be diverted from landfills in accordance with California's Green Building Code. As such, it is estimated that approximately 5,565 cubic yards of demolition debris would be hauled to a landfill. The Sunshine Canyon Landfill receives approximately 8,300 tons of waste per day with a maximum of 12,100 tons per day permitted. There is a remaining capacity of 77,900,000 cubic yards at the Sunshine Canyon Landfill. The proposed Project would generate less than one percent of the capacity of the landfill; as such, the Sunshine Canyon Landfill would adequately accommodate the anticipated amount of solid waste generated for the proposed Project.

In addition, the proposed Project would be required to adhere to federal, State, and local regulations for solid waste disposal, including AB 939 and those identified in the City's Solid Waste Integrated Resources Plan to divert materials prior to disposal for recycling or reuse, where appropriate. Therefore, the proposed Project would not conflict with the Solid Waste Integrated Resources Plan, AB 341, AB 939, and local management and reduction statutes related to solid waste.

As such, solid waste would not be generated in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. The proposed Project would comply with federal, State, and local reduction strategies and regulations related to solid waste. Additionally, with implementation of Mitigation Measure HAZ-A, which would require the proper handling and removal of impacted soil and/or groundwater for off-site disposal, impacts related to solid waste generation during construction of the proposed Project would be less than significant.

Operational Impacts

Less Than Significant Impact. Operation of the proposed Project would not generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, nor would operation of the proposed Project otherwise impair the attainment of solid waste reduction goals. Operation of the proposed Project would comply with all solid waste management and reduction statutes and regulations.

The proposed Project would generate waste representative of the population it would serve – existing and anticipated residents, workers, visitors, the transit population, and the anticipated 20 employees required for operation of the ART system. Trash and recycling bins would be provided for use by the public at each of the stations. Additionally, the proposed Project would generate waste from the approximately 740 square feet of concessions proposed at the Chinatown/State Park Station, which is estimated to generate approximately 64 pounds of solid waste per day.[46] This amenity would be operated by the Los Angeles State Historic Park. All waste would be managed on a daily basis and disposed of appropriately.

The proposed Project is not anticipated to generate a substantial amount of solid waste, and the available landfill capacity at Sunshine Canyon Landfill would be adequate to accommodate the proposed Project. Sunshine Canyon Landfill receives approximately 8,300 tons of waste per day with a maximum of 12,100 tons per day permitted and a remaining capacity of 77,900,000 cubic yards as of 2018.[47] The proposed Project would comply with federal, State, and local regulations, policies, and plans including AB 939, AB 341, and the City's Solid Waste Integrated Resources Plan to divert and recycle waste where possible.

The proposed Project would not generate waste in excess of standards or in a way that would impair solid waste reduction goals. The proposed Project would comply with federal, State, and local reduction strategies and regulations related to solid waste. Impacts related to solid waste generation during operation of the proposed Project would be less than significant.

3.19.5 Mitigation Measures

The following mitigation measures are proposed to reduce significant impacts related to utilities and service systems to a level less than significant.

USS-A: **Development of a Utility Relocation Plan:** Before the start of construction-related activities, including the relocation of utilities, the Project Sponsor shall coordinate with the Los Angeles Department of Water & Power, the Los Angeles Sanitation & Environment Department, the Southern California Gas Company, and Metro to prepare a Utility Relocation Plan. The Project Sponsor shall also coordinate with the utility companies to minimize impacts to services throughout the Project and obtain their approval of the Utility Relocation Plan.

The Utility Relocation Plan shall be prepared, reviewed, and approved by a licensed civil engineer and, at a minimum, include the following:

- Plans that identify the utility infrastructure elements, including access for utility providers and easements, as applicable, that require relocation as a result of the proposed Project;
- Safety measures to avoid any human health hazards or environmental hazards associated with capping and abandoning some utility infrastructure, such as natural gas lines or sewer lines; and

46 Concessions solid waste generation was estimated using the CalRecycle solid waste generation factor for a fast food restaurant, which is one pounds per seat per day.

47 CalRecycle. 2019. Solid Waste Information System. *Facility/Site Activity Details for Sunshine Canyon City/County Landfill (19-AA-2000)*. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/259?siteID=4702. Accessed April 2022.

- Timing for completion of the utility relocation, which shall be scheduled to minimize disruption to the utility companies and their customers.

HAZ-A: Prepare a Soil and Groundwater Management Plan (as described in Section 3.9, Hazards and Hazardous Materials, of this Draft EIR).

3.19.6 Level of Significance after Mitigation

Impacts regarding water supply, water supply facilities, wastewater treatment facilities, and solid waste regulations were determined to be less than significant. Impacts regarding the relocation of existing utilities and solid waste generation were determined to be potentially significant.

Implementation of Mitigation Measure USS-A includes the development of a Utility Relocation Plan to reduce potential impacts related to relocation of existing utilities. In addition, Mitigation Measure HAZ-A requires preparation of a Soil and Groundwater Management Plan, which would include methods and procedures for sampling and analyzing soil and/or groundwater in order to classify them as either hazardous or non-hazardous, and if identified as hazardous, shall include additional methods and procedures for the proper handling and removal of impacted soil and/or groundwater for off-site disposal and/or recycle.

Upon implementation of Mitigation Measure USS-A and Mitigation Measure HAZ-A, significant impacts related to utilities and service systems would be reduced to less than significant for the proposed Project.

This page intentionally left blank.

3.20 Wildfire

This section evaluates the proposed Project's potential to increase the risk of wildfires based upon existing mapping of the proposed Project and surrounding areas, and whether the proposed Project would result in potential significant impacts related to wildfire if located in or near State Responsibility Areas (SRAs) or lands classified as Very High Fire Hazard Severity Zones (VHFHSZ). This section is based in part on the *Fire Hazard Assessment* (Appendix R of this Draft EIR) prepared for the proposed Project.

3.20.1 Regulatory Setting

Federal

National Cohesive Wildland Fire Management Strategy

The National Cohesive Wildland Fire Management Strategy addresses the requirements of the Federal Land Assistance, Management and Enhancement Act of 2009 (FLAME Act) and subsequent reports. It establishes a national vision for wildland fire management, defines three national goals, describes the wildland fire challenges, identifies opportunities to reduce wildfire risks, and establishes national priorities focused on achieving the national goals. The vision established in the strategy is to safely and effectively extinguish fire, when needed; use fire where allowable; manage our natural resources; and as a Nation, live with wildland fire. The goals identified to achieve the vision are: Resilient Landscapes, Fire Adapted Communities, and Safe and Effective Wildfire Response. Management options included in the strategy include prescribed fires, managing wildfires for resource objectives, non-fire treatments, non-fire fuel treatments, focusing on defensive actions, adjusting building and construction codes, reduce accidental human-caused ignitions, and protecting structures and targeting fuels and prevention of ignitions.

Federal Wildland Fire Management Policy

The Federal Wildland Fire Management Policy[1], enacted in 1995 and updated in 2001,[2] provides the principles and policies shared by the Department of Interior and Department of Agriculture, as well as other responsible Tribal, State, and other jurisdictions, for the protection and management of wildland fires and natural resources. The guiding principles provide a foundation for interagency cooperation and collaboration and establish baseline values for all responsible parties to implement in order to protect the public and the environment in light of wildland fires. The original guiding principles defined safety prioritization (that of the firefighters and the public is always primary), acknowledged the role of wildland fires within the ecological processes of the environment, assessed risk management and response procedures, and established the need for Fire Management Plans that cater to local geographies, economies, interests, and other considerable circumstances. The 1995 Policy was reviewed and updated in 2001. The 2001 Review and Update of the 1995 Federal Wildland Fire Management Policy[3] built on the founding

---

1 U.S. Department of Agriculture & U.S. Department of Interior. December 1995. *Federal Wildland Fire Management Policy*. Available at: https://www.doi.gov/sites/doi.gov/files/migrated/pmb/owf/upload/1995-Federal-Fire-Policy.pdf. Accessed May 2022.

2 Interagency Federal Wildland Fire Policy Review Working Group. January 2001. *Review and Update of the 1995 Federal Wildland Fire Management Policy*. Available at: https://www.nifc.gov/sites/default/files/policies/FederalWildlandFireManagementPolicy.pdf. Accessed May 2022.

3 U.S. Department of Agriculture & U.S. Department of Interior. January 2001. Review and Updated of the 1995 *Federal Wildland Fire Management Policy*. Available at: https://www.doi.gov/sites/doi.gov/files/uploads/2001-wfm-policy-review.pdf. Accessed May 2022.

principles and expanded on those policies by recommending additional guidelines related to education, administration, communication, and evaluation in order to properly implement this policy.

National Fire Protection Association Codes, Standards, Practices, and Guides

The National Fire Protection Association (NFPA)[4] publishes more than 300 consensus codes and standards intended to minimize the possibility and effects of fire and other risks. NFPA codes and standards are adopted and used throughout the world. Below is a non-exhaustive summary of the NFPA Codes that will be applied to the proposed Project. NFPA sections 241, 51B, and 30 are incorporated into the California Building Code and California Fire Code by reference.

- NFPA 1, Fire Code, advances fire and life safety for the public and first responders as well as property protection by providing a comprehensive, integrated approach to fire code regulation and hazard management. It addresses all the bases with extracts from and references to more than 130 NFPA codes and standards including such industry benchmarks as NFPA 101, NFPA 54, NFPA 58, NFPA 30, NFPA 13, NFPA 25, and NFPA 72.

- NFPA 30 provides safeguards to reduce the hazards associated with the storage, handling, and use of flammable and combustible liquids. NFPA 30 is enforceable under the Occupational Safety and Health Administration and many state and local regulations.

- NFPA 51B presents provisions to prevent injury, loss of life, and loss of property from fire or explosion as a result of hot work projects such as welding, heat treating, grinding, and similar applications producing or using sparks, flames, or heat.

- NFPA 70, National Electrical Code, is the benchmark for safe electrical design, installation, and inspection to protect people and property from electrical hazards.

- NFPA 101, Life Safety Code, is the most widely used source for strategies to protect people based on building construction, protection, and occupancy features that minimize the effects of fire and related hazards. Unique in the field, it is the only document that covers life safety in both new and existing structures.

- NFPA 111 covers performance requirements for stored electrical energy systems providing an alternate source of electrical power in buildings and facilities in the event that the normal electrical power source fails. Systems include power sources, transfer equipment, controls, supervisory equipment, and accessory equipment needed to supply electrical power to the selected circuits.

- NFPA 130 specifies fire protection and life safety requirements for underground, surface, and elevated fixed guideway transit and passenger rail systems, including, but not limited to, stations, trainways, emergency ventilation systems, vehicles, emergency procedures, communications, and control systems.

[4] Please note that all NFPs are either covered under a NDA, otherwise confidential, and/or copywritten.

- NFPA 220 promotes protection from fire and its associated hazards by defining types of building construction based on the combustibility and the fire resistance rating of their structural elements.

- NFPA 241 provides measures for preventing or minimizing fire damage to structures during construction, alteration, or demolition.

- NFPA 262 improves fire safety in air-handling spaces by presenting a test procedure to evaluate the potential for smoke and fire spread along cables and wires housed in a plenum or other air transport spaces.

- NFPA 900 provides design, construction, and maintenance requirements for the energy efficiency of all buildings, structures, and certain equipment.

- NFPA 1144 provides a methodology for assessing wildland fire ignition hazards around existing structures and provides requirements for new construction to reduce the potential of structure ignition from wildland fires.

- NFPA 5000, Building Construction and Safety Code, provides requirements for those construction, protection, and occupancy features necessary to safeguard life, health, property, and public welfare and minimize injuries.

State

California Building Code

California Building Code, Chapter 7A applies to building materials and exterior design of new structures located within a Wildland-Urban Interface Fire Area. It establishes minimum standards for the protection of life and property by increasing the ability of a building located in any Fire Hazard Severity Zone within State Responsibility Areas to resist flames or burning embers.[5] New buildings located in such areas are required to comply with the ignition resistant construction standards outlined in Chapter 7A. Additionally, Chapter 33 establishes safeguards during construction, including the protection of adjacent public and private properties

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) is the State agency responsible for fire protection in State Responsibility Areas (SRAs) of California. CAL FIRE is dedicated to the fire protection of over 31 million acres of California's privately-owned wildlands and provides emergency services in 36 of the State's 58 counties via contracts with local governments.[6] CAL FIRE’s Fire Prevention Program consists of wildland pre-fire engineering, vegetation management, fire planning, education and law enforcement. Typical fire prevention projects include brush clearance, prescribed fire, defensible space inspections, emergency evacuation planning, fire prevention education, fire hazard severity mapping, and fire-related law enforcement activities. The Office of the State Fire Marshal supports the CAL FIRE mission through law enforcement, code enforcement, and education. The Office of the State Fire Marshal

---

5 California Building Code. 2016. Chapter 7A [SFM] Materials and Construction Methods for Exterior Wildfire Exposure. Available at: https://up.codes/viewer/california/ca-building-code-2016/chapter/7A/sfm-materials-and-construction-methods-for-exterior-wildfire-exposure#7A. Accessed May 2022.

6 California Department of Fire and Forestry Protection (CAL FIRE). About Us. Available at: https://www.fire.ca.gov/about-us/. Accessed May 2022.

provides for fire prevention by enforcing fire-related laws in State-owned or operated buildings, investigating arson fires in California, licensing those who inspect and service fire protection systems, evaluating building materials against fire safety standards, and tracking incident statistics for local and State government emergency response agencies.

CAL FIRE is the responsible agency that maps areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as Fire Hazard Severity Zones (FHSZ), define the application of various mitigation strategies to reduce risk associated with wildland fires.[7] The proposed FHSZ maps for lands where the State has financial responsibility for wildland fire protection are known as SRAs. There are three hazard zones in SRAs: moderate, high, and very high. The Very High Fire Hazard Severity Zones (VHFHSZ) are those that are at high risk of fire on windy, hot, and dry days in Southern California.

CAL FIRE also produces FHSZ maps for the areas of California where local governments have financial responsibility for wildland fire protection, known as local responsibility areas (LRAs). Only lands zoned "very high" are identified within LRAs. The FHSZ maps are developed using a science-based and field-tested computer model that assigns a hazard score based on the factors such as fire history, existing and potential fuel (natural vegetation), flame length, blowing embers, terrain, and typical weather for the area.

California Fire Code

The purpose of the California Fire Code (CFC) is to provide minimum standards to increase the ability of a building to resist fire. Within the limits established by law, construction methods intended to mitigate wildfire exposure shall comply with the wildfire protection building construction requirements. The CFC regulates minimum fire safety requirements for new and existing buildings, facilities, storage, and processes. It addresses fire protection and prevention as well as life safety and safe storage and use of hazardous materials. The International Fire Code (IFC) sets forth minimum requirements for maintaining the life safety of building occupants and protection of emergency responders. The CFC adopts, with amendments, the IFC, which includes, in chapters 7-10, 33, 35, 57, and 58 requirements for fire resistive construction, interior finish, fire protection systems, means of egress, construction safeguards, welding and other hot work, flammable and combustible liquids, and flammable gases and flammable cryogenic fluids.[8] Additionally, CFC Section 3308 details the owner's responsibility for fire protection. In the City of Los Angeles, the CFC is enforceable by the fire code official, which is the Los Angeles Fire Department (LAFD).

California Public Resources Code

California Public Resources Code, Article 9, Sections 4201 through 4204 provide for the classification of lands within State Responsibility Areas in accordance with the severity of fire

7 City of Los Angeles. Fire Hazard Severity Areas. Interactive map available at: https://geohub.lacity.org/datasets/lacounty::fire-hazard-severity-zones. Accessed May 2022. Please note that this material is either covered under a NDA, otherwise confidential, and/or copywritten. Due to copyright agreements, this document is unable to be downloaded as a pdf, though it is available for viewing online.

8 International Fire Code. 2018. Available at: https://codes.iccsafe.org/content/IFC2018P4/preface. Accessed May 2022. Please note that this material is either covered under a NDA, otherwise confidential, and/or copywritten. Due to copyright agreements, this document is unable to be downloaded as a pdf, though it is available for viewing online.

hazard present to identify measures to reduce the rate of spreading and to reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.[9]

California Public Resources Code Section 4291 maintains that all buildings or structures adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material, shall maintain defensible space of 100 feet from each side and from the front and rear of the structure. The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building materials, building standards, location, and type of vegetation.[10]

California Public Resources Code Section 4442 prohibits the use of internal combustion engines running on hydrocarbon fuels on any land covered by forest, brush, or grass unless the engine is equipped with a spark arrestor and is constructed, equipped, and maintained in good working order when traveling on any such land. In addition, a spark arrester affixed to the exhaust system cannot be placed or mounted in such a manner as to allow flames or heat from the exhaust system to ignite flammable material.[11]

Executive Order N-05-19

In response to the State of California’s most destructive fire season in 2018, Governor Gavin Newsom signed Executive Order N-05-19 into effect on January 8, 2019.[12] The order directed CAL FIRE as the lead department to assemble other responsible State agencies to produce a written report to the Governor with recommendations of the most impactful administrative, regulatory, and policy changes or waivers the Governor can initiate that are necessary to prevent and mitigate wildfires to the greatest extent possible, with an emphasis on environmental sustainability and protection of public health. It was ordered that this report include, short-, medium-, and long-term preventative actions against wildfires, policy recommendations for implementing such actions and action plans, and methods for assessing the most at-risk communities. This report would establish an ongoing practice to be included as part of the Governor’s “California For All” resiliency plan.

In February 2019, CAL FIRE issued a 45-Day Report to Governor Gavin Newsom in response to Executive Order N-05-19, systematically identified high priority fuels reduction projects and other measures to immediately begin to protect over 200 of California's most wildfire-vulnerable communities and put the State on a path toward long-term wildfire prevention and forest health[13].

In April 2019, Governor Newsom released Wildfires and Climate Change: California’s Energy Future. This report is also known as the Five Point Plan includes sections on Preventing and Responding to Catastrophic Wildfires; Renewing California’s Commitment to Clean Energy;

---

9 State of California. 1982. Public Resources Code, Article 9, Fire Hazard Severity Zones [4201 - 4204]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=4201. Accessed May 2022.

10 State of California. 1982. Public Resources Code, Chapter 3, Mountainous, Forest-, Brush- and Grass-Covered Lands [4291 - 4299]. Available at: http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=4291. Accessed May 2022.

11 State of California. 1982. Public Resources Code, Article 2, Prohibited Activities [4421 - 4446]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=4442. Accessed May 2022.

12 State of California Executive Department. January 2019. Executive Order N-05-19. Available at: https://www.gov.ca.gov/wp-content/uploads/2019/01/1.8.19-EO-N-05-19.pdf. Accessed May 2022.

13 CAL FIRE. February 2019. Community Wildfire Prevention & Mitigation Report. Available at: https://www.fire.ca.gov/media/5584/45-day-report-final.pdf. Accessed July 2022.

Allocating Responsibility for Wildfire Costs; Strengthening Utility Market Regulation; and Holding PG&E Accountable for Safety[14].

Senate Bill 901

Senate Bill 901 was enacted in 2018 in response to fire risk in California. The bill provides funds for fire-protection efforts and addresses timberlands, forestlands, State Responsibility Areas (SRAs), forest management, and the responsibility of utilities companies. Additionally, this bill provides that, until January 1, 2023, under specified conditions, CEQA would not apply to the issuance of a permit or other project approval by a State or local agency for prescribed fire, thinning, or fuel reduction projects. Senate Bill 901 also requires utilities companies to prepare wildfire mitigation measures if the utilities' overhead electrical lines and equipment are located in an area that has a significant risk of wildfire resulting from those electrical lines and equipment. It reinforces the requirement for public electric utilities to have a Wildfire Mitigation Plan (WMP) and sets an independent review requirement for the WMP. As amended by SB 901, every publicly owned utility must prepare and present a WMP to its governing body by January 1, 2020, and annually thereafter.

Regional

Los Angeles County Operational Area Emergency Response Plan

On July 5, 1995, the Los Angeles County Board of Supervisors adopted a resolution providing for formation of the Los Angeles County Operational Area, and, in accordance with Standardized Emergency Management System, the County of Los Angeles serves as the lead agency of the Los Angeles County Operational Area. In 1998, the County of Los Angeles adopted the Los Angeles County Operational Area Emergency Response Plan, which provides emergency planning for the Los Angeles County Operational Area, an area that includes the Project Site and vicinity. The Los Angeles County Operational Area serves as an intermediate level of the State's emergency services organization and encompasses the County and all political subdivisions located within the County, including cities, unincorporated communities, and special districts. An updated Los Angeles County Operational Area Emergency Response Plan was adopted in June 2012. The purpose of this plan is to establish the coordinated emergency management system, which includes prevention protection, response, recovery, and mitigation within the Los Angeles County Operational Area.[15]

In accordance with County Emergency Ordinance 2.68, the Office of Emergency Management has been tasked with the responsibility for updating, developing, and maintaining the Operational Area Emergency Response Plan. The intent of this plan is to integrate Los Angeles County Operational Area resources into an efficient organization capable of responding to any emergency using the National Incident Management System, Standardized Emergency Management System, mutual aid, and other appropriate response procedures. The Operational Area Emergency Response Plan identifies the following four emergency management phases:

- Preparedness Phase: The preparedness phase includes activities to develop operational capabilities and effective responses to a disaster, such as mitigation activities, emergency/disaster planning, training, and exercises, and public education. This phase

[14] Office of Governor Gavin Newsom. April 2019. Wildfires and Climate Change: California's Energy Future. Available at: https://www.gov.ca.gov/wp-content/uploads/2019/04/Wildfires-and-Climate-Change-California%E2%80%99s-Energy-Future.pdf. Accessed July 2022.

[15] County of Los Angeles. Los Angeles County Operational Area Emergency Response Plan, June 2012.

also includes “Increased Readiness” with actions such as testing warning and communications systems.

- Response Phase: The response phase includes pre-emergency/emergency imminent responses and emergency response conditions, priorities, and procedures.
- Recovery Phase: The recovery phase details the actions taken post–emergency response by the Cal OES Director operating through the State Coordinating Officer. The Cal OES Director will bring together representatives of federal, State, County, and City agencies, as well as representatives of the American Red Cross, to coordinate assistance programs and establish support priorities. The Federal Emergency Management Agency (FEMA) will establish tele-registration to initiate the process of receiving federal, State, and local recovery assistance.
- Mitigation Phase: Mitigation efforts occur both before and following disaster events. Eliminating or reducing the impact of hazards which exist and are a threat to life and property are part of the mitigation efforts. Post-disaster mitigation is part of the recovery process.[16]

2019 Metro Climate Action and Adaptation Plan

First published and approved by the Metro Board in June 2012, the Climate Action and Adaptation Plan (CAAP) establishes a framework to identify the areas of greatest opportunity for Metro to reduce GHG emissions and protect riders from climate change.[17] The CAAP includes an assessment of the high risk posed to the northern and eastern parts of the Metro rail system from wildfire. It outlines how wildfire can cause costly damage to light rail infrastructure, can result in system disruptions from road closures, and can damage buildings and impact air quality, creating safety and health hazards for passengers, operators and staff. The CAAP includes an evaluation of wildfire exposure and risks to identify and address these risks and minimize their impact.

Local

City of Los Angeles General Plan, Safety Element

The Safety Element of the City of Los Angeles General Plan provides goals, objectives, policies and programs related to hazards mitigation, emergency response, disaster recovery and implementation to carry out these policies. The City has drafted a targeted update of the Safety Element alongside the comprehensive update of the Housing Element, as directed by recent State legislation. This draft preserves the structure of the current 1996 Safety Element, with targeted amendments to better integrate related long range planning documents and comply with recent changes to State laws. The City Emergency Operations Organization (EOO) is the City agency (program) which implements the Safety Element. The EOO is the operational department of the City of Los Angeles responsible for the City's emergency preparations (planning, training and mitigation), response and recovery operations. Unique in design, it is a “department without walls” which comprises all agencies of the City’s government. The EOO centralizes command and information coordination to enable a unified chain-of-command to operate efficiently and

16 Ibid.

17 Metro. 2019. Metro Climate and Adaptation Plan 2019. Available at: https://media.metro.net/projects_studies/sustainability/images/Climate_Action_Plan.pdf. Accessed: April 2022.

effectively. The Emergency Management Department (EMD) administers the EOO emergency preparedness, response, and recovery.[18]

The City's fire safety program addresses the broad scope of fire prevention and suppression and emergency response operations. Fire prevention has been recognized as the best method for reducing fire incidence and devastation.[19]

Table 3.20-1: City of Los Angeles General Plan Goals, Objectives, and Policies Related to Wildfire

Plan	Goal/Objective/Policy
City of Los Angeles General Plan Framework Element	Objective 9.19. Maintain the Los Angeles Fire Department's ability to assure public safety in emergency situations.
City of Los Angeles General Plan Safety Element	Goal 1. A city where potential injury, loss of life, property damage, and disruption of the social and economic life of the City due to hazards is minimized. Objective 1.1. Implement comprehensive hazard mitigation plans and programs that are integrated with each other and with the City's comprehensive emergency response and recovery plans and programs.
	Goal 2. A city that responds with the maximum feasible speed and efficiency to disaster events so as to minimize injury, loss of life, property damage and disruption of the social and economic life of the City and its immediate environs. Objective 2.1. Develop and implement comprehensive emergency response plans and programs that are integrated with each other and with the City's comprehensive hazard mitigation and recovery plans and programs. Policy 2.1.6. Continue to maintain, enforce and upgrade requirements, procedures and standards to facilitate more effective fire suppression, including enforcement of peak water supply requirements and minimum roadway widths and clearances.
Central City Community Plan	Objective 6.1. To ensure that fire facilities and protective services are sufficient for the existing and future population and land uses of Central City.
Central City North Community Plan	Goal 9. Protect the community through a comprehensive fire and life safety program.
Silver Lake- Echo Park-Elysian Valley Community Plan	Goal 9. Protect the community through a comprehensive fire and life safety program. Objective 9.1. Ensure that fire facilities and fire protection services are sufficient for the existing and future population and land uses.

18 City of Los Angeles. General Plan Safety Element. Available at: https://planning.lacity.org/odocument/31b07c9a-7eea-4694-9899-f00265b2dc0d/Safety_Element.pdf. Accessed May 2022.

19 City of Los Angeles. General Plan Safety Element. Available at: https://planning.lacity.org/odocument/31b07c9a-7eea-4694-9899-f00265b2dc0d/Safety_Element.pdf. Accessed May 2022.

City of Los Angeles Hazard Mitigation Plan

The City of Los Angeles, in conjunction with several emergency service partners, has prepared a Local All-Hazards Mitigation Plan that sets strategies for coping with natural and man-made hazards faced by residents. The plan has a five-step risk and vulnerability assessment: 1) hazard identification; 2) profiling hazard events; 3) vulnerability assessment/inventory of existing assets; 4) risk analysis; and 5) assessing vulnerability/analyzing development trends for earthquake hazards, flood hazards, wildfire, tsunami, and non-significant hazards (i.e., water/wastewater emergency). The intent of the plan is to develop a sustained source of action to reduce or eliminate long-term risk to people and property for both natural and technological hazards and their effects. The plan has goals to continue implementation of Fire Road Maintenance Program (LAFD-02); update/maintain wild land operation plan with best available data and science on wildfire risk and severity within the operational area (LAFD-03); update and maintain the Brushfire Response Plan (Wildland-Urban Interface Fires) (LAPD-08); improve soil stability and erosion abatement regulations (DPW-21); and implement weed abatement (DWP-05).

The Hazard Mitigation Plan contains the following objectives applicable to fire hazards:

- Reduce repetitive property losses due to flood, fire, and earthquake by updating land use, design, and construction policies.
- Identify natural and handmade hazards that threaten life and property in the City. Use hazard data while reviewing proposed development opportunities.
- Encourage the incorporation of mitigation measures into repairs, major alterations, new development, and redevelopment practices, especially in areas subject to substantial hazard risk.
- Incorporate risk reduction considerations in new and updated infrastructure and development plans to reduce the impacts of hazards.
- Continue providing City emergency services with training and equipment to address all identified hazards.
- Implement mitigation programs and projects that protect not only life and property but the environment as well.

Wildland-Urban Interface Hazard Mitigation Report

In response to the Woolsey Fire, the Los Angeles City Council proposed in November 2018 to form the Wildland-Urban Interface Hazard Mitigation Task Force. The Wildland-Urban Interface Hazard Mitigation Task Force would examine street width requirements, parking restrictions, the effectiveness of emergency alert systems and evacuation plans, current building codes and standards, and the need for stricter enforcement of construction activities on narrow roads, among other issues. LAFD and the Chief Legislative Analyst (CLA) were directed to report on issues related to hazard mitigation efforts and goals in the Wildland-Urban Interface.[20] The Joint Wildland-Urban Interface Hazard Mitigation Report from the LAFD and CLA dated August 7, 2019 provides an overview of the roles of various City departments in hazard mitigation and during an emergency, such as a wildfire, as well as background on standing plans for emergencies. The report states that LAFD will continue to work with these City departments to implement new

[20] The Wildland-Urban Interface coincides with the City's VHRHSZs.

programs and policies to mitigate wildfire hazards, identify new technologies and tools to reduce the risk of wildfires, and to streamline LAFD's response to fires in the future. The report also makes a number of recommendations for further reports, including review of the Red Flag Warning Days parking program, boundaries of the City's VHFSZs, as well as procedures for large animal evacuations and emergency notification.[21]

On March 6, 2020, the Los Angeles City Council adopted the Joint Wildland-Urban Interface Hazard Mitigation Report.

City of Los Angeles Emergency Operations Plan (2017)

The City of Los Angeles Emergency Management Department develops the City's emergency response and recovery plans, including the Emergency Operations Plan which serves as the City's overall plan for emergency management, emergency planning, preparedness, response, and response activities. The Emergency Management Department leads the City's effort in the development of citywide emergency plans, revises and distributes the Emergency Operations Master Plan and Master Procedures and Annexes and updates and disseminates guidelines for the emergency response and recovery plans. The department also reviews and tests departmental emergency plans to ensure City departments are ready to fulfill their respective emergency missions. The plan includes several Annexes that deal with specific topics, such as the Brush Fire Hazard Specific Annex (March 2018) that focuses on the City's response to brush fire emergencies. [22]

The Brush Fire Hazard Specific Annex was developed in cooperation and with input from the City departments with primary response/support activities, as well as input from appropriate non-City agencies with identified activities related to brush fire emergencies, and is reviewed every other year. This Brush Fire Hazard Specific Annex details the City's responsibilities for response to brush fires. It identifies roles and responsibilities for appropriate departments, procedures for rapid notification to City departments and the public in the event of brush fire related emergencies and ensures consistency with federal, State, County, and other local governments' emergency response plans and operations. In turn, the LAPD has developed a Brushfire Response Guide, which provides a general guide for LAPD in the management of brushfire emergencies, including evacuation. In the event of an evacuation, LAPD is to identify the area to be evacuated and determine the ingress/egress routes for and provide a plan for the control of emergency vehicles, evacuation buses, and evacuation routes.[23]

The Evacuation Functional Support Annex (May 2018) was developed in cooperation and with input from the City departments with primary response/support activities, as well as input from appropriate non-City agencies with identified activities related to evacuation, and is intended to facilitate response during evacuations. The Evacuation Functional Support Annex is reviewed every other year and details the City's responsibilities for evacuation. The Annex is used by each department identified in the Annex to develop their own Standardized Operating Procedures (SOPs) specifically for their department to direct tactical operations. The Annex identifies LAPD as the primary lead agency responsible for conducting an area evacuation, which is the

[21] City of Los Angeles Inter-Departmental Correspondence: Wildland-Urban Interface Hazard Mitigation Report. Available at: http://clkrep.lacity.org/onlinedocs/2018/18-1120_rpt_CLA_08-07-2019.pdf. Accessed May 2022.

[22] City of Los Angeles Emergency Management Department. Emergency Plans and Annexes, Brush Fire Annex. Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-04/brush_fire_annex_2018_5.pdf. Accessed May 2022.

[23] Los Angeles Police Department. 2014. Brushfire Response Guide. Available at https://lapdonlinestrgeacc.blob.core.usgovcloudapi.net/lapdonlinemedia/2021/09/2014_Brushfire-Response-Guide.pdf. Accessed May 2022.

evacuation of a geographical area to include the coordination and traffic management of vehicle flow out of a specified area identified by boundary coordinates or streets. LAFD is designated as the primary agency for determining evacuation areas due to a wildfire threat, and is responsible for directing Fire Suppression and Rescue personnel. LAFD or LAPD are the primary lead agencies for building evacuations. LADOT will coordinate with LAPD and other agencies (as necessary) to identify a traffic plan with evacuation pick up points and transportation routes. Generally, primary evacuation routes consist of the major interstates, highways, and primary arterials within the City and Los Angeles County.

City of Los Angeles Municipal Code

In 2018, the Los Angeles City Council approved an ordinance to increase requirements for brush clearance and fire safety in a VHFHSZ. The ordinance establishes appropriate safety measures necessary to mitigate the occurrence of such fires. The ordinance amends Article 7, Chapter V of the Los Angeles Municipal Code and prohibits the use of certain metal cutting blades for brush clearance activities in the VHFHSZ, establishing specific requirements for engaging in brush clearance activities in the VHFHSZ, and establishes penalties for violations for such sections. Highlights of the ordinance include:

- Use of metal cutting blades for grass or brush clearance shall be limited to those which are non-ferrous/non-sparking.
- Brush clearance cannot be done on red flag days, when fire weather conditions are at their peak.
- Individuals engaged in brush clearance operations shall not engage in any other activities during their actual clearance of grass or brush.
- An approved fire extinguisher, or a pressurized garden hose with attached nozzle shall be within 10 feet of any grass or brush clearance operation, to quickly extinguish a small fire before it burns out of control.
- A cell phone capable of dialing 9-1-1 shall be charged and readily accessible to the grass or brush clearance operation.[24]

City of Los Angeles Fire Code (2020)

The City of Los Angeles Fire Code (LAFC) is a component of the overall Los Angeles Municipal Code and is a combination of the California Fire Code and the Los Angeles amendments. The purpose of the LAFC is to establish minimum requirements consistent with nationally recognized good practices for providing a reasonable level of life safety and property protection from the hazards of fire, explosion, panic or dangerous conditions in new and existing buildings, structures, and premises. Chapter 12 of the Code addresses electrical energy storage systems designed to provide electrical power to a building or facility, including for use as standby or emergency power. The chapter includes permit requirements, hazard mitigation analysis for battery technologies not specifically listed in the Code, requirements for seismic and structural design, and service and maintenance requirements. Chapter 33 of the Code addresses fire safety during construction and demolition. Section 3304, Precautions Against Fire, prohibits smoking; includes requirements for combustible debris, rubbish, and waste; includes requirements for fire watch, as determined by a

24 Los Angeles Fire Department, Brush Clearance Requirements, Website: https://www.lafd.org/fire-prevention/brush/brush-clearance-requirements, accessed May 2022.

fire code official; and includes requirements for cutting, welding, and electrical installation. Section 3308 details the owner's responsibility for fire protection. Section 3308.1 requires that the owner shall be responsible for the development, implementation and maintenance of a written plan establishing a fire prevention program (also known as the fire protection program) at the project site applicable throughout all phases of construction, repair, alteration or demolition work. However, as noted by LAFD Requirement #07, a written plan is required for the following projects:

> *A written Fire Protection Program (FPP) complying with Chapter 33 of the LAFC and NFPA 241 shall be developed for building projects that exceed 150,000 square feet, or exceeds 100,000 square feet for projects that exceed 30 feet in height. The FPP shall be developed prior to proceeding past foundation work for new buildings or commencement of demolition work in alteration projects. A hard copy of the FPP shall be available on site for Fire Department and Building and Safety Review.*[25]

Therefore, while the proposed Project does not meet the minimum requirements to necessitate a written plan establishing a fire prevention program, the Project will nonetheless prepare a Fire Prevention Plan as a project design feature, as discussed below.

Section 3308.5 requires that the quantity and type of fire protection equipment be approved in accordance with the fire protection program. The plan shall address the requirements of the Code, the duties of staff, and staff training requirements, and shall be made available for review by the fire code official upon request. Section 3312 requires an approved water supply for fire protection, either temporary or permanent, be made available as soon as combustible materials arrives on site. Section 3316 includes requirements for motorized construction equipment.

Chapter 49 of the Code addresses requirements for Wildland-Urban interface fire areas, which are defined as a geographical area identified by the State as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code, or other areas designated by the enforcing agency to be at a significant risk from wildfires. Section 4905 requires construction methods intended to mitigate wildfire exposure be compliant with requirements of the California Building Standards Code. Section 4906 requires that hazardous vegetation and fuels around all applicable buildings and structures be maintained. Section 4907 requires that all buildings and structures within VHFHSZs in LRAs maintain defensible space. Section 4908 includes requirements specific to VHFHSZs in Los Angeles. Section 4908 includes, but is not limited to, the following:

- There shall be no open burning or smoking in the Very High Fire Hazard Severity Zone.
- There shall be no open flame or self-contained device capable of producing flame permitted or located upon any road, street or fire road within the Very High Fire Hazard Severity Zone.
- It shall be unlawful for any person to light, ignite or smoke any cigar, cigarette, tobacco in a pipe or other form of smoldering substances within the Very High Fire Hazard Severity Zone.

25 LAFD. Fire Prevention and Public Safety Bureau, Requirement #07. Available at: https://issuu.com/lafd/docs/lafd_standards_for_construction_site_fire_safety_2?fr=sY2ViNTYwMjYy. Accessed May 2022.

- No unauthorized person shall park any vehicle so as to obstruct the entrance to any fire road, fire trail or firebreak.[26]

Los Angeles Department of Water and Power Wildfire Mitigation Plan

The Los Angeles Department of Water and Power (LADWP), which provides water and power to the Project area, developed a Wildfire Mitigation Plan in accordance with California State Law, as amended by Senate Bill 901 and Assembly Bill 1054, which include requirements for public utilities related to wildfire. The Wildfire Mitigation Plan describes the steps that LADWP is taking to mitigate the threat of wildfires caused by electrical lines and equipment. The key objectives of LADWP's Wildfire Mitigation Plan are to ensure public safety, minimize wildfire risks, increase collaboration with local fire agencies, and meet and exceed California State law. The Wildfire Mitigation Plan complies with the requirements of Public Utilities Code (PUC) Section 8387 for publicly owned electric utilities.

According to the Wildfire Mitigation Plan, wildfire risks include high wind events, vegetation contact, conductor failure, conductor slap, pole/hardware failure, and aging infrastructure. LADWP has implemented solutions coupled with rigorous construction standards in high fire threat areas, robust vegetation management program, and collaboration with fire agencies affirm that the utility's overhead electrical lines and equipment do not pose a significant wildfire risk. LADWP's electrical equipment and facilities are designed and constructed to meet or exceed applicable federal, State, or industry standards, such as the California Public Utilities Commission General Order 95. LADWP is determining the feasibility of installing covered conductor or undergrounding overhead lines in select areas.[27]

3.20.2 Environmental Setting

The potential for significant damage to life and property exists in areas designated as "wildland-urban interface areas," where development is adjacent to densely vegetated areas. The area surrounding the proposed Project alignment is primarily characterized by dense urban development, including a mix of transit, public facilities, commercial, industrial, open space, and residential uses. However, the northern portion of the proposed Project alignment, north of the proposed Broadway Junction site, contains vegetated areas. According to the *City of Los Angeles 2018 Local Hazard Mitigation Plan*, highly urbanized areas have little wildfire risk exposure as urbanization tends to alter the natural fire regime.[28]

Fire Hazard Severity Zones

As describe above, CAL FIRE is the responsible agency that maps areas of significant fire hazards using a science-based and field-tested model that assigns a hazard score based on the factors that influence fire likelihood and fire behavior. Many factors are considered such as fire history, existing and potential fuel (natural vegetation), predicted flame length, blowing embers,

[26] City of Los Angeles Fire Code. 2020. Available at: https://codes.iccsafe.org/content/CACLAFC2020P1. Accessed May 2022. Please note that this material is either covered under a NDA, otherwise confidential, and/or copywritten. Due to copyright agreements, this document is unable to be downloaded as a pdf, though it is available for viewing online.

[27] Los Angeles Department of Water and Power. 2021. Wildfire Mitigation Plan. Available at: https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/AboutUs-Power-Wildfire?_adf.ctrl-state=i6w13ozkx_4&_afrLoop=586279179934108. Accessed May 2022.

[28] City of Los Angeles. City of Los Angeles 2018 Local Hazard Mitigation Plan. Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-03/2018_LA_HMP_Final_2018-11-30.pdf. Accessed May 2022.

terrain, and typical fire weather for the area. There are three levels of hazard: moderate, high, and very high. According to CAL FIRE, there are no VHFHSZs within an SRA located near the proposed Project alignment. However, portions of the proposed Project are located within the LRA VHFHSZ, including the Broadway Junction, Stadium Tower, and Dodger Stadium Station, and associated ART cables and cabins. Alameda Station, Alameda Tower, Alpine Tower, and Chinatown/State Park Station are located outside of the VHFHSZ. The Project components located within the VHFHSZ are labeled in Figure 3.20-1.

FHSZs sometimes fail to capture details at smaller scale that may better inform fire hazard on a particular site, including topography, fuels, climate/weather patterns, and fire history of that particular site. The Dodger Stadium property is primarily developed with the Stadium and surface parking. The vegetated area of Elysian Park is located approximately 0.45 miles northeast of the Stadium Tower and Dodger Stadium Station. The Solano Canyon neighborhood is located north of Dodger Stadium, and the vegetated area of Radio Hill Gardens is located to the east of Dodger Stadium, and approximately 275 feet east of the Stadium Tower site on the other side of SR-110. The portion of the alignment between Broadway Junction and Dodger Stadium Station crosses over several paved multi-lane roads and the SR-110 as well as non-burnable fuel, but is classified as being within the VHFHSZ.

Wildfire Classification and Behavior

A wildfire is a non-structure fire incident fueled by vegetation in largely undeveloped areas. They are most commonly started by human-related activity; power lines and electrical equipment, sparks from vehicles or equipment, arson, campfires, faulty wiring, or failure to extinguish a previous fire can all be causes of wildfires.[29]

Wildland fire behavior is based on three primary factors: topography, weather, and fuels.[30] The following discussion briefly describes how each of these factors influences wildfire behavior within the Project area.

Topography

Topography includes slope and elevation. The topography of a region influences the amount and moisture of fuel; the impact of weather conditions such as temperature and wind; potential barriers to fire spread, such as highways and lakes; and elevation and slope of land forms (fire spreads more easily uphill than downhill).[31] According to the National Park Service, topographical features can help or hinder the spread of fire. For example, a rocky slope can act as a great natural fire break due to a lack of fuel and wide gap of open space. Drainages can act as fire breaks, as well if fuels are moist or there is little vegetation. Beyond the shape of the land, it is also important to consider elevation, slope, and aspect. Elevation and aspect can determine how hot and dry a given area will be. For example, higher elevations will be drier but colder than low ones, and a north-facing slope will be slower to heat up or dry out. Slope can determine how quickly a fire will move up or down hills. For example, if a fire ignites at the bottom of a steep slope, it will spread

29 *Los Angeles Times*. October 2019. "How Do Wildfires Start and Spread?" Available at: https://www.latimes.com/california/story/2019-10-29/how-do-wildfires-start. Accessed May 2022.

30 City of Los Angeles. City of Los Angeles 2018 Local Hazard Mitigation Plan. Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-03/2018_LA_HMP_Final_2018-11-30.pdf. Accessed May 2022.

31 Ibid.

much more quickly upwards because it can pre-heat the upcoming fuels with rising hot air, and upward drafts are more likely to create spot fires.[32]

As discussed in Chapter 2, Project Description, the proposed Project alignment would commence adjacent to LAUS and El Pueblo de los Angeles (El Pueblo) and terminate at Dodger Stadium with an intermediate station at the southernmost entrance of the Los Angeles State Historic Park. From the Alameda Station, the proposed Project alignment would generally be located within public right-of-way (ROW), or on publicly owned property, following Alameda Street and then continuing along Spring Street in a northeast direction through the community of Chinatown to the southernmost corner of the Los Angeles State Historic Park. The alignment would then continue northeast over the western edge of the Los Angeles State Historic Park and the Los Angeles County Metropolitan Transportation Authority (Metro) L Line (Gold) to the intersection of North Broadway and Bishops Road. At this intersection, the proposed Project alignment would turn and continue northwest following Bishops Road toward its terminus at Dodger Stadium, located in the Elysian Park community.

The majority of the proposed Project alignment occupies a gentle, south-sloping alluvial plain located approximately 0.5 mile west of the Los Angeles River. The northern end of the proposed Project alignment slopes up more steeply towards the Dodger Stadium property. Elevations along the gently sloping portion of the proposed Project alignment range from approximately 280 feet near LAUS to approximately 300 feet at the Los Angeles State Historic Park. From the Broadway Junction, where the proposed Project alignment turns northwest towards Dodger Stadium, elevations climb gradually to approximately 515 feet at the northern terminus at the Dodger Stadium property. The slope from the Broadway Junction to Dodger Stadium is approximately 8 to 16 percent, which is generally considered a gentle slope.[33] However, there is upward sloping terrain greater than 20 degrees approximately 700 feet to the northeast and east of the portion of the proposed Project alignment between Stadium Tower and Dodger Stadium Station.

According to the City of Los Angeles' Zone Information and Map Access System (ZIMAS), the proposed locations of the Alameda Station, Alameda Tower, Alpine Tower, and Chinatown/State Park Station, and Broadway Junction are not located in hillside areas. The proposed locations of the Stadium Tower and Dodger Stadium Station are located in hillside areas.[34]

Weather

Weather conditions such as wind, temperature, and humidity also contribute to fire behavior. Wind is one of the most important factors because it can bring a fresh supply of oxygen to the fire and push the fire toward a new fuel source. Temperature of fuels is determined by the ambient temperature because fuels attain their heat by absorbing surrounding solar radiation. The temperature of a fuel influences its susceptibility to ignition. In general, fuels will ignite more readily at high temperatures than at low temperatures. Humidity, the amount of water vapor in the air, affects the moisture level of a fuel. At low humidity levels, fuels become dry and, therefore, catch fire more easily and burn more quickly than when humidity levels are high.[35]

32 National Park Service. Wildland Fire Behavior. Available at: https://www.nps.gov/articles/wildland-fire-behavior.htm. Accessed May 2022.

33 Slope was calculated from the center of the Roundhouse located at the Los Angeles State Historic Park to the Dodger Stadium Station.

34 City of Los Angeles. ZIMAS. Interactive map available at: http://zimas.lacity.org/. Accessed May 2022.

35 National Park Service. Wildland Fire Behavior. Available at: https://www.nps.gov/articles/wildland-fire-behavior.htm. Accessed May 2022.

The climate of Los Angeles is normally mild through the year, and the Pacific Ocean is the primary moderating influence. The coastal mountain ranges lying along the north and east sides of the Los Angeles coastal basin act as a buffer against extremes of summer heat and winter cold occurring in desert and plateau regions in the interior. An important aspect of the climate of the Los Angeles metropolitan area is the pronounced difference in temperature, humidity, cloudiness, fog, rain, and sunshine over fairly short distances. These “microclimate” differences are closely related to the distance from, and elevation above, the Pacific Ocean. Both high and low temperatures become more extreme and the average relative humidity becomes lower as one goes inland and up foothill slopes. Relative humidity is frequently high near the coast, but may be quite low along the foothills. During periods of high temperatures, the relative humidity is usually below normal, except for infrequent periods when high temperatures and high humidities occur together.[36] The average daily maximum temperature recorded for the Los Angeles Station (Downtown L.A./USC Campus), located approximately 3.8 miles southwest of the proposed Project alignment, in 2020 was 77.3 degrees Fahrenheit. In 2020, there were 41 days with temperatures greater than 90 degrees Fahrenheit.

Most rainfall comes during the winter with nearly 85 percent of the annual total occurring from November through March, while summers are practically rainless. As in many semi-arid regions, there is a marked variability in monthly and seasonal totals. The average monthly precipitation in 2021 was approximately 4.00 inches, with the most rain in December 2021.

Fire weather in Southern California has typically been in the dry, hot, and windy late summer and early fall months of June to October. Downtown Los Angeles sees elevated temperatures and dry fuel conditions during these times of year.

Windrose data (Figure 3.20-1) from the Los Angeles Station (Downtown L.A./USC Campus), located approximately 3.8 miles southwest of the proposed Project alignment, shows wind speeds and directions for the high fire hazard months from June to October from 2010 to 2021. This data shows that winds remain predominantly from the west and that the Project vicinity only rarely sees the northeast and east Santa Ana winds which more strongly effect the San Fernando, Santa Clarita and Ventura County valleys.

The City of Los Angeles also designates certain areas of the City as "high wind velocity areas" when evidence or studies indicate that the wind velocity results in damage to structures conforming to the minimum requirements of the building code. According to the City of Los Angeles Department of Public Works, Bureau of Engineering’s High Wind Area Map, no portion of the proposed Project alignment is located within an area identified by the City as being susceptible to high wind velocities.[37]

Fuels

During a wildland fire, all kinds of plant material can act as fuel, including grasses, shrubs, trees, dead leaves, and fallen pine needles. In the right conditions, excess fuel allows fires to burn hotter, larger, longer, and faster, making them more difficult and dangerous to manage.[38] However, in

36 NOAA. 2020. Local Climatological Data Annual Summary with Comparative Data, Los Angeles Downtown L.A./USC Campus (KCQT). Accessed July 2022.

37 City of Los Angeles Department of Public Works, Bureau of Engineering. High Wind Area Map. Available at: http://navigatela.lacity.org/common/mapgallery/pdf/pcis/High%20Wind%20Area.pdf. Accessed May 2022.

38 U.S. Department of the Interior, Office of Wildland Fire. Fuels Management. Available at: https://www.doi.gov/wildlandfire/fuels. Accessed May 2022.

urban or developed settings, limited fuel loads or landscaped/ornamental vegetation reduces the risk of ignition and fire spread.

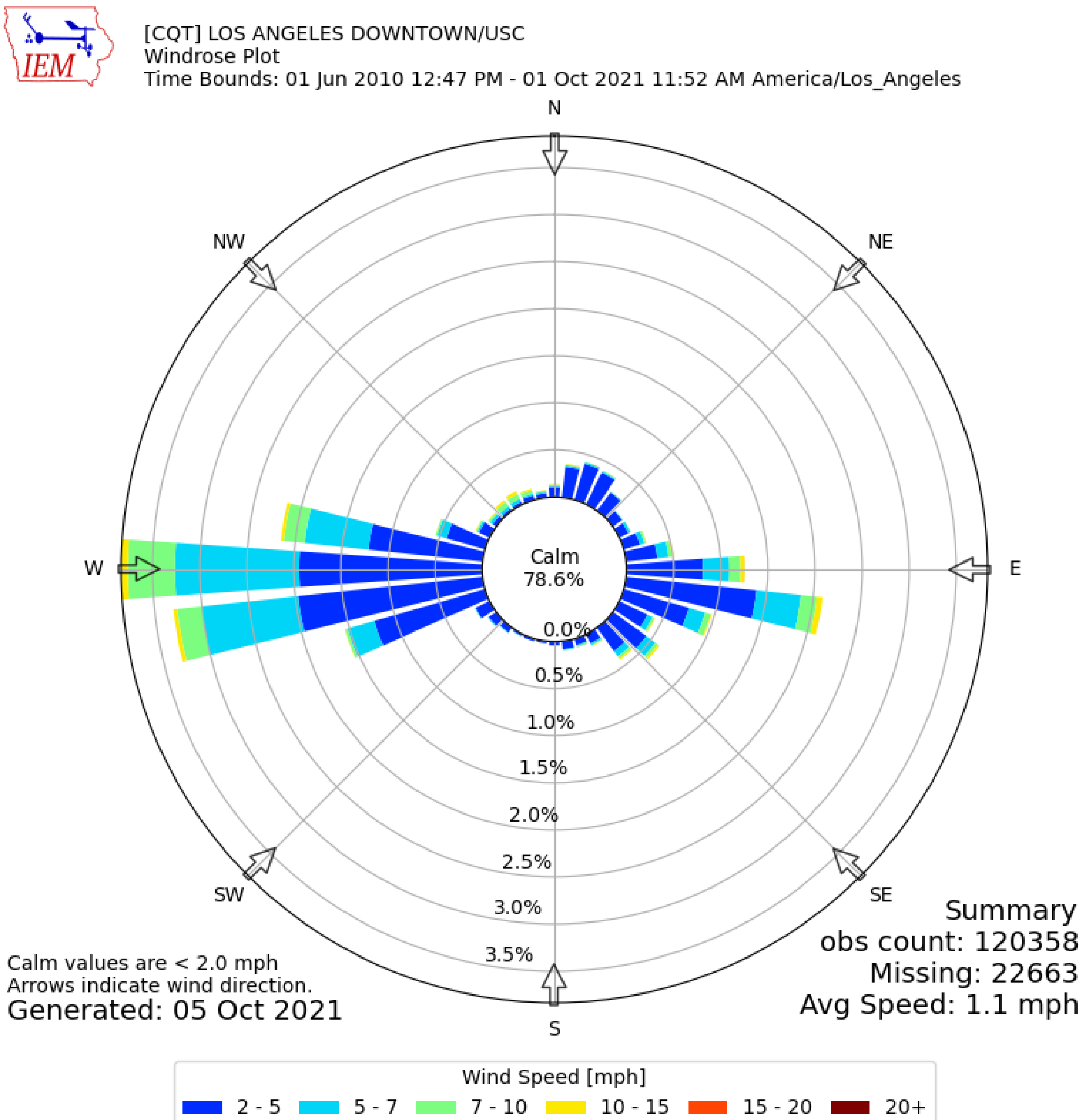


Figure 3.20-1: Los Angeles Station Windrose Data

A fuel's composition, including moisture level, chemical makeup, and density, determines its degree of flammability. Moisture level is the most important consideration. Live trees usually contain a great deal of moisture and dead logs contain very little. The moisture content and distribution of these fuels define how quickly a fire can spread and how intense or hot a fire may become. High moisture content will slow the burning process, because heat from the fire must first eliminate moisture.

In addition to moisture, a fuel's chemical makeup determines how readily it will burn. Some plants, shrubs, and trees contain oils or resins that promote combustion, causing them to burn more easily, quickly, or intensely than those without such oils. Finally, density of a fuel influences its flammability. If fuel particles are close together, they will ignite each other, causing the fuel to burn readily. But if fuel particles are so close that air cannot circulate easily, the fuel will not burn freely. Soil types also must be considered because fire affects the environment above and below the surface. Soil moisture content, the amount of organic matter present, and the duration of the fire determine to what extent fire will affect soil.[39] Given the variability of fuel bed composition, fuel bed characteristics have been consolidated into 40 stylized "fuel models" to facilitate fire behavior modeling. Geospatial data for vegetative fuels are available from the California Forest Observatory at a 10-meter (~33 ft) resolution, and depicted in Figure 3.20-2, excluding non-burnable fuels that contain no fuel load such that wildland fire will not spread.

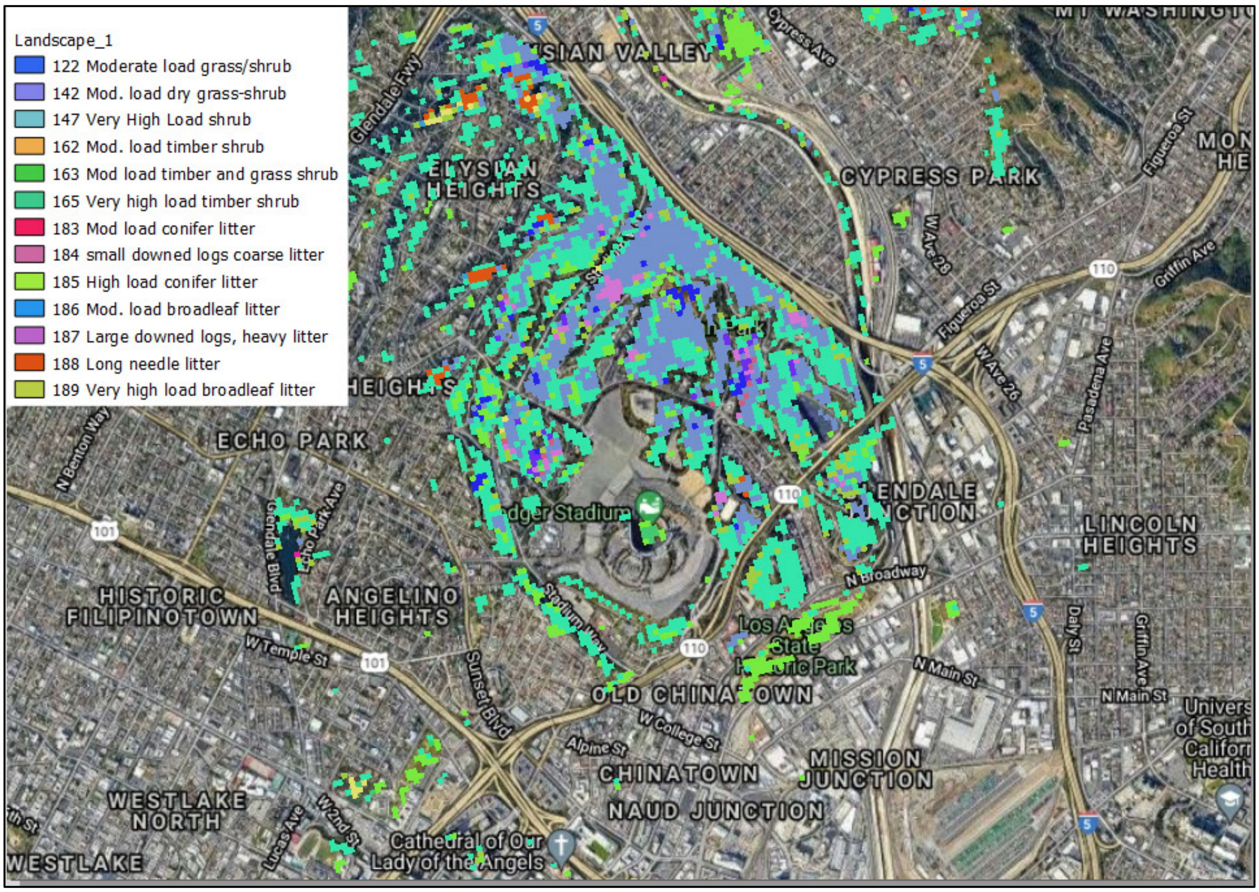


Figure 3.20-2: California Forest Observatory Geospatial Data For Vegetative Fuels

The proposed Project alignment is primarily above urban regions typically classified as non-burnable in wildland fire hazard assessments. Fuels along the proposed Project alignment are composed of ornamental vegetation, herbaceous vegetation, and non-native grasses (refer to Section 3.4, Biological Resources, for further discussion and a full description of trees along the Project alignment). Table 3.20-2 shows the carrier fuel types at the Project component sites.

---

39 National Park Service. Wildland Fire Behavior. Available at: https://www.nps.gov/articles/wildland-fire-behavior.htm. Accessed May 2022.

Along Alameda Street, where the Alameda Station, Alameda Tower, and Alpine Tower are proposed, there are industrial, residential, and commercial buildings. This portion of the proposed Project alignment is developed and heavily urbanized and therefore does not contain significant fuel loads. The limited vegetation within this portion of the proposed Project alignment is comprised of ornamental vegetation as well as some green space consisting of lawn and herbaceous vegetation. The carrier fuel types along this portion of the proposed Project alignment are characterized as non-burnable and grass fuels.

Table 3.20-2: Summary data for fires shown in Figure 3.20[40]

Fire number	Fire name	Date	Cause	Acres
1	Not named	06/18/57	Unknown	45
2	Not named	06/16/81	Unknown	272
3	Not named	06/16/74	Unknown	21
4	Not named	06/27/76	Unknown	4
5	Not named	07/19/66	Unknown	9
6	Not named	07/04/20	Unknown	1
7	Not named	07/04/20	Unknown	N/A
8	Not named	09/22/16	Unknown	6
9	Not named	07/03/21	Unknown	1/2
10	Not named	04/29/15	Unknown	2
11	Not named	06/06/20	Unknown	2
12	Not named	06/16/21	Unknown	2
13	Not named	05/29/20	Unknown)	1

The Chinatown/State Park Station would be constructed adjacent to Spring Street partially on City ROW and partially within the boundaries of the Los Angeles State Historic Park, which is surrounded by light industrial, open space, and commercial uses. The proposed Project alignment would also cross over the western edge of Los Angeles State Historic Park, which is landscaped and maintained. The carrier fuel types at the Chinatown/State Park Station consist of non-burnable and grass fuels.

The fuels closest to the portions of the proposed alignment within the VHFHSZ (Broadway Junction, Stadium Tower, and Dodger Stadium Station) are low load dry and coarse grasses which are easily ignited but are typically characterized by low and moderate flame lengths, meaning that while a fire is less likely to spread into higher more dense fuels and vegetation management is facilitated.

The Broadway Junction would be located at the northern corner of the intersection of North Broadway and Bishops Road (1201 N. Broadway). The existing building located at 1201 N. Broadway would be demolished prior to construction at this location. The Broadway Junction site contains ornamental vegetation that would also be removed prior to the start of construction. The Broadway Junction site is adjacent to Cathedral High School, as well as commercial and

40 In 1957, a 47-acre fire occurred on the now-Dodger Stadium property. While this fire appears in CAL FIRE's Historic Fire Perimeter database, the fire occurred prior to the construction of Dodger Stadium and is not representative of existing conditions. A fire in this same location does not present the same risks because it would now be located on Dodger Stadium's paved parking lots and unlikely to spread.

residential buildings. The proposed Project alignment would travel up Bishops Road past Cathedral High School and other low-rise single- and multi-family residential dwellings. These areas are developed and urban. The carrier fuel types at the Broadway Junction consists of non-burnable, grass fuels, and grass/shrub fuels that are well-islanded and present a low hazard of carrying fire through larger vegetation.

After crossing SR-110, the alignment would travel up a vegetated hillside to the Stadium Tower site located on hillside private property north of Stadium Way between the Downtown Gate entrance road to Dodger Stadium and SR-110. The surrounding area is bounded by SR-110 to the east, a multi-lane access road to Dodger Stadium's Downtown Gate to the west, and a vegetated hillside to the northeast. The immediate area surrounding the Stadium Tower construction zone predominantly contains low load grass and barren landscape.

From the Stadium Tower, the alignment would travel northwesterly over the paved multi-lane access road to Dodger Stadium's Downtown Gate and terminate at the Dodger Stadium Station, which would be located in a parking lot at the Dodger Stadium property near the Downtown Gate. The site of the Dodger Stadium Station currently contains a paved surface parking area, drive aisle, and a small strip of low and moderate load, humid climate timber grass shrub, with moderate forest litter located on a 12-degree slope between the parking area and the multi-lane access road to Dodger Stadium's Downtown Gate to the east. This vegetated strip is well buffered by wide areas of paved parking areas and wide roads that limit direct fire spread into the larger vegetated areas to the north and vegetation within the construction site would be removed prior to the start of construction. Strands of mature eucalyptus cover a hillside occurring 200-300 feet north and east of the proposed Dodger Stadium Station site, which are well islanded and present a low hazard of carrying fire through larger vegetation.

Post-Fire Debris Flows

According to the United States Geological Survey, fast-moving, highly destructive debris flows triggered by intense rainfall are one of the most dangerous post-fire hazards. The risk of floods and debris flows after fires increases due to vegetation loss and soil exposure. Cases of sudden and deadly debris flow are well documented in the western United States, particularly in Southern California. These flows are a risk to life and property because they can occur with little warning, can exert great impulsive loads on objects in their path, and may strip vegetation, block drainage ways, and damage infrastructure.[41] As described in Section 3.7, Geology and Soils, because the Stadium Tower and Dodger Stadium Station sites are located in a City-designated hillside area, they are potentially susceptible to landslides.

Wildfire History Along Project Alignment

Assessment of local fire history provides an understanding of potential future fire occurrence and behavior. Various federal, State, and local agencies maintain records of past fire ignitions and burned areas. While some records date back to the late 1800's, the earlier records are often incomplete due to difficulty in wildfire data collection in years past. CAL FIRE maintains a relatively robust database of historical fire perimeters in California as part of the Fire and Resource Assessment Program.

41 United States Geological Survey. n.d. Post-Fire Flooding and Debris Flow. Available at: https://www.usgs.gov/centers/ca-water/science/post-fire-flooding-and-debris-flow?qt-science_center_objects=0#qt-science_center_objects. Accessed May 2022.

Displayed in Figure 3.20-3, Items 1-5 are historic fires as gathered from the CAL FIRE database. The accompanying table 3.20-2 provides summary data for these fires. The region depicted in Figure 3.20-3 extends roughly from Dodger Stadium to the borders of the more heavily vegetated regions of Elysian Park, extending approximately ½ mile east and south, ¾ mile west, and 1 ¼ miles north of Dodger Stadium within the VHFHSZ. More fires over two acres in size within this area (Items 6-13) can be found in news stories from local LA news outlets, which describe small fires that are quickly controlled by LAFD ground units and in many cases, water dropping helicopters. The cause of these fires is typically undetermined, but the narratives accompanying these news stories typically highlight rapid reporting, response, containment, and extinguishment. In addition, there are four LAFD stations within a 1.6-mile radius around the Project Study Area shown in Figure 3.20-4, which would allow for rapid response times.

Figure 3.20-3: CAL FIRE Historic Fires

Figure 3.20-4: LAFD Stations – Project Study Area

The City's Emergency Operations Plan also includes hazards specific annexes, which explain procedures unique to the hazard type, including the Evacuation Functional Support Annex, which was developed to facilitate response during evacuations. The Annex notes that while "it is difficult to accurately predict the location, frequency, and scale of an emergency or disaster, it is possible; however, to plan and manage an evacuation network and establish evacuation procedures in effort to reduce the adverse impact of a threatened or actual emergency incident."[42] As stated in the Annex, when necessary an evacuation is conducted by law enforcement in the City of Los Angeles, and would be supported by other City departments (e.g. Park Rangers) as required. While primary evacuation routes are not specifically defined by the Annex, they are described as major interstates, highways and primary arterials with the City and Los Angeles County. If evacuation is required, the City would work with local law enforcement agencies or departments to identify evacuation routes. In response to a localized emergency, agencies such as LAFD, LAPD, and the LA Department of Transportation, would work together to identify the appropriate local egress option and direct individuals to those routes. Potential evacuation routes would vary based on the type and location of the hazard or disaster.

In addition to the described evacuation procedures, the County of Los Angeles designates disaster routes within the County, including within the City. As described by Los Angeles County Public Works, "disaster routes are freeway, highway or arterial routes pre-identified for use during times of crisis. These routes are utilized to bring in emergency personnel, equipment, and supplies to impacted areas in order to save lives, protect property and minimize impact to the environment. During a disaster, these routes have priority for clearing, repairing and restoration over all other roads. Disaster routes are not evacuation routes. Although an emergency may warrant a road be used as both a disaster and evacuation route, they are different. An evacuation route is used to move the affected population out of an impacted area."[43] In contrast, disaster routes are used to bring in emergency personnel, equipment, and supplies to the impacted areas. Disaster routes are categorized as either Primary Disaster Routes (Freeway) or Secondary Disaster Routes. Within the proposed Project area, SR-110 is designated as a Primary Disaster Route, and Alameda Street, Cesar E. Chavez Avenue, and Spring Street are designated as Secondary Disaster Routes. In the event of an emergency, these routes would be utilized to move emergency equipment, personnel, and supplies during a disaster, although they may also be used to evacuate the population in the event of a localized emergency if identified to do so under the City's Emergency Operations Plan.

---

42 City of Los Angeles Emergency Operations Plan, Evacuation Functional Support Annex, May 2018. Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-04/evacuation_annex_2018.pdf. Accessed May 2022.

43 County of Los Angeles Public Works. n.d. Disaster Routes. Available at: https://dpw.lacounty.gov/dsg/DisasterRoutes/. Accessed May 2022.

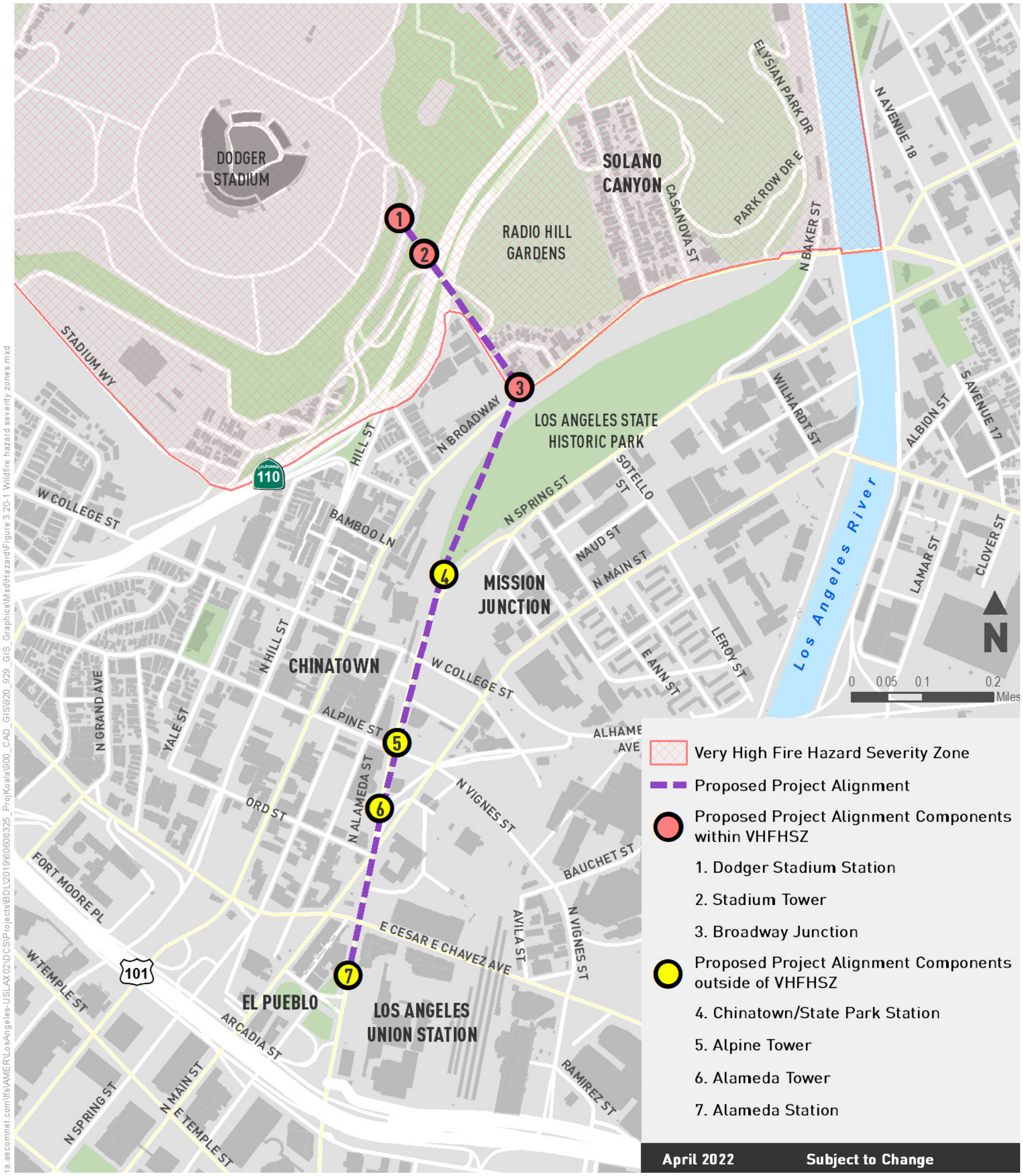


Figure 3.20-5: Very High Fire Hazard Severity Zone (VHFHSZ) Map

3.20.3 Methodology

This section evaluates the potential of the proposed Project to increase wildfire risks. The following impact analysis is based in part on the Fire Hazard Assessment (Appendix R). In order to establish an operational baseline and evaluate the impacts of the proposed Project, federal, State, and local regulations governing wildfire management were reviewed and existing wildfire risks were documented, including topography, weather, fuels, and wildfire history. The following agency websites were consulted for information regarding wildfire: U.S. Department of Agriculture, U.S. Department of Interior, City of Los Angeles Department of City Planning, City of Los Angeles Emergency Management Department, LAFD, LADWP, National Park Service, City of Los Angeles Zone Information and Map Access System (ZIMAS), National Oceanic and Atmospheric Administration, and National Wildfire Coordinating Group.

CAL FIRE maps were reviewed to determine the portions of the alignment located in a VHFHSZ. For the portions of the proposed Project alignment located in a VHFHSZ, wildfire risk parameters were assessed based on the CAL FIRE and local wildfire maps and planning documents. An evaluation was made in part based on comparison of the existing physical conditions (location, topography, weather, fuel) at the proposed Project component sites compared with the physical conditions after development of the proposed Project. Regulatory requirements, best management practices, such as fire safety practices, are included as part of the assessment.

To assess the potential for wildfire impacts during construction, this analysis considers whether the proposed Project would introduce temporary ignition sources, or otherwise exacerbate fire risks during construction. The proposed Project's construction plans were reviewed, particularly areas that need brush clearance or temporary power, staging areas, and haul routes. The presence of construction equipment, construction personnel, and activities that could spark flammable vegetation (fuels) around construction staging areas and access routes alongside or near the proposed Project alignment, like welding, grinding, cutting, earthmoving, and vegetation clearing were considered. Information about construction activities and types of equipment are available in Appendix B.

For operation, this assessment considers whether the proposed Project would introduce any permanent ignition sources, otherwise exacerbate fire risks, or expose people or structures to an area with post-fire risks or to wildland fires. To evaluate these impacts, the operational components of the proposed Project were compared to the existing conditions. The analysis considers whether the proposed Project introduces people or structures to an area where there previously were none. Information from Section 3.7, Geology and Soils, and Section 3.10, Hydrology and Water Quality, relating to post-fire instability, is incorporated in this section. Regulatory requirements, project design features, and industry standards also included as part of the assessment.

Additionally, the assessment considers whether the proposed Project would substantially impede adopted emergency response or emergency evacuation plans during an emergency spurred by a wildfire. The City of Los Angeles Emergency Management Department coordinates evacuations in the case of emergency with the Los Angeles Police Department (LAPD) and the LAFD, as outlined in the City's Emergency Operations Plan. As described in Section 3.20.1 Regulatory Setting, the City's Emergency Operations Plan also includes hazards specific annexes, which explain procedures unique to the hazard type, including the Evacuation Functional Support Annex, which was developed to facilitate response during evacuations. If evacuation is required, the City would work with local law enforcement agencies or departments to identify evacuation routes. In response to a localized emergency, agencies such as LAFD, LAPD, and the LA

Department of Transportation, would work together to identify the appropriate local egress option and direct individuals to those routes. Potential evacuation routes would vary based on the type and location of the hazard or disaster. While evacuation routes are not designated in the City's Emergency Operations Plan, they are described as major interstates, highways, and primary arterials within the City and Los Angeles County. Arterials potentially affected by construction include Cesar E. Chavez Avenue, Alameda Street, Spring Street, and North Broadway. The proposed Project alignment would also cross over the SR-110.

In addition to the described evacuation procedures, designated disaster routes were reviewed from the County of Los Angeles Public Works website as the County of Los Angeles designates disaster routes within the County, as well as within the City. Within the proposed Project area, SR-110 is designated as a Primary Disaster Route, and Alameda Street, Cesar E. Chavez Avenue, and Spring Street are designated as Secondary Disaster Routes. Construction plans were reviewed to determine if the proposed Project would substantially impair the implementation of an adopted emergency response plan or emergency evacuation plan. If partial road closures are required, the availability of alternate routes for first responders were considered. For operation, this assessment considers whether the proposed Project would substantially impair the implementation of an adopted emergency response plan or emergency evacuation plan. Information from Section 3.17, Transportation, in terms of adequacy of emergency access, is incorporated in this section.

Thresholds of Significance

For purposes of this draft EIR, the checklist questions related to Wildfire contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance.

In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a potentially significant impact to increase the risk of wildfire if it is located in or near State Responsibility Areas or lands classified as VHFHSZs and would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan;
- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

The thresholds above apply to areas located within and near lands classified as a VHFHSZ. The area along Alameda Street, where the Alameda Station, Alameda Tower, Alpine Tower, and Chinatown/State Park Station are proposed, are not located within lands classified as a VHFHSZ. The portion south of the proposed Broadway Junction is highly urbanized and contains only ornamental vegetation, herbaceous shrubs, and a maintained grassy lawn within the Los Angeles State Historic Park, which would not provide fuel for wildfires.

As such, the analysis in WFR-1 through WFR-4 in Section 3.20.4, Environmental Impacts, is predominately focused on the components of the proposed Project that would be located within the VHFHSZ. As shown in Figure 3.20-1, the northern portion of the proposed Project alignment is located within an identified VHFHSZ, including the Broadway Junction, Stadium Tower, and Dodger Stadium Station, as well as the cables and cabins between these components.

The following threshold related to wildland fires is from Section IX, Hazards and Hazardous Materials, in Appendix G of the CEQA Guidelines. The proposed Project would have a significant impact on hazards and hazardous materials if it would:

- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

3.20.4 Environmental Impacts

The proposed Project would be regulated by the various laws, regulations, and policies summarized above in the Regulatory Setting. Compliance by the proposed Project with applicable federal, State, and local laws and regulations is assumed in this analysis and State and local agencies would be expected to continue to enforce applicable requirements to the extent that they do so now.

WFR-1: *Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?*

Construction Impacts

Less Than Significant Impact. The City of Los Angeles Emergency Management Department coordinates evacuations and evacuation routes in the case of emergency with LAPD and LAFD, as outlined in the City's Emergency Operations Plan and Emergency Operations Plan Evacuation Functional Support Annex and Brush Fire Hazard Specific Annex. The LAFD serves as the initial lead agency for brush fire incidents. While evacuation routes are not designated in the City's Emergency Operations Plan, they are described as major interstates, highways, and primary arterials within the City and Los Angeles County. Arterials potentially affected by construction include Cesar E. Chavez Avenue, Alameda Street, Spring Street, and North Broadway. The proposed Project alignment would also cross over the SR-110. A complete list of regional freeways and key arterials within the proposed Project area is provided in Section 3.17.2 of Transportation.

In addition, the City is within the Los Angeles Operational Area, which is governed by the Los Angeles County Operational Area Emergency Response Plan. The purpose of this plan is to establish the coordinated emergency management system, which includes prevention protection, response, recovery, and mitigation within the Los Angeles County Operational Area. Disaster routes mapped for the Los Angeles County Operational Area identify designates disaster routes within the County, including within the City. Designated disaster routes along the proposed Project alignment include Alameda Street, Cesar E. Chavez Avenue, Spring Street and SR-110.[44]

Construction activities would not interfere with the implementation of the City's Emergency Operations Plan and related Annexes, or the Los Angeles County Operational Area Emergency Response Plan. The proposed Project's construction activities would not interfere with any of the

[44] Los Angeles County Department of Public Works. Disaster Route Maps. Available at: http://dpw.lacounty.gov/dsg/disasterRoutes/city.cfm. Accessed May 2022.

local authorities' prescribed roles or responsibilities during emergency response. Further, in the event of an emergency, the proposed Project would comply with all regulatory requirements.

Implementation of WFR-PDF-A would support the emergency management phases of the Operational Emergency Response Plan, including the Plan's prevention phase, which includes actions to avoid an incident or to intervene to stop an incident from occurring, because WFR-PDF-A requires, among other actions, a Fire Prevention Program Superintendent that will coordinate with the LAFD on fire prevention and response, worker fire safety and evacuation training, and fire prevention measures (e.g., ceasing hot work during Red Flag Warnings issued by the National Weather Service).

Construction of the proposed Project would require temporary road closures, potentially including evacuation or designated disaster routes within the VHFHSZ. As shown in Figure 3.20-1, the northern portion of the proposed Project alignment, including Broadway Junction, Stadium Tower, and Dodger Stadium Station, is located within an identified VHFHSZ. Designated disaster routes or potential evacuation routes along the proposed Project alignment include Alameda Street, Cesar E. Chavez Avenue, Spring Street and SR-110.[45] Evacuations in urban areas similar to the proposed Project typically are completed in discrete phases at the direction of local authorities and generally do not involve mass evacuations. Larger wildfires are actively tracked, allowing authorities hours or days to adjust evacuation strategies and to facilitate strategic evacuation of discrete areas.

A detailed description of construction lane closures is provided in Section 3.17, Transportation. While road closures and roadway disruptions would be temporary and intermittent throughout construction of the proposed Project and would be coordination with LADOT, emergency access would be maintained and construction activities would be quickly halted, as necessary, in the event of an emergency in coordination with LAFD and LAPD. As discussed in Section 3.17, Transportation, a Construction Traffic Management Plan would be prepared as part of the proposed Project, which is included as Mitigation Measure TRA-B. The Construction Traffic Management Plan for the proposed Project would identify potential fire evacuation routes and construction equipment storage areas to ensure that equipment would not be stored within the roadways to allow for emergency access, if needed. The Construction Traffic Management Plan would require coordination with the City and emergency service providers to ensure emergency access is provided to the proposed Project alignment and component sites and neighboring businesses and residences. Emergency access points will be marked accordingly in consultation with LAFD, as necessary.

Applicable construction lane closures and the available emergency access are summarized as follows:

- Construction of Alameda Station would require short-term full lane closures on Alameda Street during five weeks of construction if a temporary deck is utilized for deck erection and removal, and full lane closures on Alameda Street during construction hours for 30 weeks if the temporary deck option is not utilized. Partial lane closures on Alameda Street would be required during other phases of Alameda Station construction. Emergency access to El Pueblo would be provided on Alameda Street near its intersection with Cesar E. Chavez Avenue, if the temporary deck option is utilized. If the temporary deck option is not utilized, emergency access to El Pueblo would be provided on Alameda Street near its intersection with Los Angeles Street during the Foundations and Columns phase, and

[45] Los Angeles County Department of Public Works. Disaster Route Maps. Available at: http://dpw.lacounty.gov/dsg/disasterRoutes/city.cfm. Accessed May 2022.

on Alameda Street near its intersection with Cesar E. Chavez Avenue during other phases.

- Construction of Alameda Tower would require full lane closures on Alameda Street during construction hours for 22 weeks during one phase of construction, while still maintaining local and emergency access on Alameda Street. Partial lane closures on Alameda Street are required during other phases of the construction of Alameda Tower. Emergency access during construction hours would be maintained. Partial lane closures on Alameda Street and Alpine Street are required during construction of Alpine Tower, although access, including emergency access, along Alameda Street and Alpine Street would be maintained.

- Construction of Chinatown/State Park Station would require partial lane closures on Spring Street, while still maintaining local and emergency access for adjacent properties along Spring Street. While construction would occur along existing access points to nearby properties, local and emergency access to these properties would be maintained. Additionally, construction of Broadway Junction would require short-term full lane closures on North Broadway and Bishops Road during the cumulative five-week period that decking is installed over the roadway and then later removed following the completion of the structural steel and gondola equipment erection phase. Partial lane closures on North Broadway would be required during other phases of the construction of Broadway Junction. Restricted local and emergency access would be provided to allow access to properties along North Broadway from southbound travel along North Broadway. Restricted local and emergency access would be provided for the properties along North Broadway from Cottage Home Street up until the area of closure located just south of the intersection of North Broadway and Bishops Road. Emergency access would also be provided to Cathedral High School.

- Rope pulling activities could be quickly halted in the event of an emergency, allowing roadways to be utilized during an emergency for either evacuation or emergency response. LAFD is tasked with closely monitoring all potential wildfire situations and providing early warning and notification under the City's Emergency Operations Plan, including for larger fires that could require evacuation. Rope pulling activities for each of the two ropeway systems would otherwise require temporary closure of roadways underneath each ropeway system of the proposed Project alignment, but could be halted to allow roadways to be utilized during a wildfire emergency. In addition, in order to minimize traffic disruption, rope pulling activities for each ropeway system would not occur contemporaneously. Rope pulling activities for the ropeway system from Alameda Station to Broadway Junction would require temporary closure of Alameda Street, Spring Street and North Broadway, as well as portions of roadways that intersect with these roadways, for up to two non-consecutive days. Rope pulling activities for the ropeway system from Broadway Junction to Dodger Stadium Station would require temporary closure of North Broadway, Bishops Road, Savoy Street, SR-110, and Stadium Way, for up to two non-consecutive days. Alameda Street, Spring Street, North Broadway, and SR-110 could potentially be utilized as potential evacuation routes. However, rope pulling is not expected to significantly impact emergency response due to the use of the thin, light line rope and the short duration of roadway closures associated with flying the line, and rope pulling activities could be quickly halted in the event of an emergency, thereby allowing the roadways to be utilized during an emergency.

- Construction activities could be further modified if directed by the City or County of Los Angeles to respond to wildfire events in order to provide additional emergency access, if needed. Because wildfires are tracked with hours or days of lead time, the authorities may adjust evacuation plans as necessary.

Accordingly, the proposed road closures and roadway disruptions would be temporary and intermittent throughout construction of the proposed Project and would be coordinated with local authorities. Construction activities would be modified or halted in the event of an emergency, as necessary, to allow the roads or portions of the roads to reopen for emergency response. LAPD, as the law enforcement agency responsible for conducting emergency evacuation in the event of a wildfire, could choose to utilize these roadways to evacuate in the event of an emergency. The proposed Project is located in an established urban area that is well-served by the surrounding roadway network, providing a variety of detour options for local authorities to utilize. However, if emergency responders are required to use a roadway experiencing closure or disruption from proposed Project construction, or LAPD chooses to utilize one of these roads for evacuation, construction would be modified or halted as directed by local authorities to allow the roads (or portions of the roads) to be available for emergency access. Such steps may not be needed in an emergency because drivers of emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic, and are also able to use onboard live mapping software that informs them which roadways are experiencing delays due to construction, accidents, or other events, and would be able to take alternative routes accordingly. Emergency responders could also be flagged through a worksite if necessary, in addition to using routes designated as “Permitted Local Access.”

Accordingly, construction of the proposed Project would not inhibit access in the event of an emergency to the identified disaster routes within the proposed Project area. The proposed Project would otherwise comply with any regulatory or statutory requirements pertaining to street closures and detours.

Therefore, construction of the proposed Project would not substantially impair the implementation of an adopted emergency response plan or emergency evacuation plan, and the impact would be less than significant.

It is noted that the proposed Project would implement Mitigation Measure TRA-3, requiring the development of a Project-specific temporary disaster route plan prior to the start of construction, as described in Section 3.17, Transportation, which would further support coordination with local authorities during an emergency event. The temporary disaster route plan would require coordination with and approval of the plan by LADOT, which would include street closure information and detour plans. In addition to detours, the temporary disaster route plan could also include temporary operational measures that would be implemented by the City during a disaster, including temporary contra-flow lanes or reversing directions to flush vehicles during a disaster situation.

Operational Impacts

Less Than Significant Impact. The proposed Project stations would be readily accessible from adjacent City streets during an evacuation or fire situation affecting proposed Project operations. Daily operations would not affect emergency response or evacuations at the street level or to adjacent roadways or parcels as the cabins would be suspended above the public ROW. The proposed Project is designed so that it would not affect roadway through lane capacity by any of the proposed in-roadway structures (i.e., Alameda Station). In addition, off-roadway structures would not hinder emergency response because the bases of stations, junction, and towers would not be located in travel lanes. Upon completion of construction activities, all existing travel lanes along the proposed Project alignment would continue to serve as designated disaster routes and provide local and emergency response route access.

Operation of the proposed Project would not impair the implementation of the City's Emergency Operations Plan or the Los Angeles County Operational Area Emergency Response Plan, and the proposed Project would not result in any permanent roadway closures or changes that would impact access routes. Therefore, operation of the proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan, and the impact would be less than significant.

WFR-2: *Would the Project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

Construction Impacts

Less Than Significant Impact.

The proposed Alameda Station, Alameda Tower, Alpine Tower, and Chinatown/State Park Station would be constructed outside of the VHFHSZ and in developed areas that would not be subject to increased fire risks from the proposed Project construction. As discussed in Section 3.20.2 above, there are industrial, residential, and commercial buildings along Alameda Street, where Alameda Station, Alameda Tower, and Alpine Tower are proposed, with a very low potential for providing fuel for wildfires. Although some ornamental vegetation and green space is present, the vegetation is irrigated and unlikely to provide fuels for wildfires. Similarly, the proposed Chinatown/State Park Station site is located at the western edge of Los Angeles State Historic Park, which is irrigated and maintained, providing limited fuel for wildfires.

As such, the areas comprising and around Alameda Station, Alameda Tower, Alpine Tower, and Chinatown/State Park Station components are not characterized by vegetative fuels (e.g., expanses of dry grass, dead leaves, logs, stumps, branch wood or snags), slopes (e.g., steep uphill gradients over areas with vegetative fuels), or other features with a high potential to ignite or spread wildfires. Due to the developed nature of these sites and adjacent areas surrounded by a network of fire hydrants and fire stations, construction activities associated with the proposed Alameda Station, Alameda Tower, Alpine Tower, and Chinatown/State Park Station would not exacerbate wildfire risks nor expose people to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

Broadway Junction, Stadium Tower, and Dodger Stadium Station would be constructed within the VHFHSZ; however, these locations are in and surrounded by developed areas or on sites otherwise largely confined by paved roads and existing development. While these areas present a low risk of wildfire spread, the construction zones for Broadway Junction, Stadium Tower, and Dodger Stadium Station are near vegetation and fuel sources that have some potential to result in wildfire ignitions and the uncontrolled spread of wildfires from certain construction activities, such as the use of equipment that has the potential to accidentally ignite fire, such as sparks from welders. As described below, such potential risk would be managed by the implementation of standard construction practices and regulatory compliance measures related to safeguards for construction, alteration, and demolition activities in order to provide reasonable safety to life and property from fire during such activities, including prohibiting smoking unless in approved areas, requiring permits and implementing a fire watch for hot work construction activities, and implementing partitions to prevent the passage of sparks, slag, and heat from the hot work area.

Broadway Junction

The Broadway Junction site would be located at 1201 North Broadway, occurring primarily on a flat, privately-owned parcel at the intersection of North Broadway and Bishops Road, currently developed with an office building and ancillary uses, which would be demolished prior to construction at this location. The Broadway Junction site, shown in Figure 3.20-6, is surrounded by residences and commercial uses, including Cathedral High School to the west, and is bounded by Savoy Street, Bishops Road, and North Broadway.

The Broadway Junction site contains ornamental vegetation that would be removed prior to the start of construction. Larger shrubs and trees present on the Cathedral High School property across Bishops Road from the Broadway Junction site are well islanded and present a low hazard of carrying fire through larger vegetation.

Windrose data described above shows that winds remain predominantly from the west that would blow towards developed areas. The proposed Project area only rarely sees the northeast and east Santa Ana winds. Westerly winds present a lower potential hazard to the Broadway Junction site because this portion of the alignment is located southwest of the fire prone areas in Elysian Park and the areas characterized by low load, dry climate grass shrub associated with moderate fire spread rates and low flame lengths. The Broadway Junction site is separated from these areas by Savoy Street, the SR-110, the Dodger Stadium parking lots, and residential development. The Broadway Junction site is separated from Radio Hill Gardens by Savoy Street and residential development. Northeast of the Broadway Junction site is industrial and commercial development that does not present a wildfire hazard.

Construction at the Broadway Junction site would involve the demolition of the existing building at 1201 North Broadway and removal of existing trees and vegetation on the construction site prior to the construction of Broadway Junction, which is anticipated to occur over several phases: piles, foundations and columns; structural steel and gondola equipment erection; vertical circulation, hardscape, landscape, interior work, and any required roadway asphalt and re-striping to support the proposed Project. Certain phases of the construction of Broadway Junction will require hot work activities, including the use of welders and torches, however, pre-construction clearance of vegetation on the Broadway Junction site and other regulatory compliance measures reduce the risk of ignition on-site from falling slag and splatter produced from welding.

Broadway Junction site construction would not impact the Los Angeles State Historic Park to the east because the park is separated by North Broadway (a four-lane paved road), fencing, a slope, and the Metro L Line (Gold) tracks. Further, the Los Angeles State Historic Park is located outside of the VHFHSZ and the landscaped vegetation within the park presents a low risk of wildland fire.

Figure 3.20-6: Broadway Junction Site – Construction Zone

Accordingly, the proposed Project has a less than significant potential to exacerbate wildfire risks at Broadway Junction during construction because the site is surrounded by existing uses and roadways that minimize the risk of fire spread, the pre-construction clearance of vegetation on the site would inhibit onsite ignitions, and the proposed Project would comply with regulatory standards and industry standard practices designed to avoid or reduce fire risks associated with construction activities.[46] Nevertheless, to provide additional environmental benefits and further reduce fire risks, the proposed Project would incorporate the project design features outlined in WFR-PDF-A prior to/during construction at the Broadway Junction site, including fire safety training for all construction employees, implementation of tiered fire watches with increased staff and/or duration following the completion of hot-work operation, prohibiting hot work construction activities during Red Flag Warnings, ongoing fire inspections during construction, and other measures.

Stadium Tower

The Stadium Tower construction area shown in Figure 3.20-7 is adjacent to Stadium Way and is generally bounded by SR-110 to the east, a multi-lane access road to Dodger Stadium's Downtown Gate to the west, and a vegetated hillside to the northeast.

A review of the CAL FIRE database indicates that no historic fires have occurred on the Stadium Tower site. There are four LAFD stations within a 1.6-mile radius around the Project Study Area shown in Figure 3.20-4 above, which would allow for rapid response times.

The construction of Stadium Tower is anticipated to occur over several phases: piles, foundations and columns; structural steel and gondola equipment erection; and hardscape, landscape, interior work. Certain phases of the construction of Stadium Tower will require hot work activities, including the use of welders and torches. However, as discussed further below, pre-clearing of the site prior to the start of construction, regulatory compliance and the implementation of recommended best construction practices would minimize such risks.

The northeastern portion of the site presents a potential fire spread hazard location due to the presence of low load, dry climate grass-shrub about 1 foot high, which is associated with moderate fire spread rates and low flame lengths. However, such fire spread hazards during construction would be avoided or reduced through pre-clearing of the Construction Zone prior to the start of construction, regulatory compliance, standard construction practices and vegetation management. In addition, the potential for spread to the south, east and west is already reduced by SR-110, the SR-110 access ramps and the wide roads that are adjacent, which serve to buffer the proposed Stadium Tower site away from areas with higher risk fuel sources. Windrose data indicates that fire or ignition sources generally would not be driven to the vegetated areas to the northeast of the Stadium Tower site, but rather to the east towards the SR-110, reducing fire risks.

[46] See Section 3.20.1 and the Fire Hazard Assessment prepared for the Project (Appendix R) for additional discussion about applicable regulatory standards and industry standard practices that would reduce wildfire risks associated with the Project's construction activities.

Figure 3.20-7: Stadium Tower – Construction Zone and Buffer

Accordingly, the proposed Project has a less than significant potential to exacerbate wildfire risks at the Stadium Tower site during construction because the site is surrounded by wide roads to the south, east and west that minimize the risk of fire spread, the pre-construction clearance of vegetation on the site would inhibit onsite ignitions and fire spread to the northeast, and the proposed Project would comply with regulatory standards and industry standard practices designed to avoid or reduce fire risks associated with construction activities.[47]. Nevertheless, to provide additional environmental benefits and further reduce fire risks, the proposed Project will incorporate the project design features in WFR-PDF-A and WFR-PDF-B prior to/during construction.

WFR-PDF-B requires the provision of additional buffer area of either 70 feet or until the buffer reaches the nearest paved roadway, i.e., the SR-110 or Stadium Way, around the construction site, consisting of barren earth and removal or thinning of any dry grass and low to moderate shrubs in the site footprint. Such a buffer would further reduce the potential for spread to the vegetated hillside to the northeast. This buffer provides an additional 35 feet of clearance beyond the NFPA 51B (Standard for Fire Prevention During Welding, Cutting, and Other Hot Work) requirement to maintain a 35 foot distance from combustibles (Section 5.5.1.3) during hot work activities. The additional 35 feet of clearance would provide additional fire-prevention benefits to further reduce the potential for ignition from falling slag and splatter produced from welding during hot work activities.

WFR-PDF-A includes other fire prevention project design features that will be incorporated prior to/during construction for the proposed Project at the Stadium Tower site, such as fire safety training for all construction employees, implementation of tiered fire watches with increased staff and/or duration following the completion of hot-work operation, prohibiting hot work construction activities during Red Flag Warnings, ongoing fire inspections during construction, and other measures.

Dodger Stadium Station

The Dodger Stadium Station site shown in Figure 3.20-8 is located approximately 700 feet east of Dodger Stadium on a built site characterized by a paved surface parking lot and adjacent to a small strip of low and moderate load, humid climate timber grass shrub, with moderate forest litter located on a 12-degree slope between the parking area and the multi-lane access road to Dodger Stadium's Downtown Gate to the east. This strip of vegetation is well buffered by paved parking areas and wide roads that limit the potential for direct fire spread into the larger vegetated areas to the north and vegetation within the Construction Zone would be removed prior to the start of construction.

A review of the CAL FIRE database indicates that no historic fires have occurred at the Dodger Stadium Station site. There are four LAFD stations within a 1.6-mile radius around the Project Study Area shown in Figure 3.20-4, which would allow for rapid response times.

Dodger Stadium Station will be constructed at-grade along with a cabin storage and maintenance area beneath the Station. Prior to construction of Dodger Stadium Station, existing trees and vegetation in the Construction Zone shown in Figure 3.20-8 would be removed. Dodger Stadium Station construction is anticipated to occur over several phases: construction of piles, foundations and columns; structural steel and gondola equipment erection; vertical circulation, hardscape, landscape, interior work, and any required roadway asphalt and re-striping to support the proposed Project. Certain phases of the construction of Dodger Stadium Station will require hot work activities, including the use of welders and torches. Pre-construction clearance of vegetation

[47] See Section 3.20.1 and the Fire Hazard Assessment prepared for the Project (Appendix R) for additional discussion about applicable regulatory standards and industry standard practices that would reduce wildfire risks associated with the Project's construction activities.

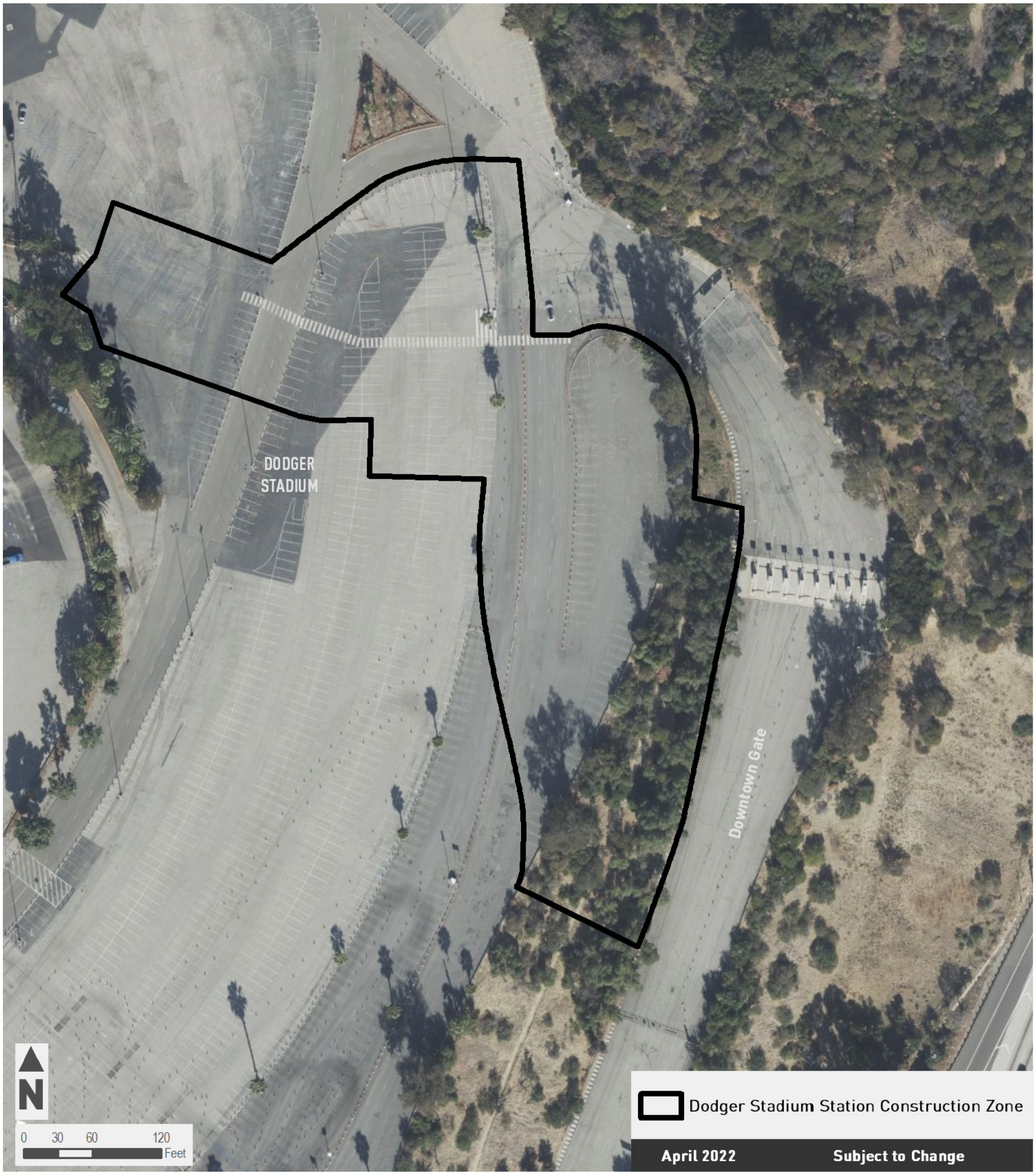


Figure 3.20-8: Dodger Stadium Station – Construction Zone

on the Dodger Stadium Station site and regulatory compliance measures reduce the risk of ignition on-site from falling slag and splatter produced from welding. In addition, because Dodger Stadium Station will be sited at-grade, there is a low hazard of sparks being picked up and carried by winds across the Dodger Stadium parking lot or the multi-lane access road to Dodger Stadium's Downtown Gate to locations with fuels.

Accordingly, the proposed Project has a less than significant potential to exacerbate wildfire risks at the Dodger Stadium Station site during construction because the site is surrounded by a paved parking lot and access roads that minimize the risk of fire spread, the pre-construction clearance of vegetation on the construction site would inhibit onsite ignitions and fire spread, and the proposed Project would comply with regulatory standards and industry standard practices designed to avoid or reduce fire risks associated with construction activities.[48] Nevertheless, to provide additional environmental benefits and further reduce fire risks, the proposed Project would incorporate the project design features outlined in WFR-PDF-A prior to/during construction for the proposed Project at the Dodger Stadium Station site including fire safety training for all construction employees and implementation of tiered fire watches with increased staff and/or duration following the completion of hot-work operation, prohibiting hot work construction activities during Red Flag Warnings, ongoing fire inspections during construction, and other measures based on the potential for weather conditions that may increase the potential for sparks to be carried by the wind and result in ignition (i.e., the potential for high wind events, high temperature, and/or low relative humidity).

Rope Pulling Activities

No construction activities would occur on the ground in the portion of the alignment between Broadway Junction and Stadium Tower. Cable installation and system testing would occur following the construction of the proposed Project's stations, junction, and towers. These activities do not require any hot work or other activities prone to ignition or the production of sparks. Cable installation requires the placement of an initial thin, light line rope from one end to the other, which will be used to pull progressively larger cables. Initial placement is anticipated to be flown. Once the initial rope is placed and secured at each end, one end of the rope is attached to the next larger rope, which is then pulled from its spool to the pulling location. Once the second rope has been pulled, it is secured, then one end is attached to the next rope and the process is repeated until the final cable is in place. Pulling activities otherwise require a 50-100hp diesel hydrostat winch at Broadway Junction and Dodger Stadium Station. Risks of ignition from this equipment are low due to its location at the constructed Broadway Junction and Dodger Stadium Station away from any potential fuel sources. Accordingly, rope pulling activities are not anticipated to present any fire hazards or ignition risks for the fuels below the portion of the proposed alignment within the VHFHSZ.

The proposed Project would be constructed consistent with applicable codes, regulations, and best construction practices such that the proposed Project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant. Nevertheless, in order to provide additional environmental benefits and further reduce the potential for wildfire risks, WFR-PDF-A and WFR-PDF-B will be incorporated.

---

48 See Section 3.20.1 and the Fire Hazard Assessment prepared for the proposed Project (Appendix R) for additional discussion about applicable regulatory standards and industry standard practices that would reduce wildfire risks associated with the proposed Project's construction activities.

Operational Impacts

Less Than Significant Impact. Alameda Station, Alameda Tower, Alpine Tower, and Chinatown/State Park Station would operate outside of the VHFHSZ. Each of these components is sited in an urbanized setting, typically classified as non-burnable, without expanses of vegetative fuels, or terrain that can alter wind patterns and speeds. Surrounded primarily by residential and commercial buildings and a network of fire hydrants and fire stations, operation of these components would not exacerbate wildfire risks.

No housing units are proposed as part of the proposed Project, a first/last mile transit connection from LAUS to Dodger Stadium. As such, the proposed Project would not result in new ignition sources to a VHFHSZ that could exacerbate wildfire risks due to the introduction of people to the area. The proposed Project would provide infrastructure through an ART system within highly urbanized downtown Los Angeles. While the proposed Project would introduce Broadway Junction, Stadium Tower, and Dodger Stadium Station, and associated ART cables and cabins, within the VHFHSZ, these components are located within a highly urbanized area, and on a developed site, or in locations otherwise largely confined by paved roads and/or paved parking lots. These components would not substantially change existing wind patterns to funnel or accelerate wind speeds. Similarly, Stadium Tower would not be of a height or mass that could alter prevailing wind patterns.

As such, these proposed Project components would not exacerbate wildfire risk in the area either through substantial changes to slope, or changes to wind patterns in the area that could funnel or accelerate wind speeds and in this VHFHSZ. Therefore, operation of the proposed Project would not exacerbate the risks of wildfire due to slope or winds.

Backup power would be provided by battery storage located within developed areas at the proposed Project’s stations, towers, and junction as a backup power source. The battery storage system would be tested on a regular basis and would be compliant with Chapter 12 of the LAFC, which includes permit, seismic and structural design, and service and maintenance requirements. Broadway Junction and Dodger Stadium Station would be comprised of concrete walls, structural steel, and metal roof canopies, and Stadium Tower would be composed of structural steel and concrete. These building materials are not highly flammable and would comply with the LAFC and California Building Code. Additionally, landscaping at Broadway Junction and Dodger Stadium Station would be maintained and would not provide fuel for wildfires.

Operations of the proposed Broadway Junction, Stadium Tower, and Dodger Stadium Station are not anticipated to present fire hazards because there are no known ignition sources resulting from standard operation of the proposed ropeway. The proposed Dodger Stadium Station also includes an enclosed basement for cabin storage and maintenance. While maintenance activities may include welding, the maintenance would occur within the developed envelope of the site and would not be exposed to high full loads, and operational policies, worker training and regulatory compliance would minimize risks from such actions. Accordingly, operations of the proposed Broadway Junction, Stadium Tower, and Dodger Stadium Station would not introduce a significant wildfire risk or significantly exacerbate existing wildfire risks within the VHFHSZ. Operations along the proposed Project alignment between Broadway Junction and Stadium Tower and between Stadium Tower and Dodger Stadium Station consists only of cabins traveling along the ropeway, and are therefore not anticipated to present fire hazards because there are no known ignition sources resulting from standard operation of the proposed ropeway.

The proposed Project would be operated in accordance with applicable building and fire codes and, therefore, would not exacerbate wildfire risks along the proposed Project alignment or within a proposed Project component site, nor would operations expose riders of the ART system to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant.

WFR-3: *Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

Construction Impacts

Less Than Significant Impact. The proposed Project would require utility relocations prior to construction, as discussed in Section 3.19, Utilities. These utility relocations would be coordinated directly with the utility providers. Construction of the proposed Project would require the use of electricity for on-site construction trailers and various equipment, and some temporary power poles are anticipated to be installed in the vicinity of the proposed Project component sites. Water required for construction activities, such as for mixing with concrete and dust abatement as well as for fire protection in accordance with LAFC section 3312, would be provided by existing water hydrants, water trucks, and potentially temporary water lines during construction activities. For areas with no water hydrants, water trucks would be brought on-site during construction activities. As discussed in Section 3.19, Utilities, the LADWP invests in drought-resilient sources of potable water, which would be used for these construction activities.

No roads, fuel breaks, or emergency water sources would be required during construction activities for the proposed Alameda Station, Alameda Tower, Alpine Tower, and Chinatown/State Park Station. Construction of these proposed Project components may require relocation of utilities, as detailed in Section 3.19, Utilities. As described in WFR-2, construction activities may involve the use of equipment that could generate a spark. However, construction activities and installation of temporary power lines and relocation of utilities in the area of these proposed Project components would not exacerbate fire risk because construction would be located in developed, urban areas surrounded by a network of fire hydrants and fire stations, and subject to strict design and construction standards, as required by LADWP, the LAFC, and Los Angeles Municipal Code. As described in Section 3.20.2, Environmental Setting, the Alameda Station, Alameda Tower, Alpine Tower, and Chinatown/State Park Station portions of the proposed Project are not located within a VHFHSZ and have a low fire risk potential. Potential impacts from utility installations at these sites would be less than significant.

No roads, fuel breaks, or emergency water sources would be required during construction activities for the proposed Broadway Junction. Construction of Broadway Junction may require the relocation of a storm drain pipeline, one underground LADWP power line, SoCalGas natural gas pipelines, and a telecommunications line, which will occur in previously disturbed areas. Construction activities may also require the aboveground LADWP power line and telecommunications to be undergrounded along Bishops Road and along North Broadway in previously disturbed urban areas. As described in WFR-2, construction activities may involve the use or equipment that could generate a spark. However, construction activities and installation of temporary power lines and relocation of utilities would not exacerbate fire risk at the Broadway Junction site because construction activities, including the relocation activities, would be located in previously developed urban areas with low fire potential surrounded by a network of fire hydrants and fire stations. Further, the construction activities would be subject to strict design and construction standards, as required by LADWP, the LAFC, and Los Angeles Municipal Code. Potential impacts from utility installations at this site would be less than significant.

A 12-foot temporary access way would be provided during construction of the Stadium Tower approximately 100 feet from the nearest ROW on Stadium Way, due to its location on a slope and/or hillside. Additionally, construction of the Stadium Tower may require a temporary transformer. There are no existing power lines in the area to easily draw power from. Therefore, if permitted, a new power line would be installed underground, stemming from an existing underground manhole. This underground line would eventually become the permanent power line for Stadium Tower. Construction activities associated with the temporary access way and installation of underground power lines may involve the use of equipment that could generate a spark, as described above under WFR-2. As discussed in WFR-2, the proposed Project has a less than significant potential to exacerbate wildfire risks at the Stadium Tower site during construction because the site is surrounded by wide roads to the south, east and west that minimize the risk of fire spread, the pre-construction clearance of vegetation on the site would inhibit onsite ignitions and fire spread to the northeast, and the proposed Project would comply with regulatory standards and industry standard practices designed to avoid or reduce fire risks associated with construction activities. Stadium Tower would be located in a VHFHSZ, in an area with grass and a few mature and sapling trees, and surrounded by steep grassy slopes. However, pre-construction clearance of vegetation, regulatory compliance, including those regarding hot work, the provision of water for fire protection as soon as combustible material arrives on site, and the use of internal combustion engines, and the implementation of recommended best construction practices would minimize fire risks.

Nevertheless, as discussed in WFR-2, the proposed Project will also incorporate the project design features in WFR-PDF-A and WFR-PDF-B prior to/during construction. WFR-PDF-A includes construction-related project design features that will be incorporated prior to/during construction at the Stadium Tower site, such as fire safety training for all construction employees, implementation of tiered fire watches with increased staff and/or duration following the completion of hot-work operation, installing underground power lines, prohibiting hot work construction activities during Red Flag Warnings, ongoing fire inspections during construction, and other measures. WFR-PDF-B requires the provision of a buffer area of at least 70 feet around the construction site, consisting of barren earth and removal or thinning of any dry grass and low to moderate shrubs in the site footprint. Such a buffer would reduce the potential for spread to the vegetated hillside to the northeast. This buffer provides an additional 35 feet of clearance beyond the NFPA 51B (Standard for Fire Prevention During Welding, Cutting, and Other Hot Work) requirement to maintain a 35 foot distance from combustibles (Section 5.5.1.3) during hot work activities.

No new roads, fuel breaks, or emergency water sources would be required during construction activities for the proposed Dodger Stadium Station. Construction of Dodger Stadium Station may require temporary power poles running from Dodger Stadium over the existing paved parking lot, minimizing the potential fire risk because the temporary power line would not be located over or adjacent to fuels. Accordingly, installing temporary power lines at Dodger Stadium Station would have a less than significant impact on fire spread due to the location on an existing, paved surface and with regulatory compliance and industry standard practice during construction. Nevertheless, to provide additional environmental benefits and further reduce fire risks, the proposed Project would incorporate the project design features outlined in WFR-PDF-A prior to/during construction at Dodger Stadium Station site including fire safety training for all construction employees, implementation of tiered fire watches with increased staff and/or duration following the completion of hot-work operation, prohibiting hot work construction activities during Red Flag Warnings, ongoing fire inspections during construction, and other measures.

Accordingly, construction impacts related to the installation or maintenance of associated infrastructure would be less than significant.

Operational Impacts

Less Than Significant Impact. Operation of the proposed Project would not require new roads, or emergency water sources. The utilities installed during construction of the proposed Project components would be located underground and would not exacerbate fire risks. Power requirements of normal operations would be provided by LADWP's Green Power Program, through a connection to their power grid. As discussed in Section 3.19, Utilities, the connection to the LADWP power grid would be through installation of permanent, underground power lines to connect conduit from the proposed Project to existing underground electrical vaults in order to operate the gondola system and its non-gondola system components (i.e., lights, ventilation, escalators, elevators).

Battery storage would be located within developed areas at the proposed Project's stations, towers, and junction as a backup power source. The battery storage system would be tested on a regular basis and would be compliant with Chapter 12 of the LAFC, which addresses electrical energy storage systems designed to provide electrical power to a building or facility, including for use as standby or emergency power, and includes permit and service and maintenance requirements. The storage systems would be located on developed sites without potentially flammable fuel loads in close proximity. Accordingly, battery storage would not significantly exacerbate fire risk.

Therefore, operational impacts related to the installation or maintenance of associated infrastructure would be less than significant.

WFR-4: *Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

Construction and Operational Impacts

Less Than Significant Impact.

Alameda Station, Alameda Tower, Alpine Tower, Chinatown/State Park Station, and Broadway Junction would not be located in hillside areas. Each of these proposed Project components would be sited in an urbanized setting, on relatively level terrain and served by City storm drains, which minimizes the risks associated with post-fire slope instability or drainage changes. Impacts at these sites would be less than significant.

Stadium Tower is surrounded on three sides by existing roadways that reduce the risk of a landslide originating from the site. The slope at Stadium Tower would not substantially change compared to existing conditions because the tower would be designed to be built into the hillside. The foundation for Stadium Tower would include piles installed to depths of up to 120 feet. The proposed Stadium Tower would not significantly increase the post-fire risk of landslides from slope instability because the tower foundation's small footprint (approximately 856 square feet) would minimize vegetation loss and soil exposure compared to existing conditions and the proposed Project's implementation of regulatory compliance measures would reduce erosion potential. As discussed in Section 3.10, Hydrology and Water Quality, a Storm Water Pollution Prevention Plan and an erosion control plan would be implemented during proposed Project construction as part of regulatory compliance to prevent substantial erosion and changes to drainage patterns that could affect downslope areas. Operation of the proposed Project would not result in substantial erosion or changes to drainage patterns. Accordingly, the proposed Project would have a less than significant impact on post-fire drainage changes. In addition, the Fire Hazard Assessment's search of CAL FIRE's Historic Fire Perimeter database did not yield any historic fires on the Stadium Tower construction site. Therefore, Stadium Tower is not located on a site that has been previously damaged from fire such that the proposed Project would exacerbate the risk of post-fire slope instability related to past fires.

The proposed Dodger Stadium Station would be located in the southeast portion of the Dodger Stadium property near the Downtown Gate. The site of the Dodger Stadium Station currently contains a paved surface parking area, drive aisle, and a landscaped berm that minimizes the risk of a landslide originating from the site. The slope for Dodger Stadium Station would not substantially change compared to existing conditions as the proposed Project components would be designed to be built into the hillside and the Dodger Stadium Station foundation would include piles installed to depths of up to 55 feet. Due to the paved parking lot surrounding the station, the proposed Dodger Stadium Station would not significantly increase the risk of landslides due to post-fire slope instability because of minimal vegetation loss and soil exposure compared to existing conditions. As discussed in Section 3.10, Hydrology and Water Quality, a Storm Water Pollution Prevention Plan and an erosion control plan would be implemented during proposed Project construction as part of regulatory compliance to prevent substantial erosion and changes to drainages patterns that could affect downslope areas. Operation of the proposed Project would not result in substantial erosion or changes to drainage patterns. Accordingly, the proposed Project would have a less than significant impact on post-fire drainage changes. In addition, Fire Hazard Assessment's search of CAL FIRE's Historic Fire Perimeter database did not yield any historic fires on the Dodger Stadium Station construction site. One historic fire occurred on the Dodger Stadium property generally, but this fire occurred in 1957, prior to the construction of Dodger Stadium, and therefore does not reflect current conditions. Therefore, the Dodger Stadium Station is not located on a site that has been previously damaged from fire such that the proposed Project would exacerbate the risk of post-fire slope instability related to past fires.

As described in Section 3.7, Geology and Soils, because the Stadium Tower and Dodger Stadium Station sites are located in a City-designated hillside area, they are potentially susceptible to landslides. However, as discussed above, the proposed Project would have a less than significant impact on risks associated with post-fire landslides because these sites are generally surrounded by existing roads and parking areas that minimize the risk of landslides originating from the sites, the slope of the sites would not substantially change during or after construction compared to existing conditions, and the proposed Project will comply with regulatory standards to avoid or reduce erosion that could contribute to post-fire soil instability. It is also noted that these sites would be subject to a site-specific geotechnical review and geotechnical recommendations as described in Section 3.7, Geology and Soils.

For these reasons, the proposed Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant.

WFR-5: *Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

Construction

Less Than Significant Impact. The proposed Alameda Station, Alameda Tower, Alpine Tower, and Chinatown/State Park Station would be constructed outside of the VHFHSZ and in developed areas that would not be subject to increased fire risks from construction of the proposed Project. As discussed in Section 3.20.2 above, there are industrial, residential, and commercial buildings along Alameda Street, where Alameda Station, Alameda Tower, and Alpine Tower are proposed, with a very low potential for providing fuel for wildfires. Although some ornamental vegetation and green space is present, the vegetation is irrigated and unlikely to provide fuels for wildfires. Similarly, the proposed Chinatown/State Park Station site is located at the western edge of Los Angeles State Historic Park, which is irrigated and maintained, providing limited fuel for wildfires.

As such, the areas comprising and around the proposed Alameda Station, Alameda Tower, Alpine Tower, and Chinatown/State Park Station are not characterized by features with a high potential to ignite or spread wildfires. Due to the developed nature of these sites and adjacent areas surrounded by a network of fire hydrants and fire stations, construction activities associated with the proposed Alameda Station, Alameda Tower, Alpine Tower, and Chinatown/State Park Station would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

As discussed above for Threshold WFR-2, the northern portion of the proposed Project alignment is located within an identified VHFHSZ, including Broadway Junction, Stadium Tower, and Dodger Stadium Station, as well as the cables and cabins between these components. The Broadway Junction site is currently developed with an office building and ancillary uses and is surrounded by low-rise residential and commercial uses to the north and east. Due to the developed nature of the site and adjacent areas surrounded by a network of fire hydrants and fire stations, construction activities associated with Broadway Junction is not anticipated to expose people or structures to a significant risk of loss, injury or death involving wildland fires.

As discussed above for Threshold WFR-2, Stadium Tower and Dodger Stadium Station would be constructed within the VHFHSZ. The Stadium Tower construction zone is adjacent to Stadium Way and is generally bounded by SR-110 to the east, a multi-lane access road to Dodger Stadium's Downtown Gate to the west, and a vegetated hillside to the northeast. The immediate area surrounding the Stadium Tower construction zone predominantly contains low load grass and barren landscape with areas of moderate to very high load grass, shrub, timber and both broad leaf and needle litter surface fuels. Mature trees are also present in the surrounding area nearby the SR-110 and a multi-lane access road to Dodger Stadium's Downtown Gate.

Construction of Dodger Stadium Station would occur on a built site characterized by a paved surface parking lot and adjacent to a small strip of low and moderate load, humid climate timber grass shrub, with moderate forest litter between the parking area and the multi-lane access road to Dodger Stadium's Downtown Gate to the east, which is well buffered by wide areas of paved parking areas and wide roads that limit direct fire spread into the larger vegetated areas to the north. Vegetation within the construction site would be removed prior to the start of construction, and therefore would not be a significant source of vegetative fuel that could exacerbate the risk of wildfire.

Certain phases of the construction of Stadium Tower and Dodger Stadium Station will require hot work activities. Hot work activities, including the use of welders and torches, could result in potential accidental ignition of fire and fire spread. However, the construction sites are largely surrounded by existing parking areas/roadways and pre-construction clearance of vegetation on the both the Stadium Tower and Dodger Stadium Station sites and regulatory compliance reduces the risk of on-site ignitions. In addition, because Dodger Stadium Station will be sited at-grade and surrounded by an existing parking lot and roadways, reducing the risk of any potential ignitions spreading offsite, there is a decreased risk of sparks being picked up and carried by winds across the Dodger Stadium parking lot or the multi-lane access road to Dodger Stadium's Downtown Gate to locations with fuels. Similarly, potential for spread to the east and west of Stadium Tower is already reduced by the wide roads that are adjacent to the site (the multi-lane access road to Dodger Stadium's Downtown Gate and SR-110, respectively), which serve to segment the proposed Stadium Tower site away from areas with higher risk fuel sources. Spread to the south of Stadium Tower is also reduced by the two-lane Stadium Way and SR-110 access ramps. Windrose data indicates that fire or ignition sources generally will not be driven to the vegetated areas to the north or northeast of the Stadium Tower site, but rather to the east towards the SR-110. Accordingly, as discussed in WFR-2, the proposed Project has a less than significant potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires due to construction of Stadium Tower or Dodger Stadium Station because the sites are surrounded by parking areas/road that minimize the risk of fire spread, the pre-construction clearance of vegetation on the site would inhibit onsite ignitions and fire spread to the northeast, and the proposed Project would comply with regulatory standards and industry standard practices designed to avoid or reduce fire risks associated with construction activities.

Nevertheless, to provide additional environmental benefits and further reduce fire risks, the proposed Project will incorporate the project design features in WFR-PDF-A and WFR-PDF-B prior to/during construction. WFR-PDF-A includes fire safety training for all construction employees, implementation of tiered fire watches with increased staff and/or duration following the completion of hot-work operation, prohibiting hot work construction activities during Red Flag Warnings, ongoing fire inspections during construction, and other measures based on the potential for weather conditions that may increase the potential for sparks to be carried by the wind and result in ignition (i.e., the potential for high wind events, high temperature, and/or low relative humidity) based on the potential for weather conditions that may increase the potential for sparks to be carried by the wind and result in ignition (i.e., the potential for high wind events, high temperature, and/or low relative humidity).

WFR-PDF-B requires the provision of a buffer area of either 70 feet or until the nearest paved roadway around the Stadium Tower construction site, consisting of barren earth and removal or thinning of any dry grass and low to moderate shrubs in the site footprint. Such a buffer would reduce the potential for spread to the vegetated hillside to the north. This buffer provides an additional 35 feet of clearance beyond the NFPA 51B (Standard for Fire Prevention During Welding, Cutting, and Other Hot Work) requirement to maintain a 35 foot distance from combustibles (Section 5.5.1.3) during hot work activities. The additional 35 feet of clearance would provide additional fire-prevention benefits to reduce the potential for ignition from falling slag and splatter produced from welding during hot work activities.

The proposed Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires with respect to evacuation or access during an emergency. As described in WFR-1, the proposed Project would not substantially impair implementation of an approved evacuation plan. If required during proposed Project construction, the proposed Project would be able to quickly modify or halt construction to allow the opening of roads or portions of roads to be utilized in the event of an emergency.

The proposed Project would be constructed consistent with applicable codes, regulations, and best construction practices such that the proposed Project would not, expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Impacts would be less than significant. Nevertheless, in order to provide additional environmental benefits and further reduce the potential for wildfire risks, WFR-PDF-A and WFR-PDF-B will be incorporated.

Operation

Less Than Significant Impact. Alameda Station, Alameda Tower, Alpine Tower, and Chinatown/ State Park Station would operate outside of the VHFHSZ. Each of these components is sited in an urbanized setting. Surrounded primarily by residential and commercial buildings and a network of fire hydrants and fire stations, operation of these components would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires and impacts would be less than significant.

As discussed above for Threshold WFR-2, the Broadway Junction, Stadium Tower, and Dodger Stadium Station, as well as associated ART cables and cabins, would operate within the VHFHSZ. Broadway Junction would be located in an area currently developed with an office building and ancillary uses. The Broadway Junction structures would not be highly flammable and would comply with the LAFC and California Building Code. In addition, operation would not present a fire hazard because there are no known ignition sources resulting from standard operation of the proposed ropeway. While maintenance activities may include welding, the maintenance would occur within the developed envelope of the site and would not be exposed to high fuel loads, and operational policies, worker training, and regulatory compliance would minimize risks from such actions. Broadway Junction would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires any more than existing conditions. Impacts would be less than significant.

Stadium Tower would be composed of structural steel and concrete. These building materials are not highly flammable and would comply with the LAFC and California Building Code. In addition, operation of Stadium Tower would not present a fire hazard because there are no known ignition sources resulting from standard operation of the proposed ropeway. While maintenance activities may include welding, the maintenance would occur within the developed envelope of the site and would not be exposed to high fuel loads, and operational policies, worker training, and regulatory compliance would minimize risks from such actions. Accordingly, operation of Stadium Tower would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires and impacts would be less than significant.

Similar to Broadway Junction, Dodger Stadium Station would be located in an existing paved parking lot for Dodger Stadium and would provide an additional transit option for spectators and visitors of Dodger Stadium, visitors of the Los Angeles State Historic Park and Elysian Park, and residents of the surrounding communities to connect to the regional transit system at LAUS; as such, the proposed Project would not increase the population at Dodger Stadium. The Dodger Stadium Station structures would not be highly flammable and would comply with the LAFC and California Building Code. In addition, operation would not present a fire hazard because there are no known ignition sources resulting from standard operation of the proposed ropeway. While maintenance activities may include welding, the maintenance would occur within the developed envelope of the site and would not be exposed to high fuel loads, and operational policies, worker training, and regulatory compliance would minimize risks from such actions. Therefore, Dodger Stadium Station would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires any more than existing conditions. Impacts would be less than significant.

Nevertheless, to provide additional environmental benefits and further reduce fire risks, the proposed Project will incorporate the project design features in WFR-PDF-C during operations. WFR-PDF-C requires that, during operation of Broadway Junction, Stadium Tower, and Dodger Stadium Station, security monitoring by staff and cameras shall be implemented. Project staff shall be trained to identify and report to the appropriate authority potential fire safety hazards, including the presence of sparks or smoke. Any fire ignited on site shall be promptly reported to LAFD.

Therefore, the proposed Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Impacts would be less than significant. Nevertheless, in order to provide additional environmental benefits and further reduce the potential for wildfire risks, WFR-PDF-C will be incorporated.

3.20.5 Project Design Features

WFR-PDF-A The Project will prepare a Fire Protection Plan, which will be implemented during construction of the Broadway Junction, Stadium Tower, and Dodger Stadium Station. The Fire Protection Plan will include the following measures that shall be implemented to the extent applicable in order to further reduce risks associated with ignition of wildland fire:

- Prior to the start of any construction activities, a Fire Prevention Program Superintendent shall be designated to interface with the LAFD and coordinate fire watch and site fire prevention and response.
- In exceedance of regulatory requirements, the Fire Prevention Program Superintendent shall prohibit hot work construction activities during Red Flag Warnings, which are issued for a stated period of time by the National Weather Service using pre-determined criteria to identify particularly critical wildfire danger in a particular geographic area.
- Prior to the start of any hot work construction activities, the Fire Prevention Program Superintendent will implement tiered fire watches with increased staff tasked with monitoring for ignitions during hot work activities (fire watch). The fire watch shall be provided during hot work and shall continue to monitor for a minimum of 30 minutes following completion of the hot work activities. The Fire Prevention Program Superintendent may determine during construction that this monitoring period be increased based on the potential for weather conditions that may increase the potential for sparks to be carried by the wind and result in ignition (i.e., the potential for high wind events, high temperature, and/or low relative humidity).
- Prior to the start of any construction activities, the construction manager in coordination with the Fire Prevention Program Superintendent shall provide site fire safety training for all construction crew members, including on the regulatory requirements set forth in Section 3.20.2, the proper use of firefighting equipment, and procedures to be followed in the event of a fire. Project staff shall be trained prior to the start of construction to identify and report to the appropriate authority potential fire safety hazards, including the presence of sparks or smoke. The construction manager shall maintain training records which will be available for review by Metro, the City, and LAFD.
- Prior to the start of construction, the construction area shall be cleared of all dead and downed vegetation and dead or dry leaves and pine needles from the ground. Trees within the construction area shall either be removed or trimmed to keep branches a minimum of 10 feet from other trees. Vegetation

within the construction area shall be controlled through periodic cutting and spraying of weeds.

- Ongoing fire safety inspections and patrols of the construction site shall be integrated into Project site security procedures for the duration of construction. The assigned fire patrols shall verify the proper tools and equipment are on site, serve as a lookout for fire starts, including participating in a fire watch to make sure no residual fire exists following the completion of the construction activity.
- Each construction area shall be equipped with fire extinguishers and firefighting equipment sufficient to extinguish small flames.
- The Fire Prevention Program Superintendent shall provide outreach and orientation services to responding fire stations including pre-staging measures prior to the start of hot work construction activities.
- Any fire ignited on site shall be promptly reported to LAFD.

WFR-PDF-B Prior to the start of construction, the Project shall provide a fuel modification zone surrounding the Stadium Tower construction site starting from the construction area perimeter of either 70 feet or until the nearest paved roadway that thins or removes all vegetation, dead or dry leaves and pine needles from the ground, and trims or remove trees to keep branches a minimum of 10 feet from other trees. The Stadium Tower construction site plan shows a buffer zone of 70 feet or to nearest paved roadway.

WFR-PDF-C During operation of Broadway Junction, Stadium Tower, and Dodger Stadium Station, security monitoring by staff and cameras shall be implemented. Project staff shall be trained to identify and report to the appropriate authority potential fire safety hazards, including the presence of sparks or smoke. Any fire ignited on site shall be promptly reported to LAFD.

3.20.6 Level of Significance after Mitigation

The proposed Project would result in less than significant impacts to wildfire.

4.0 ALTERNATIVES

4.1 INTRODUCTION

Alternatives have been considered in this Draft EIR to explore potential means to mitigate or avoid the significant environmental impacts associated with implementation of the proposed Project, while still achieving the primary objectives of the proposed Project. Pursuant to Section 15126.6(a) of the CEQA Guidelines, an EIR shall describe the range of reasonable alternatives, which may include alternatives to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen one or more of the significant effects of the project and evaluate the comparative merits of the alternatives. CEQA Guidelines Section 15126.6(a) further states that an EIR does not need to consider every conceivable alternative or consider alternatives that are infeasible, but rather only alternatives necessary to permit a reasoned choice. The alternative analysis must include an evaluation of the No Project Alternative in accordance with Section 15126.6(e) of the CEQA Guidelines to determine the consequences of not implementing the project. Through the identification, evaluation, and comparison of alternatives, the relative advantages and disadvantages of each alternative can be determined.

4.1.1 Project Impacts

Based on the environmental analysis conducted for the proposed Project, significant impacts requiring mitigation have been identified for:

- Section 3.4, Biological Resources
- Section 3.5, Cultural Resources
- Section 3.7, Geology and Soils
- Section 3.9, Hazards and Hazardous Materials
- Section 3.11, Land Use and Planning
- Section 3.13, Noise
- Section 3.15, Public Services
- Section 3.17, Transportation
- Section 3.18, Tribal Cultural Resources
- Section 3.19, Utilities and Service Systems
- Section 3.20, Wildfire

The Draft EIR identifies less than significant impacts for:

- Section 3.1, Aesthetics
- Section 3.2, Agriculture and Forestry Resources
- Section 3.3, Air Quality
- Section 3.6, Energy
- Section 3.8, Greenhouse Gas Emissions
- Section 3.10, Hydrology and Water Quality
- Section 3.14, Population and Housing
- Section 3.16, Recreation

The Draft EIR identifies no impacts for:

- Section 3.12, Mineral Resources

Significant and unavoidable impacts were identified for construction noise and construction vibration (human annoyance). In accordance with CEQA Guidelines Section 15126.6(d), each alternative has been evaluated below in sufficient detail to determine whether the overall environmental impacts of the alternative would be less than, similar to, or greater than the corresponding impacts identified for the proposed Project.

4.1.2 Project Objectives

Chapter 2.0, Project Description, of this Draft EIR sets forth the proposed Project’s underlying purpose and a list of project objectives. The overall purpose of the proposed Project is to provide a direct transit connection between LAUS and the Dodger Stadium property via an aerial gondola system, and improve connectivity for the surrounding communities by linking to the Los Angeles State Historic Park, Elysian Park, and the region’s rapidly growing regional transit system at LAUS. Aerial rapid transit (ART) is a proven, safe, sustainable, high-capacity, and highly efficient form of transportation that would function as both a reliable rapid transit system and first/last mile connector. In addition, the proposed Project would welcome visitors to Los Angeles.

The proposed Project objectives are as follows:

- Expand mobility options for transit riders through a direct connection between LAUS and Dodger Stadium, a regional event center.
- Attract new transit riders to the Metro system through a unique experience connecting to Dodger Stadium.
- Improve the Dodger Stadium visitor experience by providing efficient, high-capacity, and faster alternative access to Dodger Stadium.
- Enhance safety of neighborhoods adjacent to Dodger Stadium by reducing the number of vehicles in the area.
- Reduce transportation related pollution and greenhouse gas (GHG) emissions as a result of reduced vehicular congestion in and around Dodger Stadium, on neighborhood streets, arterial roadways, and freeways during game and special event days.
- Increase connectivity of people to the region’s public transportation hub at LAUS and the Dodger Stadium property.
- Improve transit rider experience by providing unique scenic views of the Los Angeles area to ART passengers and Dodger fans.
- Bring a world class aerial transit system to the Los Angeles area.
- Enhance community connectivity by providing first/last mile transit and pedestrian access to areas that have historically been underserved, including the Los Angeles State Historic Park and Elysian Park.
- Identify comparable, affordable, and accessible fare opportunities for community and Los Angeles State Historic Park and Elysian Park access.
- Minimize the Project’s environmental footprint through the integration of sustainability and environmentally-friendly design features into the materials, construction, operations, and maintenance of the proposed Project.

- Provide a sustainable form of transit by operating the ART system with the use of zero emission electricity with battery storage backup in order to reduce GHG emissions and improve air quality.
- Maximize the Project's alignment along the public ROW and minimize aerial rights requirements over private properties, taking into account existing and future adjacent land uses.

4.1.3 Project Alternatives and Conformance with Objectives

The Draft EIR has identified two project alternatives in addition to the No Project Alternative, the analysis of which is required by CEQA. The project alternatives, which are described in detail in Section 4.2.2, are as follows:

- No Project Alternative
- Spring Street Alignment Alternative
- Transportation Systems Management (TSM) Alternative

Analysis of how well the proposed Project and each alternative would fulfill the project objectives is summarized in Table 4-1, Project Objective Conformance, and discussed below.

Table 4-1 Alternatives Conformance with Objectives

Objective	No Project Alternative	The Proposed Project	Spring Street Alignment Alternative	Transportation Systems Management Alternative
Objective 1: Expand mobility options for transit riders through a direct connection between LAUS and Dodger Stadium, a regional event center.	○	●	●	◑
Objective 2: Attract new transit riders to the Metro system through a unique experience connecting to Dodger Stadium.	○	●	●	○
Objective 3: Improve the Dodger Stadium visitor experience by providing efficient, high-capacity, and faster alternative access to Dodger Stadium.	○	●	●	◑
Objective 4: Enhance safety of neighborhoods adjacent to Dodger Stadium by reducing the number of vehicles in the area.	○	●	●	◑

Table 4-1 Alternatives Conformance with Objectives

Objective	No Project Alternative	The Proposed Project	Spring Street Alignment Alternative	Transportation Systems Management Alternative
Objective 5: Reduce transportation related pollution and greenhouse gas (GHG) emissions as a result of reduced vehicular congestion in and around Dodger Stadium, on neighborhood streets, arterial roadways, and freeways during game and special event days.	○	●	●	◑
Objective 6: Increase connectivity of people to the region's public transportation hub at LAUS and the Dodger Stadium property.	○	●	●	◑
Objective 7: Improve transit rider experience by providing unique scenic views of the Los Angeles area to ART passengers and Dodger fans.	○	●	●	○
Objective 8: Bring a world class aerial transit system to the Los Angeles area.	○	●	●	○
Objective 9: Enhance community connectivity by providing first/last mile transit and pedestrian access to areas that have historically been underserved, including the Los Angeles State Historic Park and Elysian Park.	○	●	●	○
Objective 10: Identify comparable, affordable, and accessible fare opportunities for community and Los Angeles State Historic Park and Elysian Park access.	○	●	●	○
Objective 11: Minimize the Project's environmental footprint through the integration of sustainability and environmentally-friendly design features into the materials, construction, operations, and maintenance of the proposed Project.	○	●	◑	●

Table 4-1 Alternatives Conformance with Objectives

Objective	No Project Alternative	The Proposed Project	Spring Street Alignment Alternative	Transportation Systems Management Alternative
Objective 12: Provide a sustainable form of transit by operating the ART system with the use of zero emission electricity with battery storage backup in order to reduce GHG emissions and improve air quality.	○	●	●	○
Objective 13: Maximize the Project's alignment along the public ROW and minimize aerial rights requirements over private properties, taking into account existing and future adjacent land uses.	N/A	●	●	N/A

Source: AECOM 2022
● = Good Conformance ◑ = Moderate Conformance ○ = Poor Conformance

4.1.3.1 Objective 1: Expand Mobility Options for Transit Riders

The proposed Project and Spring Street Alignment Alternative would meet this objective by providing a new direct connection for transit riders between LAUS and Dodger Stadium. The Transportation Systems Management (TSM) Alternative moderately meets this objective, as the Union Station Dodger Stadium Express (DSE) service would be enhanced to increase the capacity of the DSE to match that of the proposed Project; however, the Union Station DSE is already existing and would not qualify as an expansion of mobility options for transit riders. The No Project Alternative would not provide a new direct connection for transit riders between LAUS and Dodger Stadium.

4.1.3.2 Objective 2: Attract New Transit Riders to the Metro System

The proposed Project and Spring Street Alignment Alternative would meet this objective by providing a unique experience connecting to Dodger Stadium, which would attract new transit riders to the Metro system. The TSM Alternative and No Project Alternative would not meet this objective, as neither alternative provides a unique experience connecting to Dodger Stadium.

4.1.3.3 Objective 3: Provide Efficient, High-Capacity, and Faster Alternative Access to Dodger Stadium

The proposed Project and Spring Street Alignment Alternative would meet this objective by providing a new ART system that would provide efficient, high-capacity, and faster alternative access to Dodger Stadium. The TSM Alternative moderately meets this objective, as the Union Station DSE service would provide high-capacity alternative access to Dodger Stadium through the increased capacity of the DSE to match that of the proposed Project, but would not provide a faster or more efficient alternative as compared to the proposed Project. The No Project Alternative would not provide efficient, high-capacity, and faster alternative access to Dodger Stadium.

4.1.3.4 Objective 4: Enhance Safety of Neighborhoods Adjacent to Dodger Stadium

The proposed Project and Spring Street Alignment Alternative would meet this objective by providing a new ART system that would reduce the number of vehicles in neighborhoods adjacent to Dodger Stadium by providing alternative access to Dodger Stadium. The TSM Alternative moderately meets this objective, as the DSE service would provide high-capacity alternative access to Dodger Stadium through the increased capacity of the DSE to match that of the proposed Project, which has the potential to reduce the number of vehicles in neighborhoods adjacent to Dodger Stadium, but not to the same extent as the proposed Project. The No Project Alternative would not enhance safety of neighborhoods adjacent to Dodger Stadium as the number of vehicles in the area would not be reduced.

4.1.3.5 Objective 5: Reduce Transportation Related Pollution and GHG Emissions

The proposed Project and Spring Street Alignment Alternative would meet this objective by providing an ART system that would provide safe, zero emission, and high-capacity transit connectivity. Current vehicular emissions associated with events at Dodger Stadium result from passengers in vehicles traveling to the game along with employees (i.e., total Vehicle Miles Traveled (VMT)). By transitioning the passengers of these vehicles to the proposed Project or Spring Street Alignment Alternative, total VMT would be reduced along with corresponding reductions in transportation related pollution and GHG emissions as a result of reduced vehicular congestion in and around Dodger Stadium, on neighborhood streets, arterial roadways, and freeways during game and special event days. The TSM Alternative would moderately meet this objective, because while more passengers would transition from private vehicles to DSE buses, the TSM Alternative would still operate vehicles on the roadway, thereby contributing to VMT and some congestion in and around Dodger Stadium, on neighborhood streets, arterial roadways, and freeways during game and special event days. The No Project Alternative would not meet this objective, as it would not reduce vehicular congestion that would result in a reduction in transportation related pollution and GHG emissions.

4.1.3.6 Objective 6: Increase Connectivity to the Region’s Public Transportation Hub

The proposed Project and Spring Street Alignment Alternative would meet this objective by providing a new ART system that would increase connectivity of people to the region’s public transportation hub at LAUS and Dodger Stadium. The TSM Alternative moderately meets this objective, as the DSE service would provide high-capacity alternative access to Dodger Stadium through the increased capacity of the DSE to match that of the proposed Project, which has the potential to increase connectivity of people to the region’s public transportation hub at LAUS and Dodger Stadium. The No Project Alternative would not increase connectivity of people to the region’s public transportation hub at LAUS and Dodger Stadium.

4.1.3.7 Objective 7: Improve Transit Rider Experience by Providing Unique Scenic Views

The proposed Project and Spring Street Alignment Alternative would meet this objective by providing a new ART system that would improve the transit rider experience by providing unique scenic views of the Los Angeles area to ART passengers and Dodger fans, including unique scenic views of the downtown Los Angeles skyline, Dodger Stadium, Los Angeles State Historic Park, and Elysian Park. The TSM Alternative and No Project Alternative would not meet this objective, as neither alternative provides unique scenic views of the Los Angeles area.

4.1.3.8 Objective 8: Bring a World Class Aerial Transit System to Los Angeles

The proposed Project and Spring Street Alignment Alternative would meet this objective by bringing a new world class ART system to the Los Angeles area. The TSM Alternative and No Project Alternative would not meet this objective, as neither alternative would provide a new world class ART to the Los Angeles area.

4.1.3.9 Objective 9: Enhance Community Connectivity to Los Angeles State Historic Park and Elysian Park

The proposed Project and Spring Street Alignment Alternative would meet this objective by providing a new ART system that would enhance community connectivity by providing first/last mile transit and pedestrian access to areas that have historically been underserved, including the Los Angeles State Historic Park and Elysian Park. Both the proposed Project and Spring Street Alignment Alternative would provide stations at Los Angeles State Historic Park and Dodger Stadium, which is adjacent to Elysian Park, and would provide enhanced transit and pedestrian access to these areas. The TSM Alternative and No Project Alternative would not meet this objective, as neither alternative would enhance community connectivity to Los Angeles State Historic Park and Elysian Park.

4.1.3.10 Objective 10: Identify Fare Opportunities for Community and Los Angeles State Historic Park and Elysian Park Access

The proposed Project and Spring Street Alignment Alternative would meet this objective by identifying comparable, affordable, and accessible fare opportunities for community access (e.g., for residents and employees of businesses along the proposed Project alignment), as well as access to Los Angeles State Historic Park and Elysian Park through coordination with Metro and integration of the ART fare with the Metro fare system. The TSM Alternative and No Project Alternative would not meet this objective, as neither alternative would identify comparable, affordable, and accessible fare opportunities for community and Los Angeles State Historic Park and Elysian Park access.

4.1.3.11 Objective 11: Minimize the Project's Environmental Footprint

As discussed throughout this Draft EIR, the proposed Project would meet this objective by incorporating mitigation measures, project design features, and best management practices that would minimize the environmental footprint into the materials, construction, operations, and maintenance of the proposed Project. The Spring Street Alignment Alternative moderately meets this objective because, although it would include many of the same features to minimize its environmental footprint, it would not do so to the same extent as the proposed Project due to additional component of Bishop Tower. This alternative's environmental footprint will also be increased because of the generation of VMT by buses and associated emissions. As described above, the TSM Alternative would not include development of an ART system and would still operate existing DSE buses on the roadway. The TSM Alternative would involve minor modifications to the existing environment as described in detail below. The TSM Alternative would meet this objective, but not to the same extent as the proposed Project, because it would have higher VMT and therefore air quality and GHG emissions in comparison. The No Project Alternative assumes that no new development would occur on the Project site. Therefore, as the No Project Alternative would not include a development program, it would not have the ability to integrate sustainable and environmentally-friendly design features that would minimize the proposed Project's environmental footprint. Additionally, the No Project Alternative would not be able to provide the proposed Project's operational benefits of reduced VMT and air quality improvements. As such, the No Project Alternative would not have the ability to meet this objective.

4.1.3.12 Objective 12: Provide a Sustainable Form of Transit

The proposed Project and Spring Street Alignment Alternative would meet this objective by providing a sustainable ART system that would provide safe, zero emission, and high-capacity transit connectivity. Both the proposed Project and Spring Street Alignment Alternative would obtain power through renewable electricity, and as such, GHG emissions associated with electricity usage for gondola operations would be zero. The TSM Alternative and No Project Alternative would not meet this objective at this time, as neither alternative would provide a sustainable form of transit by operating the ART system with the use of zero emission electricity with battery storage backup in order to reduce GHG emissions and improve air quality.

4.1.3.13 Objective 13: Maximize the Project's Alignment and Minimize Aerial Requirements

The proposed Project and Spring Street Alignment Alternative would meet this objective by maximizing the alignment along the public ROW and minimizing aerial rights requirements over private properties, taking into account existing and future adjacent land uses. As the No Project Alternative and the TSM Alternative would not involve aerial alignments, this objective is not applicable to these two alternatives.

4.2 ALTERNATIVES DEVELOPMENT PROCESS

The intent of the alternatives analysis is to determine if there are feasible alternatives that would avoid or substantially reduce the significant impacts of a project. Based on the analysis in Section 3, Environmental Impact Analysis, of this Draft EIR, implementation of the proposed Project would result in significant and unavoidable impacts with regard to construction noise and ground-borne vibration impacts (human annoyance). The proposed Project would not result in any significant operational impacts.

CEQA Guidelines Section 15126.6(b) emphasizes that the selection of project alternatives be based primarily on the ability to reduce impacts relative to the proposed Project. In addition, CEQA Guidelines Section 15126.6(e)(2) requires the identification and evaluation of an "Environmentally Superior Alternative."

Pursuant to CEQA Guidelines Section 15126.6(d), discussion of each alternative presented in this EIR Section is intended "to allow meaningful evaluation, analysis, and comparison with the proposed project." The alternatives analysis need not be presented in the same level of detail as the proposed Project. Each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less than, similar to, or greater than the corresponding impacts of the proposed Project. Further, each alternative is evaluated to determine whether the proposed Project objectives identified in Section 2.0, Project Description, of this Draft EIR would be mostly attained by the alternative pursuant to CEQA Guidelines Section 15126.6(c). Based on the CEQA requirements described above, the evaluation of each of the alternatives follows the process described below:

- A description of the alternative.

- The environmental impacts of the alternative before and after implementation of reasonable mitigation measures for each environmental topic area.
- The environmental impacts of each alternative as compared to the proposed Project are identified for each environmental topic area addressed in this Draft EIR. Where the impact of the alternative would be clearly less adverse than the impact of the proposed Project, the comparative impact is said to be "less than the proposed Project." Where the impacts of the alternative and the proposed Project would be roughly equivalent, the comparative impact is said to be "similar to the proposed Project." Where the alternative's impact would clearly be more adverse than the proposed Project, the comparative impact is said to be "greater than the proposed Project." The evaluation also documents whether an impact would be entirely avoided, whether a significant impact could be reduced to a less than significant level, or whether a significant unavoidable impact could be reduced to a less than significant level when compared to the proposed Project.
- The comparative analysis of the impacts is followed by a general discussion of the extent to which the underlying purpose and project objectives are obtained by the alternative.

At the end of this chapter, a relative comparison of each alternative's impacts is provided. Additionally, pursuant to CEQA Guidelines Section 15126.6(e)(2), an "Environmentally Superior Alternative" is identified.

4.2.1 Alternatives Considered but Dismissed from Detailed Analysis

One of the requirements for an alternatives analysis that is set forth in the CEQA Guidelines is identification of alternatives that were considered by the lead agency but were dismissed as infeasible during the scoping process. As stated in Section 15126.6(c) of the CEQA Guidelines, the EIR should briefly explain the reasons underlying this determination. Among the factors that may be used to eliminate alternatives from detailed consideration in the EIR are:

(i) Failure to meet most of the basic project objectives,

(ii) Infeasibility, or

(iii) Inability to avoid significant environmental impacts (CEQA Guidelines Section 15126.6(c)).

Section 15126.6(f)(1) of the CEQA Guidelines states that "among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)." However, as stated in this subsection, no one of these factors establishes a fixed limit on the scope of reasonable alternatives.

In accordance with 15126.6(c) of the CEQA Guidelines, a reasonable range of alternatives was considered during the technical review process, including for alternative alignments and station locations.

Alternatives developed during the planning process for the proposed Project were not considered for further detailed analysis in this Draft EIR because the alternatives either did not meet most of the basic project objectives, were deemed to be infeasible, and/or would not substantially lessen the predicted environmental impacts of the proposed Project. The alternatives that were not further considered in detail are summarized below, including a brief description of the alternative and a determination of its infeasibility.

4.2.1.1 Alignment and Station Location Alternatives

Broadway Station Alignment Alternative

Similar to the proposed Project, the Broadway Station Alternative would be located in the City of Los Angeles, situated northeast of downtown Los Angeles, within the Downtown, Chinatown, Mission Junction, and Elysian Park communities.

The Broadway Station Alternative would commence adjacent to LAUS and El Pueblo de Los Angeles (El Pueblo) and terminate at Dodger Stadium. The Broadway Station Alternative would include three stations, a non-passenger junction, and three cable-supporting towers at various locations along the alignment.

The Broadway Station Alternative would have the following components in common with the proposed Project: Alameda Station, Alameda Tower, Stadium Tower, and Dodger Stadium Station. In addition to these components that would be common to the proposed Project, the Broadway Station Alternative would also include the following components that would be unique to this alternative: College Street Junction, Spring Tower, and North Broadway Station.

Under the Broadway Station Alternative, the proposed Alameda Station would be the same as the proposed Project, with it being constructed over Alameda Street between Los Angeles Street and Cesar E. Chavez Avenue, adjacent to the Placita de Dolores and planned LAUS Forecourt. From the Alameda Station, the Broadway Station Alternative would follow the same alignment as the proposed Project, remaining primarily above the public right-of-way (ROW) with portions above private property and traveling north along Alameda Street to the proposed Alameda Tower, which would be constructed on the Alameda Triangle, a portion of City ROW between Alameda Street, North Main Street, and Alhambra Street.

Unlike the proposed Project alignment, the Broadway Station Alternative would not include Alpine Tower. From Alameda Tower, the Broadway Station Alternative would continue north along Alameda Street and cross Alpine Street, following the public ROW and continuing over the elevated Metro L Line (Gold) tracks to College Street Junction, a non-passenger junction located on Alameda Street between Bruno Street and College Street. North of College Street, Alameda Street becomes Spring Street, and from College Street Junction, the Broadway Station Alternative would generally follow Spring Street in a northeast trajectory until it reached Spring Tower, located on City ROW near the southernmost portion of the Los Angeles State Historic Park.

From Spring Tower, the Broadway Station Alternative would continue in a northeast trajectory over the western edge of the Los Angeles State Historic Park and Metro L Line (Gold) tracks, to reach North Broadway Station, located at the northern corner of the intersection of North Broadway and Bishops Road (1201 North Broadway), the same location as the proposed Project's non-passenger Broadway Junction. North Broadway Station would be located primarily on privately-owned property with a portion of the station and overhead cable infrastructure cantilevered and elevated above the public ROW, similar to the proposed Project's non-passenger Broadway Junction.

From North Broadway Station, the Broadway Station Alternative would travel northwest primarily along Bishops Road, with portions above private property, crossing over SR-110 towards Dodger Stadium. The Broadway Station Alternative's Stadium Tower and Dodger Stadium Station would be located in the same location as the proposed Project. Figure 4-1 depicts the Broadway Station Alternative, including station, junction, and tower locations.

The Broadway Station Alternative was dismissed from further detailed consideration due to the inability to avoid significant environmental impacts and otherwise meet the project's objectives. The Broadway Station Alternative would include the same construction related impacts that would occur under the proposed Project, including a change in prominent views, such as views of the downtown Los Angeles skyline. This Alternative would cause greater potential viewshed impacts as compared to the proposed Project alignment from the Los Angeles State Historic Park and adjacent residential developments from the 204-foot-tall Spring Tower and higher ropeway and cabins. In addition, compared to the proposed Project, the addition of College Street Junction would result in additional road closures on Alameda Street.

The location of the intermediate station at the intersection of North Broadway and Bishops Road did not meet the proposed Project's objective to enhance community connectivity by providing first/last mile transit and pedestrian access to areas that have historically been underserved, including the Los Angeles State Historic Park and Elysian Park, nor increase connectivity to the region's public transportation hub at LAUS and the Dodger Stadium property, to the same extent as the proposed Project. Several comments on the Notice of Preparation requested an intermediate station closer to Chinatown to be located at the current Metro L Line (Gold) station to bring business into the commercial area and to offer another travel mode choice so as to alleviate parking problems in the area. Under this Alternative, the Broadway Station is located further from the core of Chinatown, the Mission Junction neighborhood, and entrance to the Los Angeles State Historic Park. In comparison, the proposed Project's Chinatown/State Park Station is closer to the Chinatown core and facilitates an easy connection to the Metro L Line (Gold) Station, thereby improving connectivity and access to the Los Angeles State Historic Park and regional transit system. The Chinatown/State Park Station enhances transit access to surrounding communities, including the Park, Chinatown, Mission Junction including William Mead Homes, Los Angeles River, and North Broadway. The Chinatown/State Park Station also provides the community benefit of Park amenities, including approximately 740 square feet of concessions, 770 square feet of restrooms, and a 220 square foot covered breezeway connecting the concessions and restrooms.

Additionally, the Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and the Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge.

Accordingly, this alternative was ultimately dismissed from further analysis in the Draft EIR due to inability to avoid significant environmental impacts and because it would not meet project objectives to the same degree as the proposed Project.

Combined Metro L Line (Gold) Station and College Street Station Alignment Alternative

Similar to the proposed Project, the Combined Metro L Line (Gold) Station and College Street Station Alignment Alternative would be located in the City of Los Angeles, situated northeast of downtown Los Angeles, within the Downtown, Chinatown, Mission Junction, and Elysian Park communities.

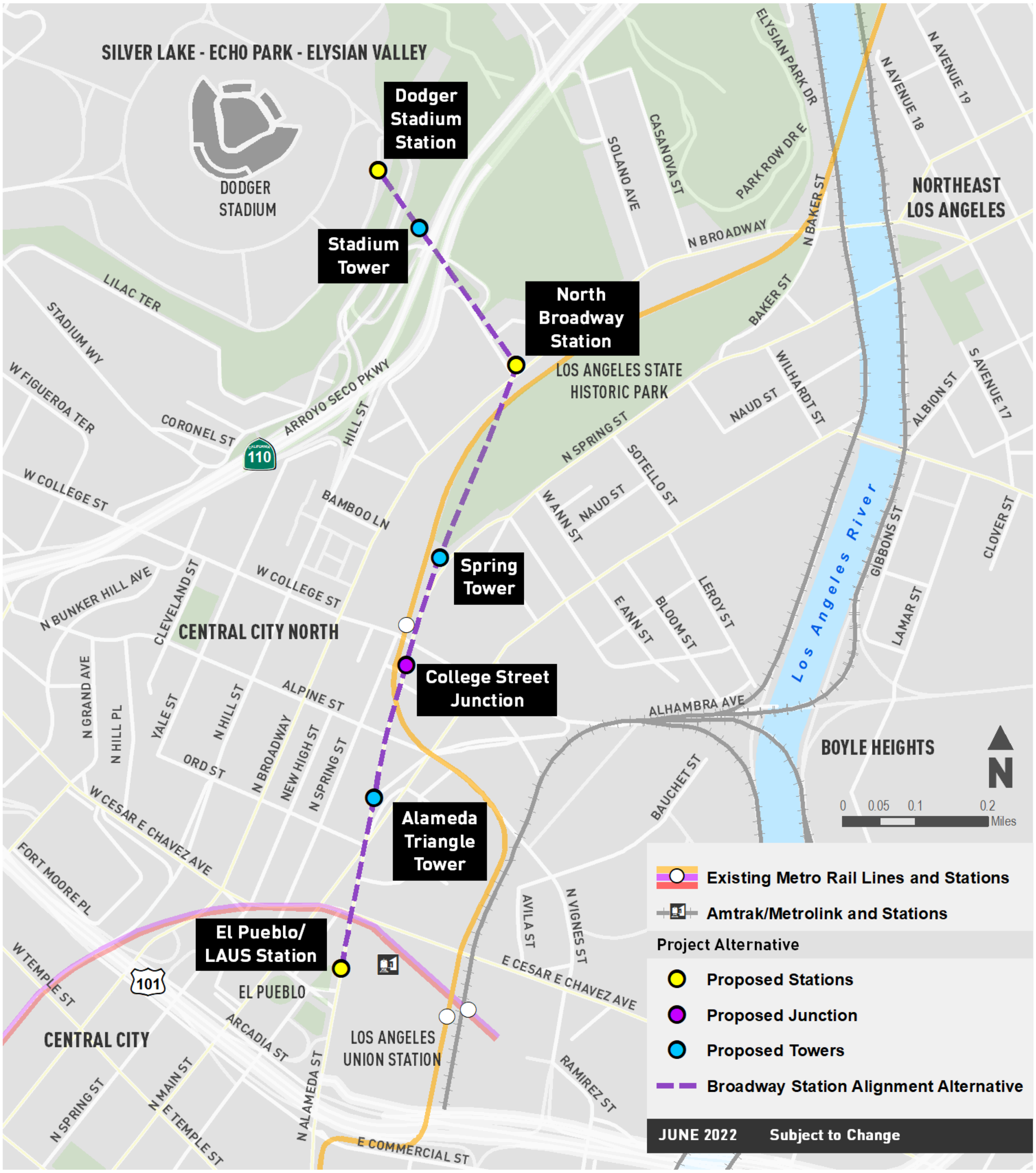


Figure 4-1: Broadway Station Alignment Alternative

The Combined Metro L Line (Gold) Station and College Street Station Alignment Alternative would commence adjacent to LAUS and El Pueblo de Los Angeles (El Pueblo) and terminate at Dodger Stadium. This Alternative would provide a direct connection from the Metro L Line (Gold) platform to the proposed College Street Station. The Combined Metro L Line (Gold) Station and College Street Station Alignment Alternative would include three stations, a non-passenger junction, and three cable-supporting towers at various locations along the alignment.

The Combined Metro L Line (Gold) Station and College Street Station Alignment Alternative would have the following components in common with the proposed Project: Alameda Station, Alameda Tower, Broadway Junction, Stadium Tower, and Dodger Stadium Station. In addition to these components that would be common to the proposed Project, the Combined Metro L Line (Gold) Station and College Street Station Alternative would also include the following components that would be unique to this alternative: College Street Station and Spring Tower.

The Combined Metro L Line (Gold) Station and College Street Station Alternative would extend approximately 1.3 miles beginning near El Pueblo and LAUS on Alameda Street. The proposed Alameda Station would be the same as the proposed Project, with it being constructed over Alameda Street between Los Angeles Street and Cesar E. Chavez Avenue, adjacent to the Placita de Dolores and planned LAUS Forecourt. From the Alameda Station, the Combined Metro L Line (Gold) Station and College Street Station Alternative would follow the same alignment as the proposed Project, remaining primarily above the public ROW with portions above private property and traveling north along Alameda Street to the proposed Alameda Tower, which would be constructed on the Alameda Triangle, a portion of City ROW between Alameda Street, North Main Street, and Alhambra Street.

Unlike the proposed Project, the Combined Metro L Line (Gold) Station and College Street Station Alternative would not include a tower at Alpine Street. From Alameda Tower, the Combined Metro L Line (Gold) Station and College Street Station Alternative would continue north along Alameda Street and cross Alpine Street, following the public ROW and continuing over the elevated Metro L Line (Gold) tracks to College Street Station, which would be constructed over Alameda Street with a portion over the existing Metro L Line (Gold) Station south of College Street and adjacent to the Metro L Line (Gold) Station. North of College Street, Alameda Street becomes Spring Street, and from the Combined Metro L Line (Gold) Station and College Street Station, this Alternative would generally follow Spring Street in a northeast trajectory until it reached Spring Tower, located on City ROW near the southernmost portion of the Los Angeles State Historic Park.

Similar to the proposed Project, the Combined Metro L Line (Gold) Station and College Street Station Alternative would include a non-passenger Broadway Junction at North Broadway, and Stadium Tower and Dodger Stadium Station would be located in the same location as the proposed Project.

Under this Alternative, the combined Metro L Line (Gold) Station and College Street Station would include the existing Metro L Line (Gold) Station platform and tracks on the lower level, with vertical circulation connecting passengers to a College Street Station above. Figure 4-2 depicts the cross-section of the combined Metro L Line (Gold) Station and College Street Station under this Alternative. The existing Metro L Line (Gold) Station is 60 feet tall at its tallest point. College Street Station would be approximately 134 feet tall at its tallest point.

The Combined Metro L Line (Gold) Station and College Street Station Alternative was dismissed from further detailed consideration due to technical infeasibility, and the inability to avoid significant environmental impacts and otherwise meet the project objectives.

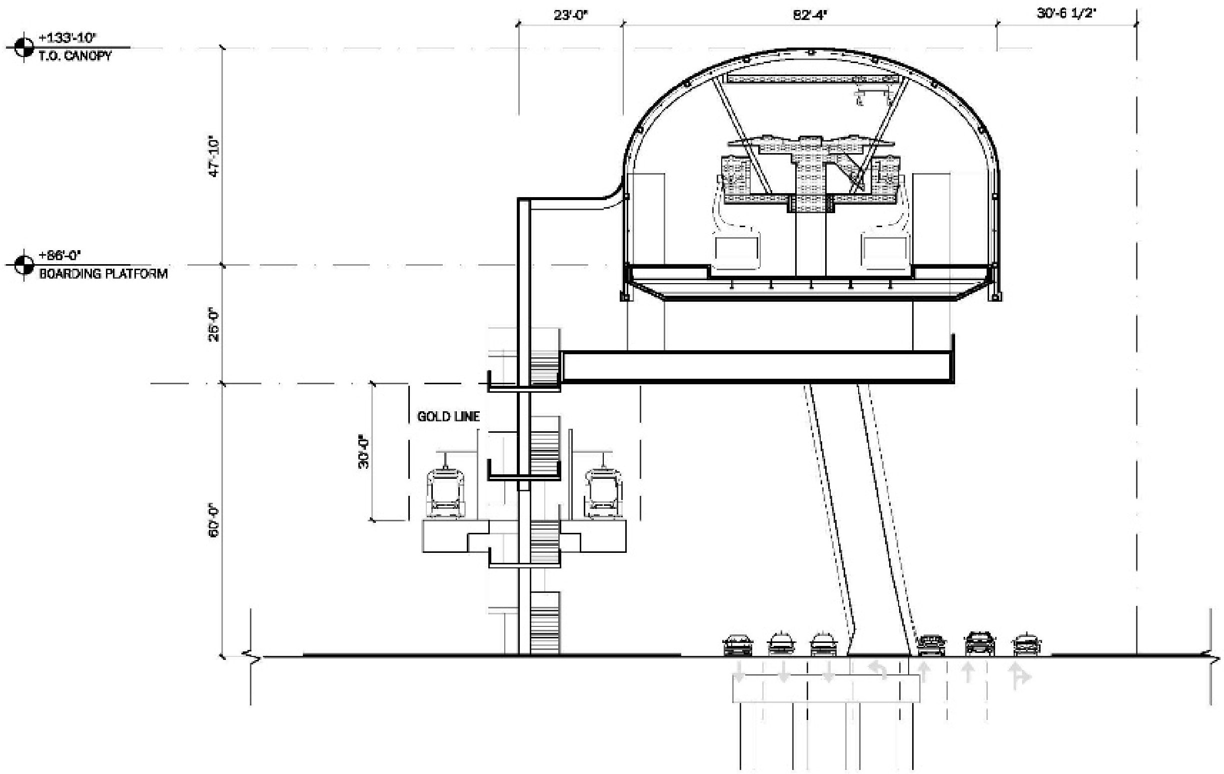


Figure 4-2: Combined Metro L Line (Gold) Station and College Street Station

Combining the Metro L Line (Gold) Station and the College Street Station was determined to be infeasible. During College Street Station construction, the Metro L Line (Gold) Station would need to be closed for at least 7 months, requiring a “bus bridge” between the Metro L Line Lincoln/Cypress station and Union Station for Metro passengers, impacting operations of the regional transit system. In addition, future maintenance and repair activities at the College Street Station would likely require closing the Metro L Line (Gold) Station. Further, it is anticipated that Metro bus stops at the Combined Metro L Line (Gold) Station and College Street Station location would likely need to be relocated to accommodate vertical circulation for the College Street Station.

Moreover, College Street Station would be 134 feet tall at its tallest point to be located above the Metro L Line (Gold) Chinatown Station’s platforms, tracks, vehicles, and catenary system. This Alternative has the potential to diminish the passenger experience, as the boarding platform for the station would be raised to approximately 86 feet above-grade, which would require additional vertical circulation to access the platform. Combining the Metro L Line (Gold) Station and College Street Station would require operational coordination with Metro via coordinated passenger ticketing and passenger capacity at the Metro L Line (Gold) Station platform and vertical circulation.

There are also space constraints in this location as to the vertical circulation to College Street Station boarding platform, including that vertical circulation may need to be located between the Metro L Line (Gold) tracks, potentially impacting the structure of the Metro L Line (Gold) Station.

The Combined Metro L Line (Gold) Station and College Street Station Alternative would include the same construction related impacts that would occur under the proposed Project, including impacts related to construction noise. Further, this Alternative would cause greater potential viewshed impacts as compared to the proposed Project from the Los Angeles State Historic Park and adjacent residential developments due to the increased height of Spring Tower (204 feet tall), as well as viewshed impacts due to increased height of College Street Station (133 feet tall) when compared to Chinatown/State Park Station (98 feet tall) under the proposed Project. The higher ropeways and cabins in these locations would also contribute to viewshed impacts in these areas.

In addition, the Combined Metro L Line (Gold) Station and College Street Station Alternative would not meet the proposed Project's objective to enhance community connectivity by providing first/last mile transit and pedestrian access to areas that have historically been underserved, including the Los Angeles State Historic Park and Elysian Park, and increase connectivity to the region's public transportation hub at LAUS and the Dodger Stadium property, to the same extent as the proposed Project. This Alternative would not provide the proposed Project's pedestrian improvements between Metro's L Line (Gold) Station and the entrance to the Los Angeles State Historic Park, as well as the Park amenities and mobility hub proposed for the Chinatown/State Park Station. The pedestrian connection is provided primarily for passengers transferring between the Metro L Line (Gold) and the proposed Project. As part of the coordination with the State Parks, with the addition of the Station, the entrance to the Park was reimagined, which is not required under this rejected alternative.

In comparison, Chinatown/State Park Station enhances transit access to surrounding communities, including the Park, Chinatown, Mission Junction including William Mead Homes, Los Angeles River, and North Broadway. Chinatown/State Park Station also provides the community benefit of Park amenities, including approximately 740 square feet of concessions, 770 square feet of restrooms, and a 220 square foot covered breezeway connecting the concessions and restrooms. Additionally, Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian improvements between Metro's L Line (Gold) Station and Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge. Overall, the community benefits listed above would not be constructed under this Combined Metro L Line (Gold) Station and College Street Station Alignment Alternative.

Therefore, this Combined Metro L Line (Gold) Station and College Street Station Alignment Alternative was ultimately dismissed from further analysis in the Draft EIR due to the infeasibility of College Street Station, inability to avoid significant environmental impacts, and because it would not meet project objectives to the same degree as the proposed Project.

Direct Alignment Alternatives

CEQA Guidelines section 15126.6(f)(2) provides guidance regarding consideration of one or more alternative location(s) for a proposed project, stating that putting the project in another location should only be considered if doing so would avoid or substantially lessen significant effects of the project; and if no feasible alternative locations exist, the EIR must disclose the reasons for this conclusion.

Similar to the proposed Project, the three Direct Alignment Alternatives would be located in the City of Los Angeles, situated northeast of downtown Los Angeles, within the Downtown, Chinatown, Mission Junction, and Elysian Park communities.

The three Direct Alignment Alternatives would commence at or near LAUS and terminate at Dodger Stadium. Two potential locations at LAUS were identified by Metro in 2017 through the LAUS Master Commercial Development Opportunity Site Descriptions document prepared for the LAUS Industry Forum as providing opportunities for private transit-oriented development on Metro-owned property. The third location was near LAUS property. The first Direct Alignment that was considered but dismissed from further consideration would commence west of the LAUS terminal's Amtrak and Metrolink tracks and to the east of the Amtrak offices that would proceed in a northeast trajectory, crossing the southernmost portion of the Los Angeles State Historic Park to reach Dodger Stadium. The second Direct Alignment that was considered but dismissed from further consideration would commence in the vicinity of the LAUS East Portal, across Cesar E. Chavez Avenue and proceed in a northeast trajectory, crossing over the southern third of the Los Angeles State Historic Park to reach Dodger Stadium. The third Direct Alignment that was considered but dismissed from further consideration would commence with Alameda Station located across Vignes Street and to the west of the Metro Garage and proceed in a northeast trajectory, crossing over the southern portion of the Los Angeles State Historic Park to reach Dodger Stadium. These three Direct Alignment Alternatives would include two stations and cable-supporting towers at various locations along the alignment. Figure 4-3 depict the three alternative Alameda Station locations and the resulting Direct Alignments.

Unlike the proposed Project, the three Direct Alignment Alternatives would extend directly from at or near LAUS to Dodger Stadium, without an intermediate station at the southernmost portion of the Los Angeles State Historic Park.

The three Direct Alignment Alternatives were dismissed from further detailed consideration due to the inability to avoid significant environmental impacts, to otherwise meet the project objectives, and because the Project Sponsor would likely be unable to reasonably acquire, control, or otherwise have access to alternatives sites required for the Direct Alignment Alternatives.

The three Direct Alignment Alternatives did not meet the proposed Project's objective of maximizing the use of public ROW and publicly-owned property while minimizing use of aerial rights requirements over private properties. Specifically, and as depicted in Figure 4-3, each of the Direct Alignment Alternatives would fly over several private properties, including the approved College Station residential development near the southernmost portion of the Los Angeles State Historic Park, the proposed Buena Vista residential development along North Broadway, and Cathedral High School. In contrast, the proposed Project maximizes alignment along the public ROW and publicly-owned property and minimizes aerial rights requirements over private properties, taking into account existing and future adjacent land uses. The proposed Project, with the location of Alameda Station over Alameda Street, as well as Chinatown/State Park Station and Broadway Junction to turn the alignment, remains primarily above the public ROW and publicly-owned property, as compared to the alignments from the Direct Alignment Alternatives.

Figure 4-3: Direct Alignment Alternatives considered but dismissed from further consideration[1]

In addition, the three Direct Alignment Alternatives did not meet the proposed Project's objectives associated with the proposed Project's intermediate Chinatown/State Park Station to enhance community connectivity by providing first/last mile transit and pedestrian access to areas that have historically been underserved, including the Los Angeles State Historic Park and Elysian Park, and increase connectivity to the region's public transportation hub at LAUS and the Dodger Stadium property, to the same extent as the proposed Project. The three Direct Alignments would not include an intermediate station closer to the Chinatown core to facilitate an easy connection to the Metro L Line (Gold) Station, thereby improving connectivity and access to the Los Angeles State Historic Park and regional transit system. The benefits of the proposed Project's intermediate Chinatown/State Park Station are year-round for areas that have historically been underserved, including the Los Angeles State Historic Park, as opposed to only the approximately 100 baseball games and other events each year at Dodger Stadium. The three Direct Alignment Alternatives would also not provide the proposed Project's pedestrian improvements between Metro's L Line (Gold) Station and the entrance to the Los Angeles State Historic Park.

In comparison, Chinatown/State Park Station enhances transit access to surrounding communities, including the Park, Chinatown, Mission Junction including William Mead Homes, Los Angeles River, and North Broadway. Chinatown/State Park Station also provides the community benefit of Park amenities, including approximately 740 square feet of concessions, 770 square feet of restrooms, and a 220 square foot covered breezeway connecting the concessions and restrooms. Additionally, Chinatown/State Park Station would include a mobility hub where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. Pedestrian access enhancements could include pedestrian

1 The Direct Alignment Alternatives would also require towers between the two stations; however, these towers are not shown in this figure.

improvements between Metro's L Line (Gold) Station and Chinatown/State Park Station consistent with the Connect US Action Plan, including hardscape and landscape improvements, shade structures, and potential seating, as well as support for the future Los Angeles State Historic Park bike and pedestrian bridge.

Therefore, these Direct Alignment Alternatives would fail to meet the proposed Project's objectives to enhance community connectivity and expand mobility options and would not attract new riders to the Metro system to the same degree as the proposed Project.

As discussed above, the Direct Alignment Alternatives would not maximize the use of public ROW and publicly owned-properties while minimizing use of aerial rights requirements over private properties. Accordingly, additional private properties could be required for towers and additional aerial rights would be required over private properties. The Direct Alignment Alternatives were further dismissed because the Project Sponsor would likely be unable to reasonably acquire, control, or otherwise access the sites along the Direct Alignments due to the area's developed, urban nature, which features a variety of commercial, industrial, and residential development, including passive open space areas and transit/transportation uses.

Moreover, the location of the station for each of the Direct Alignment Alternatives did not provide the same high visibility and proximity to Union Station and El Pueblo, safe and convenient pedestrian connection to and from the Union Station passenger terminal and El Pueblo, and adjacency to public space for passenger access as the proposed Project's Alameda Station location, which would be constructed over Alameda Street between Los Angeles Street and Cesar E. Chavez Avenue, adjacent to the Placita de Dolores and planned LAUS Forecourt. The proposed Project's Alameda Station location is also compatible with Metro's plans at LAUS, including the planned LAUS Forecourt and Esplanade Improvements Project. Therefore, the alternative locations would fail to meet the proposed Project's objectives to enhance community connectivity, expand mobility options, and attract new riders to the Metro system to the same degree as the proposed Project.

The three Direct Alignment Alternatives were dismissed from further detailed consideration due to the inability to avoid significant environmental impacts and to otherwise meet the project objectives, and because the Project Sponsor would likely be unable to reasonably acquire, control, or otherwise have access to alternatives sites required for the Direct Alignment Alternatives.

4.2.2 Alternatives Carried Forward for Detailed Analysis

Three alternatives have been carried forward for detailed analysis in this EIR, including the "No Project" alternative, pursuant to CEQA Guidelines Section 15126.6(e).

The alternatives carried forward for detailed analysis in this chapter include:

- No Project Alternative
- Spring Street Alignment Alternative
- Transportation Systems Management Alternative

4.2.2.1 No Project Alternative

Pursuant to Section 15126.6(e)(2) of the CEQA Guidelines, the EIR is required to "discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time the environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services." In addition, Section 15126.6(e)(3)(B) of the CEQA Guidelines states that, "the no project alternative means 'no build' wherein the existing environmental setting is maintained." Thus, under this alternative, the proposed Project would not be implemented, and no development would occur, and the existing environment would be maintained.

As such, the No Project Alternative provides a comparison between the environmental impacts of implementing the proposed Project in contrast to the result from not approving, or denying, the proposed Project. This alternative is intended to meet the requirements of CEQA Guidelines Section 15126.6(e) for evaluation of a no project alternative. Under this alternative, no development would occur, and the environment would remain in its existing condition. Therefore, the No Project Alternative would avoid potentially significant impacts to all environmental considerations and would have no impact. However, environmental benefits to air quality, energy, greenhouse gas emissions, and hydrology and water resources would not be realized.

Location

Similar to the proposed Project, the No Project Alternative would be located in the City of Los Angeles, situated northeast of downtown Los Angeles, within the Downtown, Chinatown, Mission Junction, and Elysian Park communities. However, under the No Project Alternative, the proposed Project would not be built.

Impact Analysis

Aesthetics

The No Project Alternative would not result in development of an ART system; therefore, no aesthetic changes would occur within the area of potential impact (API). As described in Section 3.1, Aesthetics, the proposed Project commences adjacent to El Pueblo and the planned LAUS Forecourt and terminates at Dodger Stadium. From Alameda Station, the proposed Project alignment would generally follow Alameda Street and Spring Street in a northeast direction through the community of Chinatown, flying over the Los Angeles State Historic Park to Bishops Road and then flying over SR-110 and terminating at Dodger Stadium, located in the community of Elysian Park.

The geographic area of the proposed Project's visibility is referred to as the area of potential impact (API). Viewsheds would vary from approximately 0.25-mile up to approximately 0.68 miles from the Project alignment, which is appropriate to define the API.

The No Project Alternative would not result in a change in the visual height, scale, and mass of the development in the API and views of the proposed Project site would not change. In addition, lighting and glare would not increase and would remain the same as existing conditions. Overall, the proposed Project would not be developed, and the API would remain in its current condition. Therefore, impacts to aesthetics under the No Project Alternative would be reduced compared to the less than significant impacts of the proposed Project.

However, under the No Project Alternative, there would be no aesthetic improvements to the existing proposed Project area. For example, landscaping improvements would not be installed, and the opportunity for site specific artwork at each station that is reflective of the unique neighborhood culture would not be implemented. As such, the No Project Alternative would not result in aesthetic benefits to the proposed Project area.

Agriculture and Forestry Resources

The No Project Alternative would not result in development of an ART system; therefore, the No Project Alternative would not result in any new development that would require construction or change activities on the proposed Project site compared to existing conditions, and would not result development within an A1 zone. The only sites zoned for agriculture are the Stadium Tower site and the Dodger Stadium Station site of the proposed Project, which are both zoned A1. However, neither of these sites contain agricultural uses. Notwithstanding the underlying zoning, the Dodger Stadium property is subject to a Conditional Use Permit, which allows for the operation of a Major League Baseball stadium and various ancillary structures and uses, including “mass transportation service” to the site. No impact would occur under the No Project Alternative. Therefore, impacts to agriculture and forestry resources under the No Project Alternative would be reduced compared to the less than significant impacts of the proposed Project.

Air Quality

The No Project Alternative would not result in the development of an ART system; therefore, the number of people traveling to Dodger Stadium and the surrounding area in passenger vehicles and the number of people using public transit would remain consistent with the existing setting. As such, the proposed Project’s benefits of reduced air quality emissions from decreasing VMT would not be achieved. Accordingly, the Project’s beneficial improvements in air quality emissions would not occur. Although the No Project Alternative would not generate construction or operational emissions, the proposed Project’s air quality impacts during construction and operations would be less than significant. Because the No Project Alternative would not achieve the emissions reductions associated with the proposed Project, the No Project Alternative would result in higher long-term air quality emissions than the proposed Project.

Biological Resources

The No Project Alternative would not result in development of an ART system; therefore, no grading or development would occur under this alternative and there would be no potential impacts to special-status and/or roosting bat species and migratory and/or nesting birds listed by the California Department of Fish and Wildlife (CDFW) or the United States Fish and Wildlife Service (USFWS) that may be present. No wetlands, migratory corridors, or linkages occur in the proposed Project area. As such, similar to the proposed Project, the No Project Alternative would not impact these resources. In addition, the No Project Alternative would not include any new development that would conflict with local policies, including the City’s Native Tree Protection Ordinance. Further, similar to the proposed Project, the No Project Alternative would not be subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Although the proposed Project impacts would be less than significant with mitigation, the No Project Alternative would result in no impact to biological resources. Therefore, impacts to biological resources under the No Project Alternative would be reduced compared to the less than significant impacts of the proposed Project.

Cultural Resources

The No Project Alternative would not result in development of an ART system; therefore, no conditions would change on the proposed Project site. No demolition or development and operations would occur under the No Project Alternative that could directly or indirectly affect historical resources. As such, although the proposed Project impacts would be less than significant with mitigation, the No Project Alternative would result in no impact to historical resources.

In addition, the No Project Alternative would not require any excavation or ground disturbing activities that would potentially encounter previously undiscovered archaeological resources or human remains. Because the No Project Alternative would involve no excavation or ground disturbance, it would have no impact on archaeological resources or human remains. As such, although the proposed Project impacts would be less than significant with mitigation, the No Project Alternative would result in no impact to archaeological resources or human remains. Overall, impacts related to cultural resources under the No Project Alternative would be reduced compared to the less than significant impacts of the proposed Project.

Energy

The No Project Alternative would not result in development of an ART system; therefore, the number of people traveling to Dodger Stadium and the surrounding area in passenger vehicles and the number of people using public transit would remain consistent with the existing setting. As such, the proposed Project's benefits of reduced fuel use from decreasing VMT would not be achieved. Accordingly, the beneficial improvements of the proposed Project would not occur. Under the No Project Alternative, there would be no increase in demand for electricity or fuel. The proposed Project's energy usage would be less than significant. The proposed Project would reduce fuel usage and its electricity would come from green energy sources. Similar to the proposed Project, the No Project Alternative would have less than significant energy impacts, but the No Project Alternative would not provide the benefit of reduced fuel usage.

Geology and Soils

The No Project Alternative would not result in development of an ART system; therefore, the No Project Alternative would not require any new development at the proposed Project site or increase or change exposure to existing environmental conditions, such as fault rupture, seismic shaking, liquefaction, or other geologic hazards. Because the No Project Alternative would not require any new development, excavation activity, or exposure of soils, it would not change the existing exposure to geologic conditions. In addition, the No Project Alternative would not include any new development that would expose more people or structures to geologic hazards, such as expansive soils. As such, although the proposed Project impacts would be less than significant with mitigation, the No Project Alternative would result in no impact to seismic or other geologic and soils hazards.

Further, the No Project Alternative would not require any construction activities; therefore, it would have no potential to encounter previously undiscovered paleontological resources. Because the No Project Alternative would involve no excavation or ground disturbance, it would have no impact on paleontological resources. As such, although the proposed Project impacts would be less than significant with mitigation, the No Project Alternative would result in no impact to paleontological resources. Overall, impacts to geology and soils under the No Project Alternative would be reduced compared to the less than significant impacts of the proposed Project.

Greenhouse Gas Emissions

The No Project Alternative would not result in development of an ART system; therefore, the number of people traveling to Dodger Stadium and the surrounding area in passenger vehicles and the number of people using public transit would remain consistent with the existing setting. As such, the proposed Project's benefits of reduced GHG emissions from decreasing VMT would not be achieved. The No Project Alternative would not involve new construction or a change in GHG emission producing activity over existing conditions. The proposed Project, however, would result in a net reduction compared to existing emissions based on the buildout scenarios, even with the GHG emissions associated with construction. Therefore, GHG impacts emissions under the No Project Alternative would be increased compared to the less than significant impacts of the proposed Project.

Hazards and Hazardous Materials

The No Project Alternative would not result in development of an ART system; therefore, the No Project Alternative would not involve any changes in existing conditions or the use, transport, or disposal of hazardous materials. The No Project Alternative would not involve construction or alter existing activities on the proposed Project site, and would not change the potential for an accidental release of hazardous materials or result in the release of hazardous materials or emissions near a school. In addition, the No Project Alternative would not involve construction or alter existing activities on a hazardous materials site pursuant to Government Code Section 65962.5. Further, the No Project Alternative would not require any new construction activities or occupancy of the proposed Project site that would affect an existing Emergency Operations Plan or the City's established disaster routes. As such, although the proposed Project impacts would be less than significant with mitigation, the No Project Alternative would result in no impact to hazards and hazardous materials. Therefore, impacts to hazards and hazardous materials under the No Project Alternative would be reduced compared to the less than significant impacts of the proposed Project. However, as the No Project Alternative would not involve construction activities, any existing on-site hazards would not be addressed through implementation of a Soil and Groundwater Management Plan, which would include sampling and analyzing soils/groundwater and required methods and procedures for the proper handling and removal of impacted soils and/or groundwater for off-site disposal.

Hydrology and Water Quality

The No Project Alternative would not change the character of the site with development of an ART system; therefore, existing water quality conditions, drainage patterns, and runoff water amounts would remain as is under the No Project Alternative because no new development would occur. This alternative would not introduce new sources of water pollutants from either construction or new operations on the proposed Project site, and no impacts to hydrology and water quality would occur. Therefore, impacts to hydrology and water quality under the No Project Alternative would be reduced compared to the less than significant impacts of the proposed Project.

However, this alternative would not include installation of new low-impact development (LID), source control, site design, and treatment control best management practices (BMPs) to minimize runoff and water pollution. The storm water leaving the site would not be filtered and would continue to contain sediment and other potential pollutants associated with the existing conditions of the site. As such, the beneficial improvements of the proposed Project would not occur under the No Project Alternative.

Land Use and Planning

The No Project Alternative would not result in development of an ART system; therefore, the No Project Alternative would not change the existing land use of the proposed Project site. The existing General Plan land uses and zoning designations would remain. As no changes would occur on the Project site, the No Project Alternative would have no impacts with respect to conflicts with plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, impacts to land use and planning under the No Project Alternative would be reduced compared to the less than significant impacts with mitigation of the proposed Project.

However, the No Project Alternative would also not further regional and local policies applicable to the proposed Project site within the City as compared to the proposed Project, such as the benefits of enhancing pedestrian activity and increasing transit use. As such, the beneficial improvements of the proposed Project would not occur under the No Project Alternative.

Mineral Resources

The No Project Alternative would not result in development of an ART system; therefore, the No Project Alternative would not result in any new development that would require construction, excavation activity, or exposure of soils. Similar to the proposed Project, the No Project Alternative would not impact mineral resources. Therefore, impacts to mineral resources under the No Project Alternative would not occur.

Noise and Vibration

The No Project Alternative would not result in development of an ART system; therefore, no construction or operational noise or vibration impacts would occur. In addition, the No Project Alternative would result in no construction noise or vibration impacts to nearby sensitive receptor locations. As the proposed Project impacts would be significant and unavoidable for construction noise and ground-borne vibration impacts (human annoyance), the No Project Alternative would result in no impact related to noise. Therefore, noise impacts under the No Project Alternative would be reduced compared to the impacts of the proposed Project.

Population and Housing

The No Project Alternative would not result in development of an ART system; therefore, the No Project Alternative would not induce unplanned population growth. Accordingly, no impacts would occur. Although the proposed Project, as a first/last mile transit connection to Dodger Stadium designed to meet the area's transit needs and improve the efficiency of the existing transportation network, would result in less than significant population, employment, and housing impacts, the No Project Alternative would result in no impact on population, housing, and employment. Therefore, impacts to population and housing under the No Project Alternative would be reduced compared to the less than significant impacts of the proposed Project.

Public Services

The No Project Alternative would not result in development of an ART system; therefore, the existing number of workers in the proposed Project area would remain under the No Project Alternative. There would be no increase in demand for fire protection, police protection, parks, or other public facilities. In addition, there would be no change in the demand for schools serving the proposed Project area. As such, although the proposed Project impacts would be less than significant with mitigation, the No Project Alternative would result in no impact to public services. Therefore, impacts to public services under the No Project Alternative would be reduced compared to the less than significant impacts of the proposed Project.

Recreation

The No Project Alternative would not result in development of an ART system; therefore, it would not increase demand for parks and recreational services. Accordingly, since the No Project Alternative would not directly or indirectly result in a population gain that would generate demand for parks and recreation services, it would have no impact on parks and recreational facilities. Therefore, impacts to recreational facilities under the No Project Alternative would be reduced compared to the less than significant impacts of the proposed Project.

However, the No Project Alternative would not improve mobility and accessibility for the region by providing a high-capacity ART connecting the regional transit system at LAUS, Dodger Stadium, the Los Angeles State Historic Park, Elysian Park, and surrounding communities. In addition, the No Project Alternative would not provide a potential mobility hub at the Dodger Stadium property to provide connectivity to Elysian Park and surrounding communities, or provide a mobility hub at Chinatown/State Park Station where passengers would be able to access a suite of first and last mile multi-modal options, such as a bike share program. Further, the No Project Alternative would not provide access from Chinatown/State Park Station to Park amenities, including approximately 740 square feet of concessions, 770 square feet of restrooms, and a 220 square foot covered breezeway connecting the concessions and restrooms, as well as pedestrian access enhancements included in the proposed Project could include pedestrian improvements between Metro's L Line (Gold) Station and Chinatown/State Park Station, including hardscape and landscape improvements, shade structures, and potential seating. As such, the beneficial improvements of the proposed Project would not occur under the No Project Alternative.

Transportation

The proposed Project's transportation impacts would be less than significant with mitigation. The proposed Project also provides environmental benefits by reducing VMT compared to the existing setting. The No Project Alternative would not result in development of an ART system; therefore, the No Project Alternative would not involve any transportation-related impacts. The No Project Alternative would not include construction traffic or activities that would result in lane closures or closed worksites within City streets. However, the No Project Alternative would not achieve environmental benefits associated with reducing VMT. Therefore, temporary construction transportation impacts under the No Project Alternative would be lower than the less than significant impacts of the proposed Project, but the No Project Alternative would not achieve the long-term VMT benefits of the proposed Project.

Tribal Cultural Resources

The No Project Alternative would not result in development of an ART system; therefore, no ground disturbance or ground-disturbing construction activities (e.g., boring, grading, excavation, drilling, trenching) would occur that could have the potential to impact unknown buried tribal cultural resources. As such, although the proposed Project impacts would be less than significant with mitigation, the No Project Alternative would result in no impact to tribal cultural resources. Therefore, impacts to tribal cultural resources under the No Project Alternative would be reduced compared to the less than significant impacts of the proposed Project.

Utilities and Service Systems

The No Project Alternative would not result in development of an ART system; therefore, the existing onsite water and sewer systems would continue to be used, and no new connections to existing utilities systems would be required. Because no new development or increase in employment on the proposed Project site would occur under the No Project Alternative, no additional demand for regional water supplies would occur, and no additional wastewater would be conveyed to the wastewater treatment facility. In addition, no additional drainage infrastructure would be developed by the No Project Alternative, and runoff in the proposed Project area would remain in its current condition and no storm water system improvements would be required. Further, solid waste generation would remain the same as existing conditions and increased need for landfill capacity would not occur with the No Project Alternative. As such, although the proposed Project impacts would be less than significant with mitigation, the No Project Alternative would result in no impact to utilities and service systems. Therefore, impacts to utilities and service systems under the No Project Alternative would be reduced compared to the less than significant impacts of the proposed Project.

Wildfire

The No Project Alternative would not result in development of an ART system; therefore, no new development or construction would occur in or near state responsibility areas (SRAs) or lands classified as Very High Fire Hazard Severity Zones (VHFHSZ). The No Project Alternative would not result in any new development that would exacerbate fire risks or impair the implementation of the City's Emergency Operations Plan or substantially impair an adopted emergency response plan or emergency evacuation plan. In addition, direct and indirect impacts related to post-fire conditions such as downslope or downstream flooding or landslides, as a result of runoff, post fire slope instability, or drainage changes would not occur. Further, the No Project Alternative would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. As such, although the proposed Project impacts would be less than significant with mitigation, the No Project Alternative would result in no impact to related to wildfire. Therefore, impacts related to wildfire under the No Project Alternative would be reduced compared to the less than significant impacts of the proposed Project.

Relationship of the Alternative to Project Objectives

As described above, the No Project Alternative assumes that no new development would occur on the proposed Project Site. The existing uses within the proposed Project area would continue to operate similar to existing conditions. As the No Project Alternative would not include development of an ART system, it would not provide a direct transit connection between LAUS and the Dodger Stadium property via an aerial gondola system, and would not improve connectivity for the surrounding communities by linking to the Los Angeles State Historic Park, Elysian Park, and the region's rapidly growing regional transit system at LAUS. Therefore, as presented in Table 4-1 above at the beginning of this Chapter, the No Project Alternative would not meet any of the project objectives.

4.2.2.2 Spring Street Alignment Alternative

Similar to the proposed Project, the Spring Street Alignment Alternative would provide an ART option for visitors to Dodger Stadium, while also providing access between Dodger Stadium, the surrounding communities, and the regional transit system accessible at LAUS.

Location

Similar to the proposed Project, the Spring Street Alignment Alternative would be located in the City of Los Angeles, situated northeast of downtown Los Angeles, within the Downtown, Chinatown, Mission Junction, and Elysian Park communities.

The Spring Street Alignment Alternative would commence adjacent to LAUS and El Pueblo de Los Angeles (El Pueblo) and terminate at Dodger Stadium. The Spring Street Alignment Alternative would include three stations, a non-passenger junction, and four cable-supporting towers at various locations along the alignment. As shown in Figure 4-4, the Spring Street Alignment Alternative would generally follow Alameda Street and then continue along Spring Street in a northeast direction through the community of Chinatown to the Los Angeles State Historic Park approximately 450 feet northeast of the intersection of Spring Street and Ann Street. At this intersection, the alignment would continue northwest over the Los Angeles State Historic Park and the Metro L Line (Gold), and then follow Bishops Road towards its terminus at Dodger Stadium, located in the Elysian Park community.

Alignment

The Spring Street Alignment Alternative would extend approximately 1.3 miles beginning near El Pueblo and LAUS on Alameda Street. The proposed Alameda Station would be the same as the proposed Project, with it being constructed over Alameda Street between Los Angeles Street and Cesar E. Chavez Avenue, adjacent to the Placita de Dolores and planned LAUS Forecourt. From Alameda Station, the Spring Street Alignment Alternative would follow the same alignment as the proposed Project, remaining primarily above the public right-of-way (ROW) with portions above private property and traveling north along Alameda Street to the proposed Alameda Tower, which would be constructed on the Alameda Triangle, a portion of City ROW between Alameda Street, North Main Street, and Alhambra Street.

The Spring Street Alignment Alternative would continue north along Alameda Street and cross Alpine Street. Same as the proposed Project, the proposed Alpine Tower would be constructed at the corner of Alameda Street and Alpine Street on City property. The Spring Street Alignment Alternative would follow the public ROW and continue over the elevated Metro L Line (Gold). North of College Street, Alameda Street becomes Spring Street, and the proposed alignment alternative would generally follow Spring Street in a straight northeast trajectory until it reaches the southernmost point of Los Angeles State Historic Park, where the proposed Spring Street Junction would be constructed partially on City ROW and partially within the boundaries of the Los Angeles State Historic Park.

From the Spring Street Junction, the proposed alignment would turn northeast following Spring Street to approximately 450 feet northeast of the intersection of Spring Street and Ann Street. The State Historic Park Station would be constructed on City ROW and Los Angeles State Historic Park property. At this location, the alignment would turn northwest over the Los Angeles State Historic Park and the Metro L Line (Gold), and then follow Bishops Road to Bishops Tower, which would be constructed on private property. Similar to the proposed Project, the Spring Street Alignment Alternative would continue northwest along Bishops Road, with portions above private property, crossing over SR-110 towards Dodger Stadium. The proposed Stadium Tower would be located on hillside private property north of Stadium Way between the Downtown Gate entrance road to Dodger Stadium and SR-110. The northern terminus of the system would be the same as the proposed Project, being located in a parking lot at the Dodger Stadium property, where the proposed Dodger Stadium Station would be constructed.

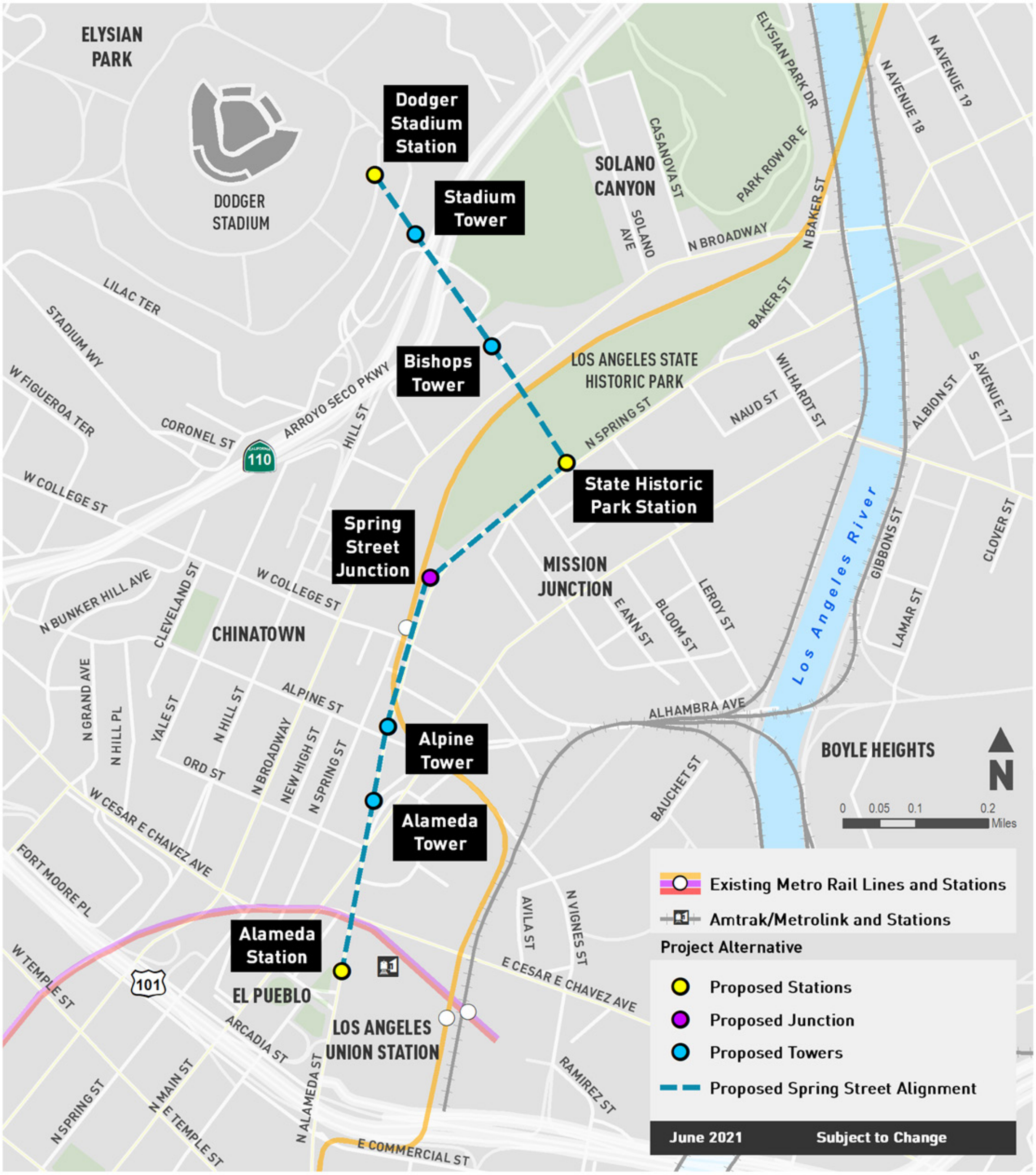


Figure 4-4: Spring Street Alignment Alternative

Components

The Spring Street Alignment Alternative would have the following components in common with the proposed Project: Alameda Station, Alameda Tower, Alpine Tower, Stadium Tower, and Dodger Stadium Station. In addition to these components that would be common to the proposed Project, the Spring Street Alignment Alternative would also include the following components that would be unique to this alternative.

Spring Street Junction: The Spring Street Junction would be a non-passenger junction that would be located on Spring Street near the southernmost portion of the Los Angeles State Historic Park. The Spring Street Junction would be approximately 175 feet long, 60 feet wide, and 80 feet high at its tallest point, with the platform approximately 50 feet above Spring Street. Vertical circulation elements (i.e. elevators and stairs) would be installed in the central structure on the northwest side of the junction for staff and maintenance access to the platform. Spring Street Junction would also include the installation of landscaping and hardscape.

State Historic Park Station: State Historic Park Station would be located on Spring Street between Ann Street and Sotello Street and the Los Angeles State Historic Park. The station would primarily be located over the public ROW, with the northern portion of the station and overhead cable infrastructure located within the Los Angeles State Historic Park. The station would be approximately 265 feet long, 210 feet wide, and 80 feet tall at its tallest point, with the passenger loading platform approximately 32 feet above-grade. The queuing areas would be located on the west and east sides of the station, with escalators, elevators, and stairs leading up to the boarding platform. Additionally, restrooms would be included on the northern side of the station within the Los Angeles State Historic Park, and landscaping and hardscaping would be installed at the base of the station. The State Park Station would require relocation of the Los Angeles State Historic Park Endless Orchard exhibit.

Bishops Tower: Bishops Tower would be located on private property on the southeast corner of Bishops Road and Savoy Street and would stand 140 feet tall at its tallest point, with the cable suspended 118 feet above-ground. Bishops Tower would also include the installation of landscaping and hardscaping near the base of the tower.

System Operations

Operation of the Spring Street Alignment Alternative, including for typical operating logistics, signage, lighting, maintenance, power requirements, and sustainability features, would be the same as the proposed Project.

Queueing areas would be built into and as necessary, adjacent to, each of the stations to provide a gathering place for passengers waiting to enter the stations, thereby preventing crowding of sidewalks and walkways by passengers around stations. Queueing for the Alameda Station would occur in the planned LAUS Forecourt area on the east side of Alameda Street, and north of the Placita de Dolores in a proposed new pedestrian plaza at El Pueblo on the west side of Alameda Street. At State Historic Park Station, queueing would occur on the east and west sides of the station. At Dodger Stadium Station, the queueing area would be located on the north side of the station in a designated queueing area adjacent to the station.

Construction

Similar to the proposed Project, construction of the Spring Street Alignment Alternative is anticipated to begin as early as 2024 and take approximately 25 months, including construction, cable installation, and system testing. However, in comparison to the proposed Project, the Spring Street Alignment Alternative would include construction of one additional proposed Project component, Bishops Tower. A summary of the construction activities is provided below. Construction of the proposed Project components may partially overlap in schedule, especially since construction would occur at several physically separated sites.

Similar to the proposed Project, utility relocations would occur prior to construction of the Project components and would be coordinated directly with the utility providers. Following utility relocations, construction would commence.

Similar to the proposed Project, construction of more than one proposed Project component for the Spring Street Alignment Alternative would occur at the same time, with consideration of available materials, work crew availability, and coordination of roadway closures. Table 4-2 below includes the estimated duration to complete construction of each of the proposed Project components, the maximum depths of drilled piles, the maximum depth of excavation, the amount of excavation, and the amount of materials (soils and demolition debris) to be exported for each component of the Spring Street Alignment Alternative.

Table 4-2: Spring Street Alignment Alternative Construction Details

Component	Construction Duration	Maximum Depth of Drilled Piles	Maximum Depth of Excavation	Amount of Excavation	Amount of Materials Exported
Alameda Station	17 months	125 feet	10 feet	2,728 cubic yards	2,295 cubic yards
Alameda Tower	12 months	120 feet	10 feet	2,850 cubic yards	2,292 cubic yards
Alpine Tower	11 months	120 feet	10 feet	3,606 cubic yards	2,887 cubic yards
Spring Street Junction	20 months	110 feet	10 feet	2,906 cubic yards	2,215 cubic yards
State Historic Park Station	20 months	105 feet	10 feet	3,733 cubic yards	1,867 cubic yards
Bishops Tower	10 months	130 feet	7 feet	1,901 cubic yards	1,475 cubic yards
Stadium Tower	12 months	120 feet	7 feet	1,286 cubic yards	1,202 cubic yards
Dodger Stadium Station	20 months	55 feet	42 feet	44,313 cubic yards	44,001 cubic yards

Following completion of construction, the gondola cables would be installed, followed by system testing and inspections.

Working hours would vary to meet special circumstances and restrictions, but are anticipated to be consistent with the City's allowable construction hours of Monday through Friday between 7:00 a.m. to 9:00 p.m. and Saturdays and National Holidays between 8:00 a.m. to 6:00 p.m. While not anticipated, approval would be required from the City of Los Angeles Board of Police Commissioners for any extended construction hours and possible construction on Sundays.

Anticipated closures would include lane closures in which lanes would be closed 24-hours a day during certain phases of construction, or alternating closures during certain phases of construction, in which closures would occur during construction hours for approximately 10 hours a day, and roads would reopen during non construction hours for approximately 14 hours a day. For alternating closures, during non-construction hours, steel plates would be placed over construction sites to the extent feasible in order to allow for vehicular and pedestrian circulation. The closures and hours would vary between location and phase of construction. The proposed Project would implement a Construction Traffic Management Plan that would include detours and ensure that emergency access is maintained throughout all construction activities.

Impact Analysis

Aesthetics

The Spring Street Alignment Alternative would result in development of an ART system; therefore, aesthetic changes would occur within the API. Similar to the proposed Project, the Spring Street Alignment Alternative would commence adjacent to LAUS and El Pueblo de Los Angeles (El Pueblo) and terminate at Dodger Stadium. The Spring Street Alignment Alternative would include three stations, a non-passenger junction, and cable-supporting towers at various locations along the alignment. Under the Spring Street Alignment Alternative, Spring Street Junction, Bishops Tower, and State Historic Park Station would be added, which would represent new visual elements within the API.

Similar to the proposed Project, no designated scenic vistas are present in the API of the Spring Street Alignment Alternative. However, views of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains, could be considered scenic to certain viewers although not officially designated as such. While the Spring Street Alignment Alternative would also include tall visual elements, views of other scenic or panoramic views would continue to be visible from more prominent view locations, such as park areas, or other sections along local streets. While the Spring Street Alignment Alternative would include tall visual elements, views of other scenic or panoramic views would continue to be visible from more prominent view locations, such as park areas, or other sections along local streets. In addition, the Spring Street Alignment Alternative would comprise a very small portion of the broad urban view field. Overall, the Spring Street Alignment Alternative would not significantly block scenic or panoramic views, such as views of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains.

The Arroyo Seco Parkway/SR-110 is a National Scenic Byway and a California Historic Parkway within the area of the Spring Street Alignment Alternative. While views of the Spring Street Alignment Alternative would be available from the Arroyo Seco Parkway/SR-110, the Arroyo Seco Parkway/SR-110 is not a state scenic highway, as determined by Caltrans *Scenic Highways – Scenic Highway System List.* As such, the analysis of scenic resources is provided only for informational purposes. As with the proposed Project, the proposed Stadium Tower, as well as cables and cabins, would be visible to motorists on Arroyo Seco Parkway/SR-110 both on the northbound and southbound sides. However, similar to the proposed Project, the Spring Street Alignment Alternative would not damage any scenic resources within a state scenic highway, as the Arroyo Seco Parkway/SR-110 is not a designated state scenic highway.

As with the proposed Project, construction activities would require equipment such as construction barriers and sound walls, cranes, and other appurtenances that would be visible during much of the approximately 25-month construction period. As such, the construction phase would represent a temporary change in the visual quality and character of the API. As with the proposed Project, construction activities would include similar equipment to other construction projects in the City, such as high-rise buildings in Chinatown and the CASP. In addition, construction impacts would be temporary, and views of the proposed Project's construction activities, equipment, stockpiles, and fencing would be removed once construction is completed.

Changes to visual character would be noticeable to motorists, pedestrians, and recreationalists in the API of the Spring Street Alignment Alternative. Because of the continuous movement of traffic, view impacts would be limited and temporary. In addition, public views of downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, or the San Gabriel and San Bernardino Mountains may temporarily change due to the presence of construction activities would continue to be visible through other street corridors and would not be affected substantially by construction or operation of the Spring Street Alignment Alternative.

Similar to the proposed Project, construction of the proposed State Historic Park Station, Spring Street Junction, cables, and cabins would represent new visual elements for recreationalists within Los Angeles State Historic Park who seek to enjoy the large open space area and views of the downtown Los Angeles skyline. With the proposed Project, the Station location would be at the southwestern edge of the Los Angeles State Historic Park. However, under this Alternative, State Historic Park Station would be located in the middle of the Los Angeles State Historic Park, and cables and cabins associated with the proposed Project would be visible over the middle of the Park. As such, the proposed cables introduce a new visual element over the Park.

Figure 4-5 shows the location of Key Observation Points (KOPs) for both the proposed Project and the Spring Street Alternative. Existing and simulated views of KOPs 1 through 17, 21, and 26-30 would be the same for the proposed Project and Spring Street Alternative. However, due to changes in the proposed Project components, such as the location of State Historic Park Station, and the inclusion of Bishops Tower in the Spring Street Alternative, Figures 4-6 through 4-12 below show the existing condition and simulated view of the Spring Street Alignment Alternative.

The Spring Street Alignment Alternative would also be located in an urban area that currently has a mix of architectural styles, building materials, and colors. For a project in an urban area, a significant impact to visual character or quality would occur if the project would conflict with applicable zoning and other regulations governing scenic quality. The Spring Street Alignment Alternative within LU-4 would be consistent with Los Angeles State Historic Park General Plan aesthetic resources goals to protect and enhance scenic viewsheds and features and preserve the visitor's experience of the surrounding landscape by minimizing impacts to aesthetic resources. The Spring Street Alignment Alternative within would also be consistent with access and circulation goals by providing an additional mode of transportation that would provide efficient access to the Park, as well as create a sense of entry and arrival at the Park. Park development goals would be met by providing a new distinctive and high-quality facility with a forward-thinking design.

Figure 4-5: KOP Locations Overview

Figure 4-6: Existing and Simulation Views of KOP 18 – Looking Southwest from Spring Street adjacent to Los Angeles State Historic Park at the State Historic Park Station, cables, and cabins

Figure 4-7: Existing and Simulation Views of KOP 19 – Looking Southwest from within Los Angeles State Historic Park at the Spring Street Junction, State Historic Park Station, cables, and cabins

Figure 4-8: Existing and Simulation Views of KOP 20 – Looking Southwest from North Broadway historic bridge at Bishops Tower, cables, and cabins

Figure 4-9: Existing and Simulation Views of KOP 22 – Looking Northeast on North Broadway from Cottage Home Street at Bishops Tower, cables, and cabins

Figure 4-10: Existing and Simulation Views of KOP 23 – Looking Southeast from Savoy Street, east of Bishops Road at Bishops Tower, cables, and cabins

Figure 4-11: Existing and Simulation Views of KOP 24 – Looking Southeast on Bishops Road from Cathedral High School at Bishops Tower, cables, and cabins

Figure 4-12: Existing and Simulation Views of KOP 25 – Looking Northeast from Cottage Home Street at Bishops Tower, cables, and cabins

Similar to the proposed Project, the design of the Spring Street Alignment Alternative would improve the quality of the public realm through design, which would promote accessibility via improved pedestrian pathways that would be complementary and appropriate to the scale and character of the existing buildings in the surrounding area consistent with Chapter 5, Urban Form and Neighborhood Design of the City of Los Angeles General Plan Framework Element. The Spring Street Alignment Alternative would also preserve visual links to and preserve open space areas consistent with policies from Chapter 6, Open Space and Conservation of the City of Los Angeles General Plan Framework Element, Objective 5.1 of the Central City North Community Plan, and Objective 4.2 of the Central City Community Plan. Further, the Spring Street Alignment Alternative's design and building materials would also complement the buildings in each neighborhood consistent with the Silver Lake-Echo Park-Elysian Park Community Plan, as well as provide attractive transit services in compliance with the Mobility Plan 2035.

The Spring Street Alignment Alternative would also comply with best management practices, as well as the City's development standards related to scenic quality during construction to reduce impacts to public views, which would be verified during the City's permitting process. In addition, similar to the proposed Project, the Spring Street Alignment Alternative would include entitlements and approvals to establish land use regulations for the proposed Project alignment to ensure consistent implementation of development standards, which would enhance the visual identity and character of the proposed Project and its surrounding communities, and would ensure visual compatibility with adjacent development, as well as the proposed Project area's overall community character. As such, the Spring Street Alignment Alternative would not conflict with applicable zoning or other regulations governing scenic quality.

Both the proposed Project and the Spring Street Alignment Alternative would introduce additional sources of light and glare that would result in similar less than significant impacts with the incorporation of project design features (PDF) and LAMC requirements.

The Spring Street Alignment Alternative could also result in additional shading due to the additional proposed Project components. Shadow diagrams are provided in Appendix B of the *Visual Impact Assessment* (Appendix C of this Draft EIR). As discussed in Section 3.1, Aesthetics, a project impact would normally be considered significant if shadow-sensitive uses would be shaded by project-related structures for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October).

A summary of the shadow analysis is provided below for the State Historic Park Station and Bishops Tower components included as part of the Spring Street Alignment Alternative.

State Historic Park Station

Winter shadow diagrams for the proposed State Historic Park Station are located on Figure 115 through Figure 118 of Appendix B of the *Visual Impact Assessment* (Appendix C of this Draft EIR). A small segment of internal walkways within and near the southeastern entrance of the Los Angeles State Historic Park would be shaded for five hours from 9:00 a.m. to 2:00 p.m. In addition, a small segment of sidewalk adjacent to the southeastern entrance of the park would be shaded for six hours from 9:00 a.m. to 3:00 p.m. A small portion of park green space would also be shaded adjacent to the southeastern entrance of the park for six hours from 9:00 a.m. to 3:00 p.m. No other shade-sensitive uses would be shaded in the Winter. Some non-sensitive uses, including the unpaved parking areas adjacent to Spring Street, would be partially shaded at various times throughout the day in Winter.

Spring shadow diagrams for the proposed State Historic Park Station are located on Figure 119 through Figure 123 of Appendix B of the *Visual Impact Assessment* (Appendix C of this Draft EIR). Similar to Winter, a small segment of the internal walkways within and near the southeastern entrance of the Los Angeles State Historic Park would be shaded for five hours from 9:00 a.m. to 2:00 p.m. In addition, a small segment of sidewalk adjacent to the southeastern entrance of the park would be shaded for two hours from 9:00 a.m. to 11:00 a.m. and again for four hours from 12:00 p.m. to 4:00 p.m. A small portion of park green space would also be shaded adjacent to the southeastern entrance of the park for five hours from 9:00 a.m. to 2:00 p.m. No other shade-sensitive uses would be shaded in the Spring. Some non-sensitive uses, including the unpaved parking areas adjacent to Spring Street would be partially shaded at various times throughout the day in the Spring.

Summer shadow diagrams for the proposed State Historic Park Station are located on Figure 124 through Figure 128 of Appendix B of the *Visual Impact Assessment* (Appendix C of this Draft EIR). A small segment of the internal walkways within and near the southeastern entrance of the Los Angeles State Historic Park would be shaded for two hours from 12:00 p.m. to 2:00 p.m. Similar to Spring, a small segment of sidewalk adjacent to the southeastern entrance of the park would be shaded for one hour from 9:00 a.m. to 10:00 a.m. and again for four hours from 1:00 p.m. to 5:00 p.m. A small portion of park green space would be shaded for two hours from 9:00 a.m. to 11:00 a.m. No other shade-sensitive uses would be shaded in the Summer. Some non-sensitive uses, including the unpaved parking areas adjacent to Spring Street would be partially shaded at various times throughout the day in the Summer.

Fall shadow diagrams for the proposed State Historic Park Station are located on Figure 129 through Figure 133 of Appendix B of the *Visual Impact Assessment* (Appendix C of this Draft EIR). A small segment of the internal walkways within and near the southeastern entrance of the Los Angeles State Historic Park would be shaded for five hours from 9:00 a.m. to 2:00 p.m. A small segment of sidewalk adjacent to the southeastern entrance of the park would be shaded for two hours from 9:00 a.m. to 11:00 a.m. and again for five hours from 12:00 p.m. to 5:00 p.m. Also, a small portion of the park green space would be shaded for three hours from 9:00 a.m. to 12:00 p.m. No other shade-sensitive uses would be shaded in the Fall. Some non-sensitive uses, including the unpaved parking areas adjacent to Spring Street would be partially shaded at various times throughout the day in the Fall.

Based on the analysis above, the proposed State Historic Park Station would result in the shading of shade-sensitive uses for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time between late October and early April. Small portions of the internal walkways and sidewalk adjacent to the eastern entrance of the park would be shaded by the proposed State Historic Park Station in the Winter, as well as a small portion of the park green space near the southeastern entrance of the park. These park-related areas would be directly adjacent to the proposed station and are also considered to be a part of the proposed Spring Street Alignment Alternative.

The Los Angeles State Historic Park is an urban park in a highly developed area and includes a total of approximately 32 acres of passive recreation including expansive additional areas of walkways and open green space for patrons to use. The relatively small areas of park walkways and green spaces that would receive shading from the proposed station are considered to be elements of the southeastern entrance of the park, but not routinely useable outdoor spaces. As such, these impacts are not considered to be significant for these reasons, and shadow impacts from the State Historic Park Station would be less than significant.

Bishops Tower

Winter shadow diagrams for the proposed Bishops Tower are located on Figure 134 through Figure 137 of Appendix B of the *Visual Impact Assessment* (Appendix C of this Draft EIR). A portion of the back patio of the multi-family residential building, at the northeast corner of Bishops Road and Savoy Street (455 Savoy Street), would be shaded for one hour at 11:00 a.m., and a portion of the front patio would be shaded for two hours from 11:00 a.m.to 1:00 p.m. A small portion of the back patio of a single-family residence (451 Savoy Street) would be shaded for two hours from 11:00 a.m.to 1:00 p.m. The backyard area of a single-family residence (449 Savoy Street), located adjacent and east of 451 Savoy Street, would be shaded for two hours from 12:00 p.m. to 2:00 p.m. The front patio of a multi-family residence (441 Savoy Street), located adjacent and east of 449 Savoy Street, would be shaded for one hour at 1:00 p.m. The front patio of a multi-family residence (439 Savoy Street), located adjacent and east of 441 Savoy Street, would be shaded for two hours from 1:00 p.m. to 3:00 p.m. The front yard of a single-family residence (435 Savoy Street), located adjacent and east of 439 Savoy Street, would be shaded for one hour at 2:00 p.m. The back patio of a multi-family residence (429 and 427 Savoy Street) and a single-family residence (425 Savoy Street), on the eastern side of Savoy Street, would be shaded for one hour at 3:00 p.m. No other shade-sensitive uses would be shaded by the proposed Bishops Tower in Winter. Some non-sensitive institutional and commercial uses would be partially shaded at various times throughout the day in Winter.

Spring shadow diagrams for the proposed Bishops Tower are located on Figure 138 through Figure 142 of Appendix B of the *Visual Impact Assessment* (Appendix C of this Draft EIR). A portion of the front patio of the multi-family residential building, at the northeast corner of Bishops Road and Savoy Street (455 Savoy Street), would be shaded for two hours from 12:00 p.m. to 2:00 p.m. A portion of the front patio of a multi-family residential building (438 Savoy Street), located on the southern side of Savoy Street, would be shaded for two hours from 3:00 p.m. to 5:00 p.m. A portion of the front patio of a single-family residential building (434 Savoy Street), located adjacent and east of 438 Savoy Street, would be shaded for one hour at 4:00 p.m. A small portion of the back patio at a single-family residential building (430 Savoy Street), located adjacent and east of 434 Savoy Street, would be shaded for one hour at 5:00 p.m. No other shade-sensitive uses would be shaded by the proposed Bishops Tower in Winter. Some non-sensitive institutional and commercial uses would be partially shaded at various times throughout the day in Spring.

Summer shadow diagrams for the proposed Bishops Tower are located on Figure 143 through Figure 147 of Appendix B of the *Visual Impact Assessment* (Appendix C of this Draft EIR). A small portion of the multi-family residential building (438 Savoy Street), located on the southern side of Savoy Street, would be shaded for one hour at 4:00 p.m. No other shade-sensitive uses would be shaded by the proposed Bishops Tower in Summer. Some non-sensitive institutional and commercial uses would be partially shaded at various times throughout the day in Summer.

Fall shadow diagrams for the proposed Bishops Tower are located on Figure 148 through Figure 152 of Appendix B of the *Visual Impact Assessment* (Appendix C of this Draft EIR). A small portion of the front patio of the multi-family residential building, at the northeast corner of Bishops Road and Savoy Street (455 Savoy Street), would be shaded for two hours from 11:00 a.m.to 1:00 p.m. A small portion of a multi-family residential building (438 Savoy Street), located on the southern side of Savoy Street, would be shaded for one hour at 2:00 p.m. No other shade-sensitive uses would be shaded by the proposed Bishops Tower in Fall. Some non-sensitive institutional and commercial uses would be partially shaded at various times throughout the day in Fall.

Based on the analysis above, the proposed Bishops Tower would not result in the shading of shade-sensitive uses for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), and between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). As such, shadow impacts from the Bishops Tower would be less than significant.

While the proposed State Historic Park Station would result in the shading of shade-sensitive uses for longer periods than the hours set forth in the L.A. CEQA Thresholds, as discussed above, the relatively small areas of park walkways and green spaces that would receive shading from the proposed State Historic Park Station are considered to be elements of the southeastern entrance to the park, but not routinely useable outdoor spaces. As such, shadow impacts from the State Historic Park Station would be less than significant.

The proposed Spring Street Junction would be a similar size and in the same location as the Chinatown/State Park Station of the proposed Project. Therefore, shading of shade-sensitive uses would be similar to the proposed Project. As such, it would result in the shading of shade-sensitive uses for longer periods than the hours set forth in the L.A. CEQA Thresholds. However, the relatively small areas of park walkways and green spaces that would receive shading from the proposed Spring Street Junction are considered to be elements of the southern entrance to the park, but not routinely useable outdoor spaces. In addition, the outdoor seating area associated with the Cargo Snack Shack, which would receive shading for only two hours, currently includes an overhead shade canopy, so the Spring Street Alignment Alternative would not shade an uncovered outdoor seating area. As such, these impacts are not considered to be significant for these reasons. Also, the proposed Spring Street Junction would not result in the shading of shade-sensitive uses for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). As such, shadow impacts from Spring Street Junction would be less than significant.

As such, impacts on scenic vistas, scenic resources, visual character, light and glare, and shadows under the Spring Street Alignment Alternative would be less than significant. Therefore, impacts related to aesthetics under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project.

Agriculture and Forestry Resources

The Spring Street Alignment Alternative would result in development of an ART system, including new development within the A1 zone. However, the Spring Street Alignment Alternative would not convert Farmland to another non-agricultural use, conflict with or cause rezoning of forest land or timberland, result in the loss or conversion of forest land, or result in the conversion of Farmland or forest land to non-agricultural or non-forest uses. As such, no impacts related to the loss of Important Farmland would occur.

Similar to the proposed Project, the only sites zoned for agriculture are the Stadium Tower site and the Dodger Stadium Station site, which are both zoned A1. However, neither of these sites contain agricultural uses. In addition, as discussed previously, notwithstanding the underlying zoning, the Dodger Stadium property is subject to a Conditional Use Permit, which allows for the operation of a Major League Baseball stadium and various ancillary structures and uses, including “mass transportation service” to the site. As such, impacts related to agriculture and forestry resources under the Spring Street Alignment Alternative would be less than significant. Therefore, impacts related to agriculture and forestry resources under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project.

Air Quality

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative has the potential to generate new emissions or cause the Air Basin's criteria pollutant emissions to worsen. As discussed previously, the Spring Street Alignment Alternative would include three stations, a non-passenger junction, and four cable-supporting towers at various locations along the alignment. Several of these components would be in common with the proposed Project, including: Alameda Station, Alameda Tower, Alpine Tower, Stadium Tower, and Dodger Stadium Station. The components that are unique to the Spring Street Alignment Alternative include Spring Street Junction, State Historic Park Station, and Bishops Tower. Spring Street Junction would be located at approximately the same location as the Chinatown/State Park Station under the proposed Project. Bishops Tower would be located adjacent to the site of the Broadway Junction under the proposed Project. Only State Historic Park Station would involve construction at a location not previously analyzed.

From an air quality and health risk perspective, the notable difference between the Spring Street Alignment Alternative and the proposed Project is the construction of an additional tower, Bishops Tower. The construction of Bishops Tower would have similar criteria air pollutant and toxic air contaminant emissions as other towers under the proposed Project. As such, the construction at Bishops Tower would not result in an exceedance of South Coast Air Quality Management District (SCAQMD) Localized Screening Thresholds (LSTs) for any criteria air pollutant. Bishops Tower is also a similar distance to sensitive receptors; therefore, the health risk impact would be similar to the proposed Project and will not result in a health risk impact above SCAQMD significance thresholds.

Although the State Historic Park Station would be at a location not previously analyzed, this station would have similar levels of construction as the proposed Project. Sensitive receptors are not closer to this site than those analyzed in the proposed Project. Therefore, the construction activities at the State Historic Park Station would have similar impacts as the proposed Project and would not result in an exceedance of SCAQMD LSTs nor result in a health risk impact above SCAQMD significance thresholds.

The construction of the Spring Street Alignment Alternative would follow a similar approach as the proposed Project. Therefore, although constructing Bishops Tower would result in criteria air pollutant and toxic air contaminant emissions, with the same staggered scheduling approach as the proposed Project, the Alternative would have similar construction mass emissions as the proposed Project and would not result in an exceedance of the SCAQMD construction maximum daily emissions significance thresholds.

The Spring Street Alignment Alternative would also have similar operational energy demands, renewable power commitments, and battery back-up as the proposed Project. In addition, the net reduction in criteria pollutant emissions due to the anticipated decrease in the number of people traveling to Dodger Stadium (and the surrounding area) in passenger vehicles and increase in number of people using public transit would remain the same. As such, the Spring Street Alignment Alternative would not result in an exceedance of the SCAQMD operational maximum daily emissions significance thresholds and would be consistent with the SCAQMD's Air Quality Management Plan. As such, impacts related to air quality under the Spring Street Alignment Alternative would be less than significant. Therefore, impacts related to air quality resources under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project.

Biological Resources

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative has the potential to impact biological resources within the Biological Survey Area (BSA). The majority of the Spring Street Alignment Alternative is within the BSA that was assessed for the proposed Project; therefore, the Spring Street Alignment Alternative would have a similar impact on biological resources as the proposed Project, as the same areas would be developed. Both the new Spring Street Junction and Bishops Tower proposed under the Spring Street Alignment Alternative are located in areas that were previously analyzed for development under the proposed Project. However, State Historic Park Station would result in development outside of the BSA analyzed for the proposed Project. The habitats that would be directly and indirectly impacted by this alternative would still be primarily urban and cultivated park lands. Although the addition of the State Historic Park Station would increase the tree removal count and tree replacement requirements, the development of the Station would not impact any habitats not already impacted by the proposed Project.

Due to the fully urbanized character of the surrounding area, there are no riparian habitats or wetlands within the BSA or adjacent to the State Historic Park Station. In addition, there are currently no active rare, endangered, or threatened habitats listed by the CDFW or the USFWS, or Habitat Conservation Plans or Natural Community Conservation Plans within the BSA or adjacent to the State Historic Park Station.

According to the California Natural Diversity Data Base (CNDDB), three special-status plant species (prostrate vernal pool navarretia (Navarretia prostrata; CRPR 1B.1), salt spring checkerbloom (Sidalcea neomexicana; CRPR 2B.2), and Greata's aster (Symphyotrichum greatae; CRPR 1B.3)) have been historically identified to occur within the BSA. In addition, nine special-status wildlife species have been recorded in the CNDDB from the BSA, including southern California legless lizard (Anniella stebbinsi; SSC), burrowing owl (Athene cunicularia; SSC), southwestern willow flycatcher (federal and state-listed endangered), western mastiff bat (Eumops perotis californicus; SSC), hoary bat (Lasiurus cinereus; tracked by CNDDB), big free-tailed bat (Nyctinomops macrotis; SSC), bank swallow (state-listed threatened), American badger (Taxidea taxus; SSC), and least Bell's vireo (federal and state-listed endangered). However, neither the BSA nor the State Historic Park Station area provides habitat that is potentially suitable for any of the regional special-status wildlife species identified during the literature review. Overall, the natural habitats within the BSA and State Historic Park Station area have been completely disturbed and these species are known to have long been removed.

Similar to the proposed Project, development of the Spring Street Alignment Alternative does have the potential to conflict with the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (CFGC) through the potential removal or destruction of an active nest, or by causing the direct mortality or injury of individual birds. In addition, mature palm trees in vicinity of the proposed Alameda Station and eucalyptus trees in proximity of the proposed Dodger Stadium Station may provide potentially suitable roosting habitat for individual and small groups of bats. As such, Mitigation Measure BIO-A would also be implemented for the Spring Street Alignment Alternative, which requires a field survey by a qualified bat biologist prior to construction and tree removal at the Alameda Station, Stadium Tower, and Dodger Stadium Station sites. In addition, Mitigation Measure BIO-B would also be included for the Spring Street Alignment Alternative, which requires a pre-construction nesting bird survey if construction activities would occur during the nesting season. As such, impacts related to biological resources under the Spring Street Alignment Alternative would be less than significant with mitigation. Therefore, impacts related to biological resources under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project with mitigation.

Cultural Resources

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative has the potential to impact both designated and non-designated eligible historical resources either through direct physical effects or through indirect affects to the area surrounding a resource.

Specifically, under the Spring Street Alignment Alternative, the proposed State Historic Park Station would be located within Los Angeles State Historic Park, which is considered an archaeological site due to the presence of sub-surface remnants from over 100 years of use as a railroad facility. As such, impacts related to construction of Spring Street Alignment Alternative could be potentially significant if an unknown archaeological resource is identified during construction.

Similar to the proposed Project, to mitigate the impacts of an inadvertent discovery of the resources known to exist in the resource boundary, Mitigation Measure CUL-E would be required, which would require an archaeological testing plan be prepared and implemented, and a data recovery plan be prepared and implemented if significant archaeological remains are encountered during test excavations in consultation with California State Parks.

In addition, historical resources would also be afforded protection through implementation of Mitigation Measure VIB-A, which would require the use of vibration monitoring equipment, and Mitigation Measure VIB-B, which would require the use of force adjustable ground compaction devices during construction.

Further, similar to the proposed Project, construction-related ground disturbing activities associated with future development under the Spring Street Alignment Alternative could lead to the discovery of additional previously unknown archaeological resources and human remains. Mitigation Measures CUL-A, CUL-B, CUL-C and CUL-D would also be implemented in order to reduce any potential impacts to any additional previously unknown archaeological resources. Further, compliance with existing regulations, including California Health and Safety Code Section 7050.5 and PRC Section 5097.98, would also protect human remains. As such, impacts related to cultural resources under the Spring Street Alignment Alternative would be less than significant with mitigation. Therefore, impacts related to cultural resources under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project with mitigation.

Energy

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative would result in new construction and change current activities on the proposed Project site that have the potential to increase the demand for energy. As discussed previously, the Spring Street Alignment Alternative would include three stations, a non-passenger junction, and four cable-supporting towers at various locations along the alignment. Several of these components would be in common with the proposed Project, including: Alameda Station, Alameda Tower, Alpine Tower, Stadium Tower, and Dodger Stadium Station. The components that are different in the Spring Street Alignment Alternative include Spring Street Junction, State Historic Park Station, and Bishops Tower. However, Spring Street Junction would be located at approximately the same location as Chinatown/State Park Station under the proposed Project. Bishops Tower would be located adjacent to the site of Broadway Junction under the proposed Project. Only State Historic Park Station would involve construction at a location not previously analyzed.

From an energy perspective, the notable difference between the Spring Street Alignment Alternative and the proposed Project is the construction of an additional tower, Bishops Tower. The construction of Bishops Tower would result in similar levels of energy usage (i.e., electricity and fuel) as other towers under the proposed Project. Although the inclusion of an additional construction site means that construction of the Spring Street Alignment Alternative would result in a slight increase in the construction energy usage than the proposed Project, energy usage during construction represents a small portion of the proposed Project's overall energy usage. Similar to the proposed Project, this usage would be temporary and construction equipment would conform to current emission standards (and related fuel efficiencies). As with the proposed Project, the Spring Street Alignment Alternative 's construction energy usage would represent a very small demand on regional energy supplies and would not require the development of additional energy capacity.

The operational energy usage of the Spring Street Alignment Alternative would also have similar operational energy demands, renewable power commitments, and battery back-up as the proposed Project. In addition, the net reduction in fuel use due to the anticipated decrease in the number of people traveling to Dodger Stadium (and the surrounding area) in passenger vehicles and increase in number of people using public transit would remain the same. As with the proposed Project, the Spring Street Alignment Alternative's operational energy usage would represent a very small demand on regional energy supplies and would not require the development of additional energy capacity.

The Spring Street Alignment Alternative will similarly be consistent with applicable statutes, regulations, plans and policies related to renewable energy and energy efficiency, including Assembly Bill (AB) 32 and Senate Bill (SB) 32, SB 375, the Los Angeles County Metropolitan Transportation Authority's (Metro) 2019 *Climate Action and Adaptation Plan*,[2] and the Southern California Association of Government's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy *Connect SoCal.*[3] As such, impacts related to energy under the Spring Street Alignment Alternative would be less than significant. Therefore, impacts related to energy under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project.

Geology and Soils

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative has the potential to increase or change exposure to existing geologic conditions. The components within the alignment of the Spring Street Alignment Alternative are set in similar geologic and geotechnical conditions as the proposed Project. Similar to the proposed Project, the Spring Street Alignment Alternative would implement Mitigation Measure GEO-A, which requires preparation of a site-specific final geotechnical report and

[2] Los Angeles County Metropolitan Transportation Authority (Metro). 2019. Metro Climate and Adaptation Plan 2019. Available at: https://media.metro.net/projects_studies/sustainability/images/Climate_Action_Plan.pdf, accessed June 2022.

[3] Southern California Association of Governments (SCAG). 2020. The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Adopted September 3, 2020. Available at: https://scag.ca.gov/read-plan-adopted-final-plan, accessed June 2022.

compliance with applicable recommendations during design to mitigate impacts to less than significant.

Alameda Station, Alameda Tower, and Alpine Tower, which are common to both the proposed Project and the Spring Street Alignment Alternative, as well as the Spring Street Junction, State Historic Park Station, and Bishops Tower sites are located within previously developed/improved areas with existing rights of way, paved areas, and developed properties, limiting their potential to cause substantial soil erosion or loss of topsoil.

The geologic and soil conditions for the components unique to the Spring Street Alignment Alternative are similar to the proposed Project and the significance of this impact is the same. As such, the Spring Street Alignment Alternative would be required to meet the same regulatory requirements as the proposed Project, which would reduce impacts related to geology and soils.

Further, the Spring Street Alignment Alternative would result in similar ground disturbance as the proposed Project, which has the potential to encounter paleontological deposits. Mitigation Measure GEO-B would also be implemented for the Spring Street Alignment Alternative, which requires the development of a Paleontological Resources Monitoring and Mitigation Plan (PRMMP) to provide direction on the identification of high sensitivity areas and appropriate monitoring, excavation, and preservation processes during construction excavation activities. With the implementation of Mitigation Measure GEO-B, impacts related to paleontological resources would be reduced to less than significant.

Overall, impacts related to geology and soils under the Spring Street Alignment Alternative would be less than significant with mitigation. Therefore, impacts related to cultural resources under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project with mitigation.

Greenhouse Gas Emissions

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative would result in new construction and change current activities on the proposed Project site that have the potential to increase GHG emissions. As discussed previously, the Spring Street Alignment Alternative would include three stations, a non-passenger junction, and cable-supporting towers at various locations along the alignment. Several of these components would be in common with the proposed Project, including: Alameda Station, Alameda Tower, Alpine Tower, Stadium Tower, and Dodger Stadium Station. The components that are different in this alternative include Spring Street Junction, State Historic Park Station, and Bishops Tower. Spring Street Junction would be located at approximately the same location as Chinatown/State Park Station under the proposed Project. Bishops Tower would be located adjacent to the site of Broadway Junction under the proposed Project. Only State Historic Park Station would involve construction at a location not previously analyzed.

From a GHG perspective, the notable difference between the Spring Street Alignment Alternative and the proposed Project is the construction of an additional tower, Bishops Tower. The construction of Bishops Tower would result in similar levels of GHG emissions as other towers under the proposed Project. Although the inclusion of an additional construction site means that construction of the Spring Street Alignment Alternative would result in a slight increase in construction GHG emissions over the proposed Project, construction GHG emissions would represent a relatively small proportion of the Spring Street Alignment Alternative's overall GHG emissions.

Similar to the proposed Project, the Spring Street Alignment Alternative would result in a net decrease in GHG emissions compared to existing conditions, albeit a slightly smaller net reduction than the proposed Project. The Spring Street Alignment Alternative would have similar operational energy demands, green power commitments, and battery back-up as the proposed Project. In addition, the net reduction in greenhouse gas emissions due to the anticipated decrease in the number of people traveling to Dodger Stadium (and the surrounding area) in passenger vehicles and increase in number of people using public transit would remain the same.

The Spring Street Alignment Alternative would also be consistent with applicable statutes, regulations, plans, and policies adopted for the purpose of reducing the emissions of GHGs, including AB 32 and SB 32, SB 375, the Los Angeles County Metropolitan Transportation Authority's (Metro) 2019 *Climate Action and Adaptation Plan*,[4] and the Southern California Association of Government's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy *Connect SoCal.*[5] Thus, while the Spring Street Alignment Alternative would have slightly higher construction GHG emissions compared to the proposed Project due to the additional tower, the Alternative would still show an overall net decrease in GHG emissions and would be consistent with state, regional, and local GHG plans, policies, and regulations. As such, the GHG impacts under the Spring Street Alignment Alternative would also be less than significant. Therefore, impacts related to GHG emissions under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project.

Hazards and Hazardous Materials

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative has the potential to increase or change exposure to hazards and hazardous materials. Similar to the proposed Project, during construction activities for the stations, junction, and towers, it is anticipated that limited amounts of hazardous substances, such as solvents, paints, oils, hydraulic fluids, gasoline, diesel fuel, etc. would be transported to and used at the component sites throughout the duration of construction. In order to obtain permits required to commence construction, the Spring Street Alignment Alternative would comply with all applicable local, state and federal regulations. These regulations identify safety standards and procedures related to the removal, handling, storage, transport, use, and disposal of hazardous materials and require testing, abatement, and remediation when deemed necessary. The Spring Street Alignment Alternative would also implement Mitigation Measure HAZ-A, which requires preparation of a Soil and Groundwater Management Plan. Thus, compliance with all applicable regulations and implementation of Mitigation Measure HAZ-A would ensure that future development would not create a significant hazard to the public, schools, or the environment through the transport, use, disposal, or release of hazardous materials. However, unlike the proposed Project, the Spring Street Alignment Alternative would not require demolition of the existing building at 1201 North Broadway and no mitigation would be required to reduce impacts from hazards or hazardous materials within the 1201 North Broadway building.

In addition, the Spring Street Alignment Alternative would not result in impacts related to safety hazards or excessive noise for people residing or working in the area, as the Spring Street

---

4 Los Angeles County Metropolitan Transportation Authority (Metro). 2019. Metro Climate and Adaptation Plan 2019. Available at: https://media.metro.net/projects_studies/sustainability/images/Climate_Action_Plan.pdf, accessed June 2022.

5 Southern California Association of Governments (SCAG). 2020. The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Adopted September 3, 2020. Available at: https://scag.ca.gov/read-plan-adopted-final-plan, accessed June 2022.

Alignment Alternative is not located within an area covered by an airport land use plan, nor within two miles of a public airport.

Road closures and roadway disruptions would also be temporary and intermittent throughout construction of the Spring Street Alignment Alternative and would be coordinated with the Los Angeles Department of Transportation (LADOT). The Spring Street Alignment Alternative would also implement Mitigation Measure TRA-C, which would require the development of a specific temporary disaster route plan for the proposed Project prior to the start of construction to reduce potential impacts related to impairment of an adopted emergency response plan or emergency evacuation plan during construction. As with the proposed Project, compliance with existing regulations and implementation of Mitigation Measure TRA-C would ensure that an adequate emergency response plan is established for the Spring Street Alignment Alternative.

Overall, similar to the proposed Project, impacts related to hazards and hazardous materials under the Spring Street Alternative would be less than significant with mitigation. Therefore, impacts related to hazards and hazardous materials under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project with mitigation.

Hydrology and Water Quality

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative has the potential to change existing hydrology and water quality conditions. Similar to the proposed Project, this alternative would introduce potential new sources of water pollutants from construction and operational activities of the ART system. The Spring Street Alignment Alternative would also be required to include storm drain facility improvements, LID, source control, site design, and treatment control BMPs, that are similar to those included for the proposed Project. Therefore, the Spring Street Alignment Alternative would result in less than significant impacts to hydrology and water quality with adherence to applicable federal, state, regional, and local laws and regulations, including compliance with applicable stormwater permits, wastewater permits, and other water quality regulations. As such, impacts related to hydrology and water quality under the Spring Street Alignment Alternative would be less than significant. Therefore, impacts related to hydrology and water quality under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project.

Land Use and Planning

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative would change the existing land use of the proposed Project site. Similar to the proposed Project, the Spring Street Alignment Alternative would result in temporary closures during the construction phase that would disrupt vehicular, pedestrian, and bicycle access within and between communities. However, Mitigation Measure TRA-B includes preparation of a Construction Traffic Management Plan to manage access, and existing communities would remain accessible from other surrounding streets. Therefore, temporary closures would not physically divide an existing community. Further, the required aerial easements for the proposed Project alignment would not physically divide an established community because the aerial easement would not impede vehicular and/or pedestrian circulation by virtue of its aerial nature.

In addition, the Spring Street Alignment Alternative would also be subject to the policies, regulations, goals, and/or objectives of the Los Angeles State Historic Park General Plan and Los Angeles State Historic Park Interpretive Master Plan at the State level, SCAG’s RTP/SCS at the regional level, and the City of Los Angeles General Plan, including the Community Plans, Alameda District Specific Plan, Cornfield Arroyo Seco Specific Plan, City of Los Angeles Municipal Code and RIO District Ordinance at the local level. Similar to the proposed Project, the density and location of the Spring Street Alignment Alternative would not conflict with policies of local and regional land use plans adopted to avoid or mitigate environmental effects. However, similar to the proposed Project, State Parks has determined that the proposed Project would be inconsistent with the Los Angeles State Historic Park General Plan because the identified land uses in the General Plan's Preferred Park Concept Elements did not contemplate a transit station like the proposed Project's Chinatown/State Park Station. State Parks considers this inconsistency a potentially significant impact. Mitigation Measure LUP-A would be implemented to require the proposed Project to obtain a LASHP General Plan Amendment, which would reduce this impact to less than significant.

Mineral Resources

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative has the potential to encounter mineral resources. As discussed previously, the Spring Street Alignment Alternative would result in similar development to the proposed Project. The Spring Street Alignment Alternative alignment would also be located within an area designated as MRZ-3, which includes areas containing mineral deposits, the significance of which cannot be evaluated from available data. As such, the Spring Street Alignment Alternative would not result in a loss of availability of known mineral resources; result in the extraction of these resources; or further preclude the extraction of such resources. Similar to the proposed Project, impacts related to mineral resources under the Spring Street Alignment Alternative would not occur. Therefore, impacts related to mineral resources under the Spring Street Alignment Alternative would be similar to the no impact of the proposed Project.

Noise and Vibration

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative has the potential to generate construction or operational noise or vibration impacts. The Spring Street Alignment Alternative would generate the same type and volume of construction and operational noise and vibration as the proposed Project. Additionally, the length of time of construction and associated noise and vibration would be similar, and the noise and vibration generated would affect the same sensitive receptors as the proposed Project. The inclusion of State Historic Park Station under the Spring Street Alignment Alternative would introduce construction in closer proximity to the existing uses along North Spring Street and the cross street of Sotello Street, however, there are no noise or vibration sensitive receptors in this area. State Historic Park Station, combined with Spring Street Junction, does introduce potential construction noise and vibration impacts to a larger portion of the State Historic Park compared to the proposed Project.

Mitigation Measure NOI-A, would continue to be required for the Spring Street Alignment Alternative. Overall, noise impacts from the Spring Street Alignment Alternative would be significant and unavoidable during construction with implementation of mitigation. Additionally, while the State Historic Park Station would not introduce a new sensitive receptor as compared to the proposed Project, it would result in potential impacts to a larger portion of the State Historic Park compared to the proposed Project. Therefore, impacts related to noise under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project with mitigation.

Additionally, as with the proposed Project, impacts would be significant and unavoidable for ground-borne vibration impacts (human annoyance). Implementation of Mitigation Measures VIB-A and VIB-B would reduce any potential vibration impacts due to construction (damage). Therefore, impacts related to vibration (damage) under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project with mitigation.

Population and Housing

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative has the potential to modify population and housing characteristics in the proposed Project area. Both the proposed Project and the Spring Street Alignment Alternative provide a first/last mile transit connection to Dodger Stadium and would be designed to meet the area's transit needs and improve the efficiency of the existing transportation network. Similar to the proposed Project, the Spring Street Alignment Alternative would not introduce new infrastructure or the extension of roads, nor would it result in the substantial displacement of housing or people, as no housing units are specifically proposed to be demolished, converted to market rate, or removed through other means. In addition, employment generated by the Spring Street Alignment Alternative would not impact population in the heavily populated Los Angeles region, and no housing units are proposed as part of the Spring Street Alignment Alternative. Further, the Spring Street Alignment Alternative is not anticipated to stimulate development to a level inconsistent with applicable planned local land use designations, and as a first/last mile transit connection to Dodger Stadium like the proposed Project, this alternative would not induce substantial population growth either directly or indirectly. Overall, impacts related to population and housing would be less than significant. Therefore, impacts related to population and housing under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project.

Public Services

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative has the potential to increase the demand for public services in the area. Consistent with the proposed Project, the Spring Street Alignment Alternative would result in an increased demand for fire protection and police protection services. Additionally, during construction, proposed lane closures could inhibit access in the area, and by necessity, increase traffic volumes on the detour routes, which could increase traffic congestion on those routes. Therefore, similar to the proposed Project, a Construction Traffic Management Plan, as outlined in Mitigation Measure TRA-B in Section 3.17, Transportation, would be required to ensure adequate emergency access is maintained in and around the Spring Street Alignment Alternative and component sites throughout all construction activities. Additionally, WFR-PDF-A, as detailed in Section 3.20, Wildfire, would be implemented which would require preparation of a Fire Protection Plan to further reduce risks associated with ignition of wildland fire.

Implementation of TRA-B, WFR-PDF-A, and compliance with applicable State and local regulations, including coordination with LAFD, LAPD, and State Parks prior to construction, would ensure that the Spring Street Alignment Alternative would not create additional demand for LAFD, LAPD, or State Parks services during construction. In addition, with adherence to the applicable regulations, coordination with LAFD, LAPD, and State Parks, and implementation of an Emergency Operations Plan, which would be reviewed prior to the issuance of a building permit, operation of the proposed Project would not create additional demand for LAFD or LAPD services that would result in the need to add new, or physically alter existing fire or police protection facilities.

Similar to the proposed Project, there are four schools located within the study area of the Spring Street Alignment Alternative. The Spring Street Alignment Alternative does not include any housing and it is unlikely that any specialized personnel or employees would relocate their families and potential school-aged children due to the Spring Street Alignment Alternative. In addition, pursuant to the State Education Code, Chapter 6, Sections 17620 through 17626, new commercial and industrial development in the City, including transportation projects, are required to pay development fees, as adopted by the affected school district, for the construction of school facilities. Payment of such fees is deemed to be full mitigation of a project's development impacts.

Further, the development of a Construction Traffic Management Plan, as outlined in Mitigation Measure TRA-B, would be also required to ensure adequate emergency access is maintained in and around the Spring Street Alignment Alternative and component sites throughout construction. Overall, the Spring Street Alignment Alternative is not anticipated to cause a demand for new or expanded fire protection, police protection, parks, or other public facilities, and impacts would be less than significant with mitigation. Therefore, impacts related to public services under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project with mitigation.

Recreation

The Spring Street Alignment Alternative would result in development of an ART system. Increased demand for parks and recreational facilities is generally associated with an increase in housing or population. Similar to the proposed Project, a peak of approximately 100 total workers would be anticipated during construction of the Spring Street Alignment Alternative. The use of parks and recreational services during construction would be temporary and cease following construction. As such, construction of the Spring Street Alignment Alternative would not generate a permanent increase or substantial temporary increase in the demand for parks or generate new permanent residents that would result in an increase in the use of existing parks and recreational facilities such that substantial deterioration of parks would occur or be accelerated.

Similar to the proposed Project's Chinatown/State Park Station, the construction of State Historic Park Station would require the temporary closure of portions of Los Angeles State Historic Park; however, while there would be a temporary closure, access to the park would be maintained as there are various access points to Los Angeles State Historic Park. The construction of State Historic Park Station would also temporarily fence off portions of the park, generate dust and noise, and introduce heavy construction equipment into the area, which may potentially discourage people from using certain portions of the park, disrupt events occurring at the park, or increase the use of the open portions of the park. However, park patrons would still be able to access the majority of the Los Angeles State Historic Park, including all the recreational areas, during construction activities within the park. In addition, regular park patrons are familiar with temporary park closures as they often occur in conjunction with concerts, fairs, and festivals that take place within the park throughout the year.

In addition, similar to the proposed Project, the Spring Street Alignment Alternative has the potential to draw an increased population of visitors to the parks within the proposed Project vicinity. Visitors and tourists to the Los Angeles region may use the Spring Street Alignment Alternative for tourism and recreational purposes. However, the Spring Street Alignment Alternative is not intended to serve as a tourist attraction or recreational facility, and would not create or expand the existing use and capacity of the Los Angeles State Historic Park beyond what is already contemplated for the park.

Further, although employees may use parks or recreational facilities during operation of the Spring Street Alignment Alternative on lunch breaks or after their shifts end, the number of employees is considered nominal and would not result in a noticeable increased use of existing parks or other recreational facilities, such that substantial physical deterioration would occur. Further, the Spring Street Alignment Alternative is also a transit project that would construct an ART system between LAUS and Dodger Stadium that would not include the construction or expansion of recreational facilities. As such, the Spring Street Alignment Alternative would not result in the construction of new or physically altered park or recreational facilities, the construction of which would cause significant adverse physical environmental impacts. Therefore, impacts related to recreation under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project.

Transportation

The Spring Street Alignment Alternative is expected to have similar consistency as the proposed Project with programs, plans, ordinances or policies addressing the circulation system. The primary variation is related to the location of the State Historic Park Station under the Spring Street Alignment Alternative.

The Cornfields Arroyo Secco Specific Plan (CASP) identifies the portion of Spring Street between Baker Street and College Street for future roadway widening.[6] Because the station location under the Spring Street Alignment Alternative would need to locate columns within the ROW, the placement of the columns could have the potential to affect the future widening potential of the roadway. Under the Spring Street Alignment Alternative, the station columns at the State Park Historic Station would generally be located within the public ROW; however, the column placement would be designed to accommodate both the existing conditions and the proposed future widening of Spring Street. As such, the Spring Street Alignment Alternative would be consistent with the street classifications identified in the Mobility Plan 2035.

Similar to the proposed Project, the Spring Street Alignment Alternative is expected to result in temporary lane closures during construction, which have the potential to increase traffic volumes and traffic congestion on the detour routes. As such, implementation of a Construction Traffic Management Plan, as outlined in Mitigation Measure TRA-B, would be required to ensure adequate emergency access is maintained in and around the alignment and component sites throughout all construction activities to ensure that the impact is less than significant. Therefore, construction of the Spring Street Alignment Alternative would not substantially increase hazards due to a geometric design feature or incompatible use with implementation of Mitigation Measure TRA-B. In addition, as components of the Spring Street Alignment Alternative get constructed, such as columns, the potential for visibility obstructions detailed below for operations could be introduced. As these features are constructed, Mitigation Measure TRA-A would be implemented concurrently to ensure that these impacts would be less than significant during construction.

The impacts on emergency access during construction would be similar under the Spring Street Alignment Alternative as the proposed Project. Construction of the Spring Street Alignment Alternative would introduce similar lane closures, detours, and closed worksites within City streets. These closures would temporarily disrupt vehicular, bicycle, pedestrian, and emergency vehicle access. This includes the Alameda Street and Spring Street disaster routes. Consistent with the proposed Project, implementation of Mitigation Measure TRA-C requires the

[6] City of Los Angeles Department of City Planning, Cornfield Arroyo Seco Specific Plan, adopted 2013, available at: https://planning.lacity.org/odocument/9d013e0f-452b-4857-86d5-fcd357b27a4d, accessed June 2022.

development of a specific temporary disaster route plan for the proposed Project prior to the start of construction to reduce potential impacts related to impairment of an adopted emergency response plan or emergency evacuation plan during construction. With implementation of Mitigation Measures TRA-B and TRA-C, construction impacts would be less than significant.

Regarding operations, the Spring Street Alignment Alternative is expected to have similar ridership levels and VMT benefits as the proposed Project. The components of the Spring Street Alignment Alternative are the same as the proposed Project for the following locations:

- Alameda Station
- Alameda Tower
- Alpine Tower
- Stadium Tower
- Dodger Stadium Station

Therefore, the findings for the Spring Street Alignment Alternative are the same as the proposed Project at these locations, including the finding of a less than significant impact for Alameda Station, Alpine Tower, Stadium Tower and Dodger Stadium Station. For the Alameda Tower, consistent with the proposed Project, implementation of the visibility enhancements described under Mitigation Measure TRA-A would alleviate potential visibility issues associated with operation of the Alameda Tower. With implementation of Mitigation Measure TRA-A, impacts would be less than significant.

The following components of the Spring Street Alignment Alternative vary from the proposed Project and a component-specific description is provided below:

- Spring Street Junction
- State Historic Park Station
- Bishops Tower

Spring Street Junction

Spring Street Junction under the Spring Street Alignment Alternative would be placed in a similar location to Chinatown/State Park Station under the proposed Project. Because the evaluation of the potential to increase geometric hazards is primarily focused on sight visibility for pedestrians and motorists related to the columns, the conclusions for Spring Street Junction under the Alternative are consistent with the conclusions for Chinatown/State Park Station under the proposed Project. This includes the implementation of the visibility enhancements described under Mitigation Measure TRA-A, including the channelization of pedestrians to the crosswalk, which would alleviate potential visibility issues associated with operation of the Spring Street Junction. With implementation of Mitigation Measure TRA-A, impacts would be less than significant.

State Historic Park Station

State Historic Park Station under the Spring Street Alignment Alternative would span the southbound lanes of Spring Street and would introduce columns into the roadway. Spring Street has a 35-mph posted speed limit, as well as a stopping sight distance of 250 feet. The intersection of Ann Street and Spring Street would be located within the 250-foot sight distance triangle, so pedestrians who cross Spring Street at Ann Street could potentially be briefly obstructed. Ann Street does not have a marked crossing; but because it is an intersection, it is considered a legal crossing for pedestrians. Traffic signals are located well beyond the 250 feet required for vertical sight distance, so there is no anticipated vertical sight distance issue related to traffic signals. Vehicles travelling northbound would have a clear line of sight for pedestrians crossing at this intersection, and therefore no sight distance issues are expected. The intersections of Spring Street at Sotello Street and Spring Street at Mesnagers Street are also beyond 250 feet from the columns for both northbound and southbound vehicles, and so there would be a clear line of sight at these intersections and no sight distance issues are expected. To mitigate the potential for significant visibility impacts associated with pedestrians crossing Spring Street at Ann Street, Mitigation Measure TRA-A would be implemented to alleviate potential visibility issues associated with the operation of State Historic Park Station. With implementation of Mitigation Measure TRA-A, impacts would be less than significant.

Bishops Tower

Bishops Tower under the Spring Street Alignment Alternative would be located on private property on the southeast corner of Bishops Road and Savoy Street. The intersection is unsignalized, and the westbound approach of Savoy Street is stop-controlled. Westbound vehicles would need sufficient horizontal sight distance to see northbound and southbound vehicles prior to entering the intersection. Northbound vehicles would also need sufficient horizontal sight distance to see pedestrians in the unmarked crosswalk on the east leg of the intersection. Bishops Road is a collector street with a prima facie speed limit of 25 mph, requiring a corner sight distance of 340 feet for the sightline to the westbound vehicle and a stopping sight distance of 150 feet to the pedestrians in the crosswalk. Bishops Tower would not obstruct the horizontal sight line between the northbound vehicles and the pedestrians in the crosswalk. However, it would obstruct the horizontal sight line between the westbound vehicle on Savoy Street and the northbound vehicle on Bishops Road. This visibility issue is an existing condition because the existing buildings and the fenced off parcel at the southeast corner of the intersection appear to be constructed to the lot line.

Implementation of the visibility enhancements described under Mitigation Measure TRA-A would alleviate visibility issues associated with operation of Bishops Tower under the Spring Street Alignment Alternative. With implementation of Mitigation Measure TRA-A, impacts would be less than significant.

The traffic signal at the intersection of Broadway and Bishops Road is located beyond the 150 feet required for vertical sight distance, so there is no anticipated vertical sight distance issue related to traffic signals.

Consistent with the proposed Project, operation of the Spring Street Alignment Alternative would not affect emergency response to adjacent roadways or parcels. All stations and junctions can be readily accessible from adjacent City streets during an evacuation or fire situation affecting operations. Therefore, the Spring Street Alignment Alternative would result in less than significant impacts related to emergency response.

Overall, the Spring Street Alignment Alternative would result in less than significant impacts with mitigation. Therefore, impacts related to transportation under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project with mitigation.

Tribal Cultural Resources

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative would have the potential to adversely affect unknown tribal cultural resources. In compliance with AB 52, records searches were conducted through the South Central Coastal Information Center (SCCIC) and the Native American Heritage Commission (NAHC) for the proposed Project, which also includes the area of the Spring Street Alignment Alternative. The survey resulted in the identification of one multi-component (prehistoric and historic) site, Resource 19-001575. Resource 19-001575 consists of a prehistoric to contact period Native American cemetery, as well as structural remains and refuse deposits associated with the nineteenth to early twentieth century development of Los Angeles. As with the proposed Project, Mitigation Measure CUL-D, which would require an archaeological testing plan and data recovery plan for the Area of Direct Impacts, would be required for the Spring Street Alignment Alternative to mitigate potential impacts to the resource. With implementation of Mitigation Measure CUL-D, impacts related to a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 and listed in the California Register of Historical Resources would be less than significant. In addition, operation of the Spring Street Alignment Alternative, including routine maintenance activities, would not require any ground disturbing activities that could expose archaeological sites, including tribal cultural sites, and no impact would occur.

In addition, similar to the proposed Project, ground disturbing activities have the potential to reveal additional unidentified subsurface deposits of prehistoric and historic age, including Native American burials. As such, Mitigation Measure TCR-A would require a Native American monitor to be identified in the Cultural Resources Monitoring and Mitigation Plan (CRMMP), as well as be present during ground disturbing activities. The CRMMP would also include procedures in the event of an unanticipated discovery. With the implementation of mitigation, impacts to tribal cultural resources would be less than significant. Therefore, impacts related to tribal cultural resources under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project with mitigation.

Utilities and Service Systems

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative would have the potential to impact utilities and service systems. As the scale of the Spring Street Alignment Alternative is similar to the proposed Project, the amount of water used and wastewater generated, as well as the demand for utilities and service systems, would remain similar under the Spring Street Alignment Alternative. The demand for regional water supplies and generation of wastewater would remain similar. Overall, impacts related to water supplies and wastewater would be less than significant with adherence to applicable state and local codes and regulations.

Similar to the proposed Project, the relocation of existing utilities may cause a significant impact related to interruption of services for the surrounding area. To minimize the potential interference with existing utilities associated with the construction of the Spring Street Alignment Alternative, Mitigation Measure USS-A would also be implemented for the Spring Street Alignment Alternative, which requires the development of a Utility Relocation Plan to be implemented prior to and during construction.

In addition, the Spring Street Alignment Alternative would be required to adhere to federal, state, and local regulations for solid waste disposal, including AB 939 and those identified in the City's Solid Waste Integrated Resource Plan to divert materials prior to disposal for recycling or reuse, where appropriate. Therefore, the Spring Street Alignment Alternative would also not conflict with the Solid Waste Integrated Resource Plan, AB 341, and AB 939 and local management and reduction statutes related to solid waste. Further, with implementation of Mitigation Measure HAZ-A, which would require the proper handling and removal of impacted soils and/or groundwater for off-site disposal, impacts related to solid waste generation during construction of the Spring Street Alignment Alternative would be less than significant. As such, solid waste would not be generated in excess of state or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Overall, impacts to utilities and service systems from the Spring Street Alignment Alternative would be less than significant with mitigation. Therefore, impacts related to utilities and service systems under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project with mitigation.

Wildfire

The Spring Street Alignment Alternative would result in development of an ART system; therefore, the Spring Street Alignment Alternative has the potential to increase wildfire risk. Under the Spring Street Alignment Alternative, the proposed Alameda Station, Alameda Tower, Alpine Tower, and Spring Street Junction would be constructed outside of the Very High Fire Hazard Severity Zone (VHFHSZ) and in highly urbanized, developed areas that would not be subject to increased fire risks. Similarly, the proposed State Historic Park Station site is located at Los Angeles State Historic Park, which is irrigated and maintained, providing limited fuel for wildfires. Bishops Tower, Stadium Tower, and Dodger Stadium Station would be constructed within the VHFHSZ; however, these locations are in and surrounded by developed areas or on sites otherwise largely confined by paved roads and existing development.

Similar to the proposed Project, the potential risk for wildfire would be managed by the implementation of standard construction practices and regulatory compliance measures related to safeguards for construction, alteration, and demolition activities in order to provide reasonable safety to life and property from fire during such activities. To provide additional environmental benefits similar to the proposed Project, the Spring Street Alignment Alternative would also require WFR-PDF-A, which includes implementation of a Fire Protection Plan, and WFR-PDF-B, which requires a fuel modification zone surrounding the Stadium Tower construction site to reduce impacts during construction. Additionally, the proposed Project has a third PDF (WFR-PDF-C) which requires security monitoring by staff and cameras installed to monitor, identify, and report any potential fire safety hazards, including the presence of sparks or smoke at Broadway Junction, Stadium Tower, and Dodger Stadium Station. The Spring Street Alignment Alternative would implement this same PDF, with the substitution of Bishops Tower for Broadway Junction.

In addition, similar to the proposed Project, operation of the Spring Street Alignment Alternative would not impair the implementation of the City's Emergency Operations Plan and would not result in any permanent roadway closures or changes that would impact access routes. In addition, the Spring Street Alignment Alternative would implement Mitigation Measure TRA-C, requiring the development of a specific temporary disaster route plan for the proposed Project prior to the start of construction to reduce potential impacts related to impairment of an adopted emergency response plan or emergency evacuation plan during construction. Furthermore, the Spring Street Alignment Alternative would be designed and constructed in accordance with applicable building and fire codes and, therefore, would not exacerbate wildfire risks.

Overall, impacts related to wildfire from the Spring Street Alignment Alternative would be less than significant. Therefore, impacts related to wildfire under the Spring Street Alignment Alternative would be similar to the less than significant impacts of the proposed Project.

Relationship of the Alternative to Project Objectives

As described above, the Spring Street Alignment Alternative includes three stations, a non-passenger junction, and four cable-supporting towers at various locations along the alignment. Several of these components would be in common with the proposed Project, including: Alameda Station, Alameda Tower, Alpine Tower, Stadium Tower, and Dodger Stadium Station. The components that are different in this alternative include Spring Street Junction, State Historic Park Station, and Bishops Tower. The Spring Street Alignment Alternative would include development of an ART system that provides a direct transit connection between LAUS and the Dodger Stadium property via an aerial gondola system, and improves connectivity for the surrounding communities by linking to the Los Angeles State Historic Park, Elysian Park, and the region's rapidly growing regional transit system at LAUS. As such, it would be consistent with the project objectives. The relationship of the Spring Street Alignment Alternative to the project objectives is presented in Table 4-1, at the beginning of this Chapter.

Although the Spring Street Alignment Alternative would be consistent with the project objectives, it would require a larger footprint within the Los Angeles State Historic Park. Overall, the proposed Project's Chinatown/State Park Station location was chosen over the other potential locations, including State Historic Park Station location as part of the Spring Street Alignment Alternative, because it minimized the proposed Project's potential footprint within the Los Angeles State Historic Park while maintaining transit access to the Park and surrounding communities, and is in closer proximity to the Metro L Line (Gold) station. As such, the Spring Street Alignment Alternative would not meet the following objective to the same extent as the proposed Project, and therefore, is considered to be only partially consistent with:

Objective 11: Minimize the Project's environmental footprint through the integration of sustainability and environmentally-friendly design features into the materials, construction, operations, and maintenance of the proposed Project.

4.2.2.3 Transportation Systems Management Alternative

Under the Transportation Systems Management (TSM) Alternative, the proposed Project would not be constructed, and instead the existing Union Station Dodger Stadium Express (DSE) service would be enhanced to determine if the DSE could increase the capacity of the DSE similar to that of the proposed Project.

As detailed in Section 2.0, Project Description, the proposed Project would have a maximum capacity of approximately 5,000 people per hour per direction, or approximately 10,000 riders in the two-hour period before and after a game. Departures would occur approximately every 23 seconds during gamedays. Based on the forecast ridership for the proposed Project as detailed in Section 3.17, Transportation, 6,000 riders are forecast in 2026, and 10,000 riders in 2042.

The Union Station DSE carries an average of approximately 1,845 passengers to a game. In the 90-120 minutes prior to a game through the end of the second inning, the Union Station DSE operates on a "load and go" basis. While the published frequency is approximately every 10 minutes or 6 buses per hour[7], Metro Operations staff indicate that buses run every 5 to 10 minutes, with a 7.5 minute frequency being typical (8 bus trips per hour), and appropriate for the evaluation of existing capacity.[8] Buses typically take approximately five minutes to load passengers.

A minimum of 7 buses are in operation for this service, with 11 buses in total available. During weekday evenings, particularly on higher attendance game days, Metro can typically meet a 5 to 7.5 minute service frequency. However, due to congestion on the roadway network, including on Vin Scully Avenue near Dodger Stadium where there is no bus lane, there can be substantial delays getting empty buses back to LAUS. This affects the service frequency on subsequent bus runs, which can extend wait times to ten minutes or more, so consistent frequency throughout the operations of the DSE can be challenging to maintain. Metro operates the DSE with 45-foot buses, which have 46 seats. The DSE holds an average of approximately 65 passengers, inclusive of seated and standing capacity (load factor of 1.41), though on higher attendance games, the DSE can hold up to approximately 70 passengers. With an average of 7.5 minute service frequency and an average of 65 passengers per bus, the existing DSE has a capacity of 1,040 riders per hour.

In order to define the level of bus service needed for the TSM Alternative, the 5,000 per hour projected passenger capacity of the proposed Project was divided by the 65-passenger capacity of the current 45-foot buses that operate on the Union Station DSE, resulting in 77 bus trips per hour, or an average of 1 bus departing approximately every 47 seconds. By comparison, during the weekday evening peak period, Patsaouras Plaza, which is the primary bus facility on the LAUS/Metro Gateway property, has approximately 43 buses exiting per hour. The increase in the DSE under this alternative is approximately 1.79 times the bus volume (77/43=1.79) accommodated in an hour in Patsaouras Plaza and its gateway intersection Vignes Street and Ramirez Street. The Amtrak bus facility has approximately one bus per hour.

Over its years of operations, the Union Station DSE has operated out of different locations on the LAUS/Metro Gateway property. It originally operated out of Patsaouras Plaza but was shifted to the West Portal due to operational concerns.[9] It was relocated north of the portico along the western frontage of the historic LAUS, north of the ticketing concourse, and south of the Mozaic Apartments. However, due to challenges in buses navigating the internal LAUS roadway, between the historic LAUS and the Mozaic Apartments, Union Station DSE was again relocated along the southern end of the western frontage of the Station, in front of the historic Fred Harvey Room. The current loading zone has capacity for one bus at a time. Metro staff have studied ways to facilitate multiple buses loading simultaneously and have found that there is insufficient curb loading capacity.[10]

In order to meet service frequencies of 47 seconds, a minimum of 6 buses loading simultaneously would be required, which cannot be accommodated in the existing location for the Union Station DSE. To determine an approximate footprint of a dedicated DSE bus plaza to serve the simultaneous loading of 6 buses, with effective passenger queue management, Metro Operations staff referred to the shuttle bus loading facility used at SoFi Stadium in the City of Inglewood.[11]

7 Final Report: MSRC Contract MS21001 Dodger Stadium Express 2019 Season, Los Angeles County Metropolitan Transportation Authority, April 3, 2020

8 Personal communication with Mr. George Del Valle, Principal Transportation Planner, Metro Contract Services, on May 31, 2022.

9 *Ibid*.

10 *Ibid*.

11 *Ibid*.

This facility is located on the block bounded by Prairie Avenue on the west, District Drive on the east, Arbor Vitae Street to the north, and an internal parking access roadway to the south. Figure 4-13 provides aerial imagery of this approximately 139,400 square foot facility, which Metro Operations staff indicated can accommodate six buses simultaneously loading, with sufficient bus and passenger queueing areas to maintain high frequency "load and go" service that could provide service capacity levels to match the proposed Project. The size of this facility substantially exceeds that of the Amtrak bus facility and Patsaouras Plaza, so an off-site loading facility would need to be developed to accommodate this level of bus activity.

Metro's Division 13 maintenance facility is located at the northeast corner of the intersection of Vignes Street and Cesar E. Chavez Avenue. The top deck of the Metro Division 13 bus maintenance facility is approximately 131,750 square feet, so could likely accommodate the space needs for service at this frequency. Because it is of sufficient size and is owned by Metro, it has the potential to accommodate this service expansion. Alternative sites would require acquisition and potentially substantial site improvements.

However, operational changes to the traffic signal at Vignes Street and the Division 13 driveway would need to be introduced to provide sufficient green time for buses to enter and exit the facility. This would require shifting green time from northbound and southbound Vignes Street, which could introduce additional vehicle queueing for those approaches, which has the potential to affect traffic operations at the intersection of Vignes Street and Cesar E. Chavez Avenue.

Moreover, use of Division 13 would introduce substantial disruption to Metro's services, including layover of existing public transit services that serve Patsaouras Plaza, and the existing maintenance operations of Division 13. It would also extend the transfer walking time for passengers, and substantially increase the number of pedestrians crossing two legs of the intersection of Vignes Street and Cesar E. Chavez Avenue, increasing exposure to potential vehicle-pedestrian collisions with an at-grade crossing for pedestrians. The amount of pedestrian activity at this location would also affect its signal timing, introducing additional vehicle delay for all approaches as the number of pedestrian calls and signal timing allotted to pedestrians would need to increase to serve the demand. Traffic Control Officers (TCOs) would be needed to manage the level of activity at this intersection. These changes would increase congestion and queue spillback, and further effect on-time performance for existing transit services that serve Patsaouras Plaza, as well as transit services on Cesar E. Chavez Avenue.

The existing bus only lane for the Union Station DSE on Cesar E. Chavez Avenue currently is westbound only and it starts west of the Union Station Driveway intersection. To adequately serve the level of bus activity required for the TSM Alternative, the bus only lane would likely need to be extended to the east to the intersection of Vignes Street and would be needed in both directions. To implement the extension of this facility, the general purpose lanes on Cesar E. Chavez Avenue would need to be reduced to one lane in each direction eastbound and westbound and/or right turn lanes would need to be eliminated, further reducing traffic capacity for other vehicles.

The proposed Project would not require such facilities, as it is an ART system and therefore would not need any footprint for transit vehicle queueing. The proposed Project's Alameda Station would be accessed directly from the planned LAUS Forecourt on the east side of Alameda Street, as well as from El Pueblo on the west side of Alameda Street, thereby eliminating the need for riders to cross any external roadways when transferring from other transit services and vehicle drop-off areas, such as the existing curb loading zone along the east side of Main Street at El Pueblo. The proposed Project would also not require the need for expanded bus only lanes that would affect roadway capacity for general purpose lanes, because the proposed Project would not be introducing an expanded at-grade transit service.

Figure 4-13: SoFi Stadium Shuttle Bus Loading Facility

Loading facilities of the same capacity as described above would also be needed at Dodger Stadium, and dedicated bus only lanes would be needed on Vin Scully Avenue and within Dodger Stadium in order to maintain consistent schedule performance both inbound and outbound. This location is responsible for much of the run time variability and delay, particularly after Dodger games.[12] This would interfere with vehicle access to and through the parking lots and may require substantive modification to the parking lots. This would also reduce traffic lane capacity on Vin

12 Personal communication with Mr. George Del Valle, Principal Transportation Planner, Metro Contract Services, on May 31, 2022.

Scully Avenue for other vehicle types, which will increase delay, queue spillback and congestion for those vehicles.

The proposed Project is expected to take approximately seven minutes to travel between Union Station and Dodger Stadium, substantially less than the DSE travel time to and from Dodger Stadium on city streets.

In order to calculate average existing travel time for the DSE, data for the 2019 season were obtained from Metro for games with published attendance of 48,000 or higher. The 2019 season average attendance was approximately 48,650, so these data points represent typical days relative to attendance. Metro provided data for a total of 17 games, inclusive of opening day, and three playoff games. Travel times from Union Station to Dodger Stadium (pre-game) ranged from approximately 14 minutes to 24 minutes, with an average travel time of approximately 17 minutes.

After a game, travel times ranged from approximately 18 minutes to 49 minutes (which occurred on opening day) for an average of approximately 22 minutes. Excluding the opening day travel time outlier, the post-game travel time ranged from approximately 18 minutes to 24 minutes, with an average travel time of 20 minutes. These average travel times represent an increase of 10 – 13 minutes of travel time relative to the proposed Project. Moreover, loading times are higher for buses than cabins as the proposed Project's cabins have a lower capacity than the buses and are constantly moving, facilitating quicker ingress and egress. Loading times would also affect the travel time differential between TSM Alternative and the proposed Project. The Union Station DSE would also experience increased travel time associated with an off-site loading facility, such as Division 13, including travel time within that facility, as well as additional travel time on Vignes Street and Cesar E. Chavez Avenue. With an increased travel time, the DSE would be substantially less competitive than the proposed Project and is expected to have lower ridership as a result, as fewer riders would be willing to shift modes due to the increased travel time, as well as the unique customer experience of the proposed Project. Due to both of these factors, the ultimate ridership for the TSM Alternative is expected to be lower than that for the proposed Project, even if the DSE could increase the capacity of the DSE similar to that of the proposed Project.

Impact Analysis

Aesthetics

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in minimal aesthetic changes within the API. As described in Section 3.1, Aesthetics, the proposed Project commences adjacent to El Pueblo and the planned LAUS Forecourt and terminates at Dodger Stadium. From the Alameda Station, the proposed Project alignment would generally follow Alameda Street and Spring Street in a northeast direction through the community of Chinatown, flying over the Los Angeles State Historic Park to Bishops Road and then flying over the SR-110 and terminating at Dodger Stadium, located in the community of Elysian Park.

The geographic area of the proposed Project's visibility is referred to as the API. Viewsheds would vary from approximately 0.25-mile up to approximately 0.68 miles from the proposed Project alignment, which is appropriate to define the API.

The API is characterized by a primarily urban environment featuring a variety of commercial, industrial, and residential development, including passive open space areas and transit/ transportation uses. The proposed Project area has several visual resources, including views of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains. The proposed Project area can be characterized as relatively flat with minor changes in elevation. The Elysian Hills is the only feature in the proposed Project area that has a moderate to highly rugged topography. The development pattern within the proposed Project area is generally medium-intensity residential, commercial, and industrial land uses, and the area is of an urban character.

The TSM Alternative would result in minimal changes to the character of the proposed Project site due to larger loading zones at LAUS and Dodger Stadium. However, the larger loading zones at LAUS and Dodger Stadium would not result in a change in the visual height, scale, or mass of the development on the site and views of the proposed Project site would not change. In addition, lighting and glare would not increase and would remain the same as existing condition. Overall, impacts related to aesthetics from the TSM Alternative would be less than significant. Therefore, impacts to aesthetics under the TSM Alternative would be reduced compared to the less than significant impacts of the proposed Project.

However, under the TSM Alternative, there would be no aesthetic improvements to the existing proposed Project area. For example, landscaping improvements would not be installed, and the opportunity for site specific artwork at each station that is reflective of the unique neighborhood culture would not be implemented. As such, the TSM Alternative would not result in aesthetic benefits to the proposed Project area.

Agriculture and Forestry Resources

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. Overall, the TSM Alternative would result in new modifications and development that would require construction and change activities on the proposed Project site compared to the proposed Project.

Therefore, the TSM Alternative could result in modifications to the Dodger Stadium parking lots within the A1 zone. However, this site does not contain agricultural uses. In addition, as discussed previously, notwithstanding the underlying zoning, the Dodger Stadium property is subject to a Conditional Use Permit, which allows for the operation of a Major League Baseball stadium and various ancillary structures and uses, including “mass transportation service” to the site. As such, impacts related to agriculture and forestry resources under the TSM Alternative would be less than significant. Therefore, impacts related to agriculture and forestry resources under the TSM Alternative would be similar to the less than significant impacts of the proposed Project.

Air Quality

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would have the potential to generate new emissions or cause the Air Basin’s criteria pollutant emissions to worsen. Overall, the TSM Alternative would involve relocating operations from LAUS to Metro’s Division 13 maintenance facility, longer loading zones at Dodger Stadium, and dedicated routes into and around the Dodger Stadium parking lots.

Regarding operation, the TSM Alternative would result in an increase in bus VMT and associated emissions. This is in contrast to the proposed Project, which as an ART system, would not generate any vehicle VMT. Additional buses on the existing bus route would create an increase of activity. While new development would be minor, the TSM Alternative would generate new emissions as there would be additional Union Station DSE bus service on the existing route. However, the increase in emissions under the TSM Alternative would be partially offset by the reduction in VMT due to an increased number of people using public transit to travel to Dodger Stadium instead of private vehicles.

The proposed Project would also result in a net reduction in criteria pollutant emissions by reducing VMT compared to existing conditions. The TSM Alternative would have higher VMT than the proposed Project, resulting in higher emissions than the proposed Project. Because the TSM Alternative involves an increase in emission producing activity over the proposed Project, it would result in increased air quality impacts compared to the proposed Project. The estimated maximum mass daily emissions for the TSM Alternative operations are less than the SCAQMD mass daily significance thresholds for all criteria pollutants. Therefore, impacts related to air quality under the TSM Alternative would be similar to the less than significant impacts of the proposed Project.

Biological Resources

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. Minor site modifications would occur under the TSM Alternative. The proposed loading zones for the TSM Alternative include some trees and as such there could be potential impacts to special-status and/or roosting bat species and migratory and/or nesting birds. Therefore, similar to the proposed Project, mitigation measures BIO-A and BIO-B would ensure impacts remain less than significant. While the TSM Alternative would introduce operational disturbances on the proposed Project site a DSE service already travels the existing bus route. As such, the TSM Alternative would result in less than significant impacts to related to biological resources with implementation of Mitigation Measures BIO-A and BIO-B. Therefore, impacts to biological resources under the TSM Alternative would be similar to the less than significant impacts of the proposed Project with mitigation.

Cultural Resources

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. Overall, no demolition, grading, or new development would occur under the TSM Alternative and there would be no potential impacts to historical resources. In addition, the TSM Alternative would not require any excavation or ground disturbing activities that would potentially encounter previously undiscovered archaeological resources or human remains. As such, although the proposed Project impacts would be less than significant with mitigation, the TSM Alternative would result in no impact to related to cultural resources. Therefore, impacts to cultural resources under the TSM Alternative would be reduced compared to the less than significant impacts of the proposed Project with mitigation.

Energy

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would involve relocating operations from the Union Station/Metro Gateway property to Division 13, longer loading zones at Dodger Stadium, and dedicated routes into and around the Dodger Stadium, which may require substantive modification to the parking lots. As such, the TSM Alternative would result in a change to current activities on the proposed Project site. In order to accommodate service frequencies of 47 seconds, a minimum of 6 buses loading simultaneously would be required. Because the TSM Alternative would allow for an increased number of people using public transit, associated emissions and fuel use would increase compared to the existing DSE service. However, consumption of energy resources would not be wasteful or inefficient, nor would the TSM Alternative conflict with energy efficiency plans as the buses used to operate the TSM Alternative would use compressed natural gas. In addition, compared to the proposed Project, the TSM Alternative's construction phase would be significantly reduced, thus resulting in fewer impacts. Therefore, impacts related to energy under the TSM Alternative would be similar to the less than significant impacts of the proposed Project with mitigation.

However, while operation of the TSM Alternative may result in an increased number of people traveling to Dodger Stadium by public transit, VMT would be higher compared to the proposed Project and associated emissions and fuel use of the additional buses would also result in an increase of energy consumption compared to the proposed Project. In addition, the TSM Alternative would not benefit from the proposed Project's green power commitments and battery back-up system. As such, while the TSM Alternative could result in reduced VMT compared to existing conditions, the VMT reduction would be less than the proposed Project. Therefore, the beneficial improvements associated with the proposed Project would not occur.

Geology and Soils

The TSM Alternative would not result in development of an ART system and would involve relocating operations from the Union Station/Metro Gateway property to Division 13, longer loading zones at Dodger Stadium, and dedicated routes into and around the Dodger Stadium, which may require substantive modification to the parking lots. In addition, the TSM Alternative would include additional DSE service trips, which would generate new GHG emissions.

Because the TSM Alternative involves an increase in a GHG emission producing activity over existing conditions, it could result in GHG emission impacts, and potential impacts regarding conflicts with applicable plans, policies, or regulations adopted for the purpose of reducing GHGs. However, this would be partially offset by the increased number of people using public transit to travel to Dodger Stadium instead of private vehicles, and impacts to GHG emissions would be less than significant. Therefore, impacts related to GHG emissions under the TSM Alternative would be higher than but similar to the less than significant impacts of the proposed Project.

However, compared to the proposed Project, the number of people traveling to Dodger Stadium and using public transit would be similar, but they would be traveling on DSE bus routes as opposed to the aerial tramway, and would not reduce associated GHG emissions and fuel use to the same extent as the proposed Project. Therefore, not all of the beneficial GHG reductions associated with the proposed Project would occur.

Greenhouse Gas Emissions

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. In addition, the TSM Alternative would include additional DSE service trips, which would generate new GHG emissions.

Because the TSM Alternative involves an increase in a GHG emission producing activity over existing conditions, it could result in GHG emission impacts, and potential impacts regarding conflicts with applicable plans, policies, or regulations adopted for the purpose of reducing GHGs. However, this would be partially offset by the increased number of people using public transit to travel to Dodger Stadium instead of private vehicles, and impacts to GHG emissions would be less than significant. Therefore, impacts related to GHG emissions under the TSM Alternative would be similar to the less than significant impacts of the proposed Project.

However, compared the proposed Project, the number of people traveling to Dodger Stadium and using public transit would be similar, but they would be traveling on DSE bus routes as opposed to the aerial tramway, and would not reduce associated GHG emissions and fuel use to the extent of the proposed Project. As such, GHG emissions and fuel use would not be reduced. Therefore, the beneficial improvements associated with the proposed Project would not occur.

Hazards and Hazardous Materials

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. The TSM Alternative would result in the refueling and maintenance of buses, which could lead to minor fuel and oil spills, as well as the possible transport of materials needed for implementation of the longer loading zones at Division 13, Dodger Stadium, and dedicated routes into and around the Dodger Stadium parking lots, which may require modification to the parking lots. However, similar to the proposed Project, any activities involving changes in existing conditions or the use, transport, or disposal of hazardous materials would be regulated by the USEPA, DTSC, and LAFD and subject to federal, state, and local health and safety requirements. This would include the prevention of spills or leaks related to buses.

Overall, the TSM Alternative would not involve construction or alter existing activities on the proposed Project site except as noted above, and therefore, would not change the potential for an accidental release of hazardous materials or result in the release of hazardous materials or emissions near a school. In addition, the TSM Alternative would not involve construction or alter existing activities on a hazardous materials site pursuant to Government Code Section 65962.5. Further, the TSM Alternative would not require any new construction activities, with the exception of the activities noted above, or occupancy of the proposed Project site that would affect an existing Emergency Operations Plan or the City's established disaster routes. As such, although the proposed Project impacts would be less than significant with mitigation, the TSM Alternative would result in less than significant impacts related to hazards and hazardous materials. Therefore, impacts related to hazards and hazardous materials under the TSM Alternative would be less than the less than significant impacts of the proposed Project with mitigation.

Hydrology and Water Quality

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. Overall, water quality conditions, drainage patterns, and runoff water amounts would remain as is under the TSM Alternative because no new development would occur, with the exception of longer loading zones at Dodger Stadium and dedicated routes into and around the Dodger Stadium parking lots which may require modification to the parking lots. As discussed above, this alternative would include the refueling and maintenance of buses, which could lead to minor fuel and oil spills; however, as discussed above, these activities would be regulated by the USEPA, DTSC, and LAFD and subject to federal, state, and local health and safety requirements. As such, these activities are unlikely to result in impacts existing water quality conditions, drainage patterns, and runoff water amounts. Overall, the TSM Alternative would have less than significant impacts related to hydrology and water quality. Therefore, impacts related to hydrology and water quality under the TSM Alternative would be reduced compared to the less than significant impacts of the proposed Project.

However, the TSM Alternative would not include installation of new LID, source control, site design, and treatment control BMPs to minimize runoff and water pollution, which would occur under the proposed Project. The storm water leaving the DSE routes would not be filtered and would continue to contain sediment and other potential pollutants associated with the existing conditions of the site. Therefore, the beneficial improvements associated with the proposed Project would not occur.

Land Use and Planning

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. Overall, the TSM Alternative would not change the existing land use of the proposed Project site. The existing General Plan land uses and zoning designations would remain. As no changes would occur on the proposed Project site, the TSM Alternative would not conflict with any adopted plans, policies or regulations related to avoiding or reducing environmental impacts. The TSM Alternative would have no impacts with respect to conflicts with plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. As such, the TSM Alternative would have no impact related to land use and planning. Therefore, impacts related to land use and planning under the TSM Alternative would be reduced compared to the less than significant impacts with mitigation of the proposed Project.

Mineral Resources

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. Overall, the TSM Alternative would not result in any new development that would require construction, excavation activity, or exposure of soils. As such, the TSM Alternative would not impact mineral resources. Therefore, impacts related to mineral resources under the TSM Alternative would be similar to the no impact of the proposed Project.

Noise and Vibration

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE.

The TSM Alternative would include changes to operational activities. The Union Station DSE currently loads north of the portico along the western frontage of the historic LAUS, north of the historic ticketing concourse, and south of the Mozaic Apartments. The current loading zone has capacity for one bus at a time. In order to service frequencies of 47 seconds, a minimum of 6 buses loading simultaneously would be required. As described above, Metro's Division 13 site would have the capacity to accommodate this amount of simultaneous bus loading.

Primary sources of noise and ground-borne vibration from the TSM Alternative would include vehicle circulation within the loading zones at Metro Division 13 and Dodger Stadium and on the dedicated routes between LAUS and into and around the Dodger Stadium, which would be confined to the immediate area and would not be expected to be perceptible off-site. In addition, there are no sensitive receptors near Metro's Division 13. Overall, while the additional DSE service would result in an increase in noise and vibration on the proposed Project site, there are no sensitive receptors near Metro's Division 13, and ground-borne vibration during operation is not anticipated to be perceptible under the TSM Alternative. As such, impacts related to noise and vibration during operation of the TSM Alternative would be less than significant.

While temporary construction impacts related to parking lot modifications would occur, and operational noise impacts would occur due to an increase in DSE services, these impacts would be minor. As the proposed Project impacts would be significant and unavoidable for construction noise and ground-borne vibration impacts (human annoyance), the TSM Alternative would result in less than significant impacts related to noise and vibration. Therefore, impacts related to noise under the TSM Alternative would be reduced compared to impacts of the proposed Project.

Population and Housing

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. Both the proposed Project and the TSM Alternative provide a first/last mile transit connection to Dodger Stadium, and would be designed to meet the area's transit needs and improve the efficiency of the existing transportation network. Similar to the proposed Project, the TSM Alternative would not introduce new infrastructure or the extension of roads, nor would it result in the substantial displacement of housing or people, as no housing units are specifically proposed to be demolished, converted to market rate, or removed through other means. In addition, employment generated by the TSM Alternative would not impact population in the heavily populated Los Angeles region, and no housing units are proposed as part of the TSM Alternative. Further, the TSM Alternative is not anticipated to stimulate development to a level inconsistent with applicable planned local land use designations, and as a first/last mile transit connection to Dodger Stadium like the proposed Project, this alternative would not induce substantial population growth either directly or indirectly. Therefore, impacts related to population and housing under the TSM Alternative would be similar to the less than significant impacts of the proposed Project.

Public Services

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. Overall, the existing number of workers in the proposed Project area would have the potential to increase under the TSM Alternative. The level of buses turning into and out of Division 13 would increase congestion on Cesar E. Chavez Avenue and likely require the use of traffic control officers (TCOs) to give right-of-way to the buses. In addition, the majority of Dodger games occur on weekday evenings when Metro, and most municipal operators, operate their peak service. Scaling the service to the necessary service level would require the acquisition of additional buses and/or operating a contracted service with non-Metro operators.

However, the minimal increase in workers in the proposed Project area would not be enough to create an increase in demand for fire protection, police protection, parks, or other public facilities. In addition, there would be no change in the demand for schools serving the proposed Project area. As such, although the proposed Project impacts would be less than significant with mitigation, the TSM Alternative would result in less than significant impacts related to public services. Therefore, impacts related to public services under the TSM Alternative would be reduced compared to the less than significant impacts of the proposed Project with mitigation.

Recreation

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. Similar to the proposed Project, the TSM Alternative has the potential to draw an increased population of visitors to Dodger Stadium. With Metro's existing and planned expansion of its transit system, coupled with other providers such as Metrolink, Amtrak, and other municipal bus operators whose services all converge at LAUS, the TSM Alternative provides the opportunity for anyone in the Los Angeles County region to access Dodger Stadium via public transit.

Overall, the TSM Alternative would not increase demand for parks and recreation services. Additionally, the TSM Alternative would not directly or indirectly result in a population gain that would generate demand for parks and recreation services. As such, the TSM Alternative would have no impact to parks or recreational facilities. Therefore, impacts related to recreation under the TSM Alternative would be reduced compared to the less than significant impacts of the proposed Project.

Transportation

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro

Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. As discussed above, in order to accommodate bus service levels required to match the capacity of the proposed Project, an off-site facility would need to be utilized. While the Metro Division 13 bus maintenance facility would have the capacity to accommodate the Union Station DSE bus service under the TSM Alternative, the service would cause considerable disruption to existing transit operations, including layover space for transit lines currently serving Patsaouras Plaza. Expanded bus only lanes would reduce the increased congestion affecting transit run time, but the displacement of layover space would have a substantial effect on the ability to operate the routes serving Patsaouras Plaza. Metro's *2020 Transit Service Policies & Standards* has the goal of Layover Optimization to provide off-street end-of-route layover terminals to avoid unnecessary route extensions and provide improved service levels to customers.[13] Impacts to the existing layover terminal as a result of the TSM Alternative would be inconsistent with this policy. Therefore, the TSM Alternative would be less consistent than the proposed Project with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

The TSM Alternative would not construct new facilities. However, pedestrian circulation, including vertical circulation improvements could be necessary to modify Metro Division 13 for a passenger loading facility. Additionally, bus only lanes may need to be striped to the intersection of Vignes Street and Cesar E. Chavez Avenue. Additionally, modifications may be necessary for the passenger loading at the Dodger Stadium property. However, the level of construction activity and associated VMT is expected to be minor.

Consistent with the proposed Project, the TSM Alternative would reduce VMT when in operation. However, as an ART system, the proposed Project would not generate any vehicle VMT, whereas the DSE would generate bus VMT. In order to accommodate the projected growth in riders, there could be approximately 9.6 times more bus trips generating VMT before and after a game than under the existing Union Station DSE (8 buses per hour existing, versus 77 buses per hour under the project alternative).

As detailed above, the proposed Project is expected to take approximately seven minutes to travel between LAUS and Dodger Stadium, substantially less than the Union Station DSE travel time. With an increased travel time, the Union Station DSE would be substantially less competitive with driving time than the proposed Project. As detailed in Appendix N, *Transportation Appendices*, the ridership forecasting model uses transit travel time as one of the input variables to determine the ridership estimate for the proposed Project, as travel time and travel cost are the primary variables that determine a person's mode choice. Also as described in Appendix N, *Transportation Appendices*, the proposed Project is anticipated to attract additional riders due to the unique customer experience of the service. Due to both of these factors, the ultimate ridership for the TSM Alternative is expected to be lower than that for the proposed Project, even with similar capacity levels.

With a reduction in ridership, the expected VMT benefit of the TSM Alternative would be reduced relative to the proposed Project, and it would generate bus VMT which the proposed Project would not generate, therefore, it would have more VMT on streets compared with the proposed Project. However, the TSM Alternative would still reduce VMT to Dodger Stadium and would therefore have a less than significant impact.

---

13 Page 12. Available at: https://www.dropbox.com/s/qmnfvhzv7mw8lat/nextgen-report-tsp-final.pdf?dl=0. Accessed June 2, 2022.

The TSM Alternative would include upgrades to vertical circulation in Metro's Division 13 and could include striping an extended bus only lane on Cesar E. Chavez to the intersection of Vignes Street. In addition, the TSM Alternative could require modifications for the passenger loading at the Dodger Stadium property. These minor activities would follow standard construction requirements and would therefore be expected to have a less than significant construction impact related to increasing hazards due to a geometric design feature or incompatible use in this regard.

The TSM Alternative would potentially modify traffic striping on Cesar E. Chavez Avenue between the Union Station Driveway and Vignes Steet to accommodate the extension of a bus only lane. Traffic striping would potentially be modified on Vin Scully Avenue between Sunset Boulevard and the entrance to Dodger Stadium parking to implement a bus only lane in each direction. These improvements would be designed to meet standards and would not be expected to introduce increased hazards due to geometric design features in this regard.

The TSM Alternative would substantially increase the amount of pedestrian crossing activity at the intersection of Vignes Street and Cesar E. Chavez Avenue, thus increasing exposure for pedestrian-vehicle collisions and the potential for increased hazards on an existing geometric facility. Given the magnitude of the increase in pedestrian activity (5,000 additional pedestrians per hour), this would be considered a significant impact at an intersection, which experiences at least one collision involving a pedestrian every year on average (see Figure 3.17-7 in Section 3.17, Transportation, of this Draft EIR), and therefore, is expected to have a significant impact related to increasing hazards due to a geometric design feature or incompatible use. As such, a mitigation measure requiring traffic control offices (TCOs) would be required in order to reduce hazard-related impacts from the substantial increases in pedestrian activity at the intersection of Vignes Street and Cesar E. Chavez Avenue. TCOs would be assigned to manage pedestrian flows at the north-south and east-west crosswalks at the intersection of Vignes Street and Cesar E. Chavez Avenue to ensure that motorists hold for crossing pedestrians, particularly for motorists wishing to turn right.

While the increased bus activity would increase vehicle queueing on streets and intersections compared with the proposed Project, particularly at the intersection of Vignes Street and Cesar E. Chavez Avenue, Vignes Street and the Division 13 driveway, as well as for right turning vehicles entering the curbside bus only lane, vehicle queuing is now considered a non-CEQA metric under the City of Los Angeles Transportation Analysis Guidelines. The TSM Alternative is therefore expected to have a less than significant impact related to increasing hazards due to a geometric design feature or incompatible use in this regard.

Regarding emergency access, the TSM Alternative would potentially modify traffic striping on Cesar E. Chavez Avenue between the Union Station Driveway and Vignes Steet to accommodate the extension of a bus only lane. Traffic striping would potentially be modified on Vin Scully Avenue between Sunset Boulevard and the entrance to Dodger Stadium parking to implement a bus only lane in each direction. Implementation of this lane restriping could occur during off-peak hours, and lane closures would be temporary. Therefore, the TSM Alternative would have a less than significant construction impact related to emergency access. Additionally, the TSM Alternative could introduce changes to streets to accommodate expanded/new bus only lanes, which would affect roadway capacity that could influence emergency response times. However, California state law requires drivers to yield the ROW to emergency vehicles and permits emergency vehicles to use opposing lane of travel, the center turn lanes, or bus only lanes. Therefore, consistent with the proposed Project, the TSM Alternative would have a less than significant operational impact related to emergency access.

However, compared with the proposed Project, the TSM Alternative would substantially increase bus trips on city streets and is expected to have lower ridership resulting in fewer vehicle trips destined for Dodger Stadium to be shifted to transit. The TSM Alternative, would therefore have more roadway congestion than the proposed Project, which could influence emergency response times.

Given the above, impacts related to transportation under the TSM Alternative have the potential to be significant, and mitigation would be required to reduce potential impacts. As such, impacts related to transportation under the TSM Alternative would be similar to the less than significant impacts of the proposed Project with mitigation. However, the TSM Alternative would not achieve the same level of beneficial improvements and reduced VMT as the proposed Project.

Tribal Cultural Resources

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. Overall, the TSM Alternative would not involve ground disturbance as no ground-disturbing construction activities (e.g., boring, grading, excavation, drilling, trenching) would occur. As such, although the proposed Project impacts would be less than significant with mitigation, the TSM Alternative would result in no impact to related to tribal cultural resources. Therefore, impacts related to tribal cultural resources under the TSM Alternative would be reduced compared to the less than significant impacts of the proposed Project with mitigation.

Utilities and Service Systems

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. Overall, under the TSM Alternative, the existing onsite water and sewer systems would continue to be used, and no new connections to existing utilities systems would be required. No additional demand for regional water supplies would occur, and no additional wastewater would be conveyed to the wastewater treatment facility. In addition, no additional drainage infrastructure would be developed by the TSM Alternative, and runoff in the proposed Project area would remain in its current condition and no storm water system improvements would be required. Further, solid waste generation would remain the same as the existing condition and increases in needs for landfill capacity would not occur with the TSM Alternative. As such, although the proposed Project impacts would be less than significant with mitigation, the TSM Alternative would result in no impact to utilities and service systems. Therefore, impacts to utilities and service systems under the TSM Alternative would be reduced compared to the less than significant impacts of the proposed Project.

Wildfire

The TSM Alternative would not result in development of an ART system; however, the TSM Alternative would result in new development that would require relocating from the LAUS to Metro Division 13, larger loading zones at Dodger Stadium, and dedicated routes between LAUS and into and around the Dodger Stadium, which may require modification to the Dodger Stadium parking lots, to increase the capacity of the Union Station DSE. Overall, the TSM Alternative would not result in any new development or construction located in or near state responsibility areas (SRAs) or lands classified as Very High Fire Hazard Severity Zones (VHFHSZ). The TSM Alternative would not result in any new development that would exacerbate fire risks or impair the implementation of the City's Emergency Operations Plan or substantially impair an adopted emergency response plan or emergency evacuation plan. In addition, direct and indirect impacts related to post-fire conditions such as downslope or downstream flooding or landslides, as a result of runoff, post fire slope instability, or drainage changes would not occur. Further, the TSM Alternative would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. As such, although the proposed Project impacts would be less than significant with mitigation, the TSM Alternative would result in no impact to related to wildfire. Therefore, impacts related to wildfire under the TSM Alternative would be reduced compared to the less than significant impacts of the proposed Project.

Relationship of the Alternative to Project Objectives

As described above, the proposed Project would not be constructed, and instead the existing Union Station DSE service would be enhanced to determine if the DSE could increase the capacity of the DSE similar to that of the proposed Project. As the TSM Alternative would not include development of an ART system, it would not provide a direct transit connection between LAUS and the Dodger Stadium property via an ART system, and would not improve connectivity for the surrounding communities by linking to the Los Angeles State Historic Park, Elysian Park, and the region's rapidly growing regional transit system at LAUS. However, the TSM Alternative would provide enhanced transit access between LAUS and Dodger Stadium. As such, it would not meet the following objectives to the same extent as under the proposed Project and is, thus, considered to be only partially consistent with the following objectives:

Objective 1: Expand mobility options for transit riders through a direct connection between LAUS and Dodger Stadium, a regional event center.

Objective 3: Improve the Dodger Stadium visitor experience by providing efficient, high-capacity, and faster alternative access to Dodger Stadium.

Objective 4: Enhance safety of neighborhoods adjacent to Dodger Stadium by reducing the number of vehicles in the area.

Objective 6: Increase connectivity of people to the region's public transportation hub at LAUS and the Dodger Stadium property.

The TSM Alternative would not include development of an ART system and would not provide a direct transit connection between LAUS and the Dodger Stadium property via an ART system, and improve connectivity for the surrounding communities by linking to the Los Angeles State Historic Park, Elysian Park, and the region's rapidly growing regional transit system at LAUS. As such, the TSM Alternative would not meet the following objectives:

Objective 2: Attract new transit riders to the Metro system through a unique experience connecting to Dodger Stadium.

Objective 5: Reduce transportation related pollution and greenhouse gas (GHG) emissions as a result of reduced vehicular congestion in and around Dodger Stadium, on neighborhood streets, arterial roadways, and freeways during game and special event days.

Objective 7: Improve transit rider experience by providing unique scenic views of the Los Angeles area to ART passengers and Dodger fans.

Objective 8: Bring a world class aerial transit system to the Los Angeles area.

Objective 9: Enhance community connectivity by providing first/last mile transit and pedestrian access to areas that have historically been underserved, including the Los Angeles State Historic Park and Elysian Park.

Objective 10: Identify comparable, affordable, and accessible fare opportunities for community and Los Angeles State Historic Park and Elysian Park access.

Objective 11: Minimize the Project's environmental footprint through the integration of sustainability and environmentally-friendly design features into the materials, construction, operations, and maintenance of the proposed Project.

Objective 12: Provide a sustainable form of transit by operating the ART system with the use of zero emission electricity with battery storage backup in order to reduce GHG emissions and improve air quality.

4.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

In accordance with CEQA Guidelines Section 15126.6, an EIR shall identify an environmentally superior alternative among the feasible alternatives. Table 4-3 provides a comparison of the impacts of each of the alternatives. As discussed above and shown in Table 4-3, both the No Project Alternative and TSM Alternative would not result in significant unavoidable impacts to any environmental considerations.

The proposed Project and the Spring Street Alignment Alternative would result in similar impacts, each having significant unavoidable construction noise and vibration (human annoyance) impacts that may not be reduced below a significant level with the implementation of mitigation measures. Additionally, they each would require implementation of mitigation measures to reduce potential impacts to less than significant for biological resources, cultural resources, geology and soils, hazards and hazardous materials, land use and planning, public services, transportation and traffic, tribal cultural resources, utilities and services systems, and wildfire.

While both the proposed Project and Spring Street Alternative would result in significant and unavoidable impacts due to construction noise and vibration (human annoyance), the Spring Street Alternative would impact a greater area within the State Historic Park due to construction of both the Spring Street Junction and State Historic Park Station. Therefore, impacts to construction noise from the Spring Street Alignment Alternative would be greater in magnitude than the proposed Project.

As noted in Table 4-3, the TSM Alternative would result in the same CEQA impact determination as the proposed Project for aesthetics, air quality, biological resources, energy, greenhouse gas emissions, hydrology and water resources, mineral resources, and transportation. However, as discussed above, the TSM Alternative's impacts would be less for aesthetics, agriculture and forestry resources, cultural resources, geology and soils, hazards and hazardous materials, land use and planning, noise and vibration, population and housing, public services, recreation, tribal cultural resources, utilities and service system, and wildfire. Additionally, the TSM Alternative's impact would be greater for air quality, energy, greenhouse gas emissions, hydrology and water

Table 4-3: Alternative Impact Comparison

Impact Area	No Project Alternative	Proposed Project	Spring Street Alignment Alternative	TSM Alternative
Aesthetics	IV	III	III	III
Agriculture and Forestry Resources	IV	III	III	IV
Air Quality	IV	III	III	III
Biological Resources	IV	II	II	II
Cultural Resources	IV	II	II	III
Energy	IV	III	III	III
Geology and Soils	IV	II	II	III
Greenhouse Gas Emissions	IV	III	III	III
Hazards and Hazardous Materials	IV	II	II	III
Hydrology and Water Quality	IV	III	III	III
Land Use and Planning	IV	II	II	IV
Mineral Resources	IV	IV	IV	IV
Noise and Vibration	IV	I	I	III
Population and Housing	IV	III	III	IV
Public Services	IV	II	II	III
Recreation	IV	III	III	IV
Transportation	IV	II	II	II
Tribal Cultural Resources	IV	II	II	IV
Utilities and Service Systems	IV	II	II	III
Wildfire	IV	II	II	III

Notes:
I: Significant Unavoidable Impact
II: Less Than Significant Impact with Mitigation
III: Less Than Significant Impact
IV: No Impact

quality, and transportation and traffic. Yet it would not result in a CEQA determination of a significant and unavoidable impact. As such, the TSM Alternative would result in the fewest environmental impacts overall. Therefore, the TSM Alternative would be considered the environmentally superior alternative. However, although the TSM Alternative would reduce construction impacts, it would generate more VMT than the proposed Project and therefore emissions that the proposed Project would not generate. In addition, the TSM Alternative would not provide the same level of benefits of the proposed Project, such as providing a direct transit connection between LAUS and the Dodger Stadium property via an ART system and improving connectivity for the surrounding communities by linking to the Los Angeles State Historic Park, Elysian Park, and the region’s rapidly growing regional transit system at LAUS.

This page intentionally left blank.

5.0 OTHER CEQA CONSIDERATIONS

This chapter provides an overview of the environmental effects of the proposed Project, including significant unavoidable adverse impacts, cumulative impacts, irreversible environmental changes, and growth-inducing impacts. Cross-references are made throughout this chapter to other sections of the Draft Environmental Impact Report (EIR) where more detailed discussions of the impacts of the proposed Project can be found. This chapter also includes a discussion of the proposed Project's aerial alignment, related to kites and special events within the Los Angeles State Historic Park and heliports.

5.1 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

This section is prepared in accordance with Section 15126.2(b) of the California Environmental Quality Act (CEQA) Guidelines, which requires the discussion of any significant environmental effects that cannot be avoided if a project is implemented. These include impacts that can be mitigated but cannot be reduced to a less than significant level. An analysis of environmental impacts resulting from the proposed Project has been conducted and is contained in Chapter 3 of this Draft EIR. According to the environmental impact analysis, the proposed Project would result in the following significant and unavoidable adverse impacts related to construction noise and ground-borne vibration (human annoyance).

5.1.1 Construction

Noise and Vibration Threshold NV-1:

> Construction of the proposed Project would have a significant and unavoidable noise impact for on-site activities. Mitigation Measure NOI-A would reduce construction noise impacts to the extent practicable. However, significant impacts from noise levels due to on-site construction activities would remain at the Los Angeles Union Station Terminal (NSR 1A), El Pueblo (NSR 2), Mozaic Apartments (NSR 3), The California Endowment Building (NSR 4), the future Homeboy Industries Residential (NSR 5), Chinatown Senior Lofts (NSR 6), Homeboy Industries (NSR 7), Future Residential Development (NSR 8), Blossom Plaza (NSR 9), Future Residential Development (NSR 10), Capitol Milling (NSR 11), Llewellyn Apartments (NSR 12), Los Angeles State Historic Park (NSR 14 N/S), Cathedral High School (NSR 16), and Low-Rise Residential on Savoy Street (NSR 17N/S). These impacts are temporary and will only last as long as the construction activities. Nonetheless, construction noise impacts would remain significant and unavoidable.

Noise and Vibration Threshold NV-2:

> Construction of the proposed Project would have a significant and unavoidable vibration (human annoyance) impact. There are no feasible mitigation measures to reduce the vibration (human annoyance) impacts identified for vibration-sensitive receptors from on-site construction activities as well as along the proposed Project alignment for off-site construction activities. As such, vibration (human annoyance) impacts would remain significant and unavoidable.

5.2 CUMULATIVE IMPACTS

According to Section 15355 of the CEQA Guidelines, cumulative impacts refer to:

> "Two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

Additionally, Section 15130(a) of the CEQA Guidelines states:

> "An EIR shall discuss cumulative impacts of a project when a project's incremental effect is cumulatively considerable… When the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR… An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant…if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact."

Pursuant to Section 15130(b)(1)(A) of the CEQA Guidelines, a list of past, present, and probable future projects producing related or cumulative impacts is used as the basis of this cumulative impacts analysis. The "list" approach was used for the cumulative impacts discussion in this Draft EIR. The scale or geographic scope of related projects varies for each impact category. For instance, cumulative geology and soils or aesthetics impacts are considered localized, while cumulative transportation and air quality are considered regional. The list of related projects is derived from information provided by the City of Los Angeles Department of City Planning and the Los Angeles Department of Transportation (LADOT). Additionally, the list includes transit-related projects. The list includes projects that are anticipated to be constructed during the same timeframe as the proposed Project (2024-2026); and operational at the same time as the proposed Project (opening year 2026 and Horizon Year 2042). Table 5-1 includes all of the approved and proposed related projects relevant to the cumulative analysis for the proposed Project. Figure 5-1 shows the location of these cumulative projects in relation to the Project alignment.

Table 5-1: Related Projects

Map #	Project Title	Address	Land Use	Size
LAND USE DEVELOPMENT PROJECTS				
1	N/A	1011 North Broadway	Hotel Restaurant	92 rooms 15,000 sf
2	N/A	117 West Wilhardt Street	Restaurant	10,802 sf
3	N/A	1231 North Spring Street	Restaurant	26,740 sf
4	Buena Vista	1251 North Spring Street and 1030–1380 North Broadway	Apartments Restaurant Retail	986 du 23,800 sf restaurant 15,000 sf retail
5	La Plaza Cultura Village	527 North Spring Street	Apartments Retail Specialty Retail Restaurant	345 du 23,000 sf retail 21,000 sf specialty retail 11,000 sf restaurant
6	N/A	1417 North Main Street	Mixed Use: Office & Retail	N/A
7	N/A	152 North Central Avenue	Restaurant	9,626 sf
8	N/A	1640 North Spring Street	Restaurant	980 sf
9	N/A	1646 North Spring Street	Restaurant	1,304 sf
10	N/A	1715 North Naud Street	Restaurant	5,477 sf
11	N/A	1726 North Spring Street	Office	15,626 sf
12	N/A	1729 North Naud Street	Restaurant	14,607 sf
13	N/A	1730 North Spring Street	Restaurant	2,172 sf
14	N/A	207 West Ord Street	Restaurant	4,965 sf
15	N/A	234 North Center Street	Apartments Retail	430 du 8,742 sf
16	N/A	323 East 1st Street	Restaurant	1,663 sf
17	N/A	414 West Bamboo Lane	Apartments Retail	2 du 3,493 sf
18	N/A	445 West Cottage Home Street	Community center	8,530 sf
19	N/A	475 West Gin Ling Way	Restaurant	3,748
20	N/A	508 West Chungking Road	Retail	1,575
21	N/A	534 West Casanova Street	Apartments	3 du
22	N/A	700 East Jackson Street	Restaurant	16,662 sf
23	N/A	727 North Broadway	Restaurant	3,370 sf
24	N/A	818 North Hill Street	Restaurant	2,558 sf

Table 5-1: Related Projects

Map #	Project Title	Address	Land Use	Size
25	N/A	819 North Broadway Street	Restaurant	2,826 sf
26	N/A	823 North Cleveland Street	Apartments	15 du
27	College Station Project	129-135 West College Street and 924 North Spring Street	Apartments Retail	770 du 51,390 sf commercial
28	Harmony	943 North Broadway	Apartments Retail/Office	178 du 37,600 sf
29	N/A	Restaurant	Restaurant	1,397 sf
30	The Llewellyn Apartments	1101 North Main Street	Apartments	318 du
31	Metro Center	410 Center Street	Office	110,000 sf
32	Los Angeles Street Civic Building (LASCB) Project	150 North Los Angeles Street	Mixed Use: Office, Retail, Other	753,740 sf
33	Hill Mixed Use Project	708 North Hill Street	Apartments Retail	162 du 5,000 sf
34	Interim Housing Facility	1060 North Vignes Street	Units	232 du
35	Mixed-Use	211 Alpine Street	Apartments Retail	170 du 2,000 sf
36	643-655 N Spring St MU	643 North Spring Street	Hotel Apartments Retail Restaurant	142 rooms 281 du 17,000 sf 2,500 sf
37	Data Center	900 North Alameda Street	Data Center	179,000 sf
38	843 N Spring St MU	843 North Spring Street	Office Restaurant	59,964 sf 40,625 sf
39	Mixed-Use	1457 North Main Street	Apartments Retail	244 du 9,829 sf
40	Mixed-Use Redevelopment	1201 North Broadway	Apartments Retail	136 du 9,000 sf
41	200 Mesnagers	200 Mesnagers Street	Apartments Retail	285 du 20,000 sf
42	BOK DTLA	1418 North Spring Street	Restaurant	20,000 sf
43	Homeboy Industries	903 North Main Street	Residential	157 du
44	Mixed-Use	942 North Broadway	Apartments Retail Restaurant Office	178 du 532 sf 4,501 sf 31,777 sf

Table 5-1: Related Projects

Map #	Project Title	Address	Land Use	Size
45	Mixed-Use Barranca Project	169 North Avenue 21	Apartments Hotel Commercial	102 du 100 Rm 4,660 sf
46	717 N Hill St Mixed Use Project	717 N Hill Street	Apartments Retail	411 17,096 sf
TRANSPORTATION PROJECTS				
A	Link Union Station			
B	California High Speed Rail			
C	LA Union Station Forecourt & Esplanade Improvements Project			
D	Cesar E Chavez Avenue Bus Stop Improvements			
E	West Santa Ana Branch Transit Corridor Project			
F	J Line (Silver) Station			
G	Division 20 Portal Widening & Turnback Facility Project			
H	LA River Bike Path Project			
I	Regional Connector Transit Project and Eastside Access Improvement Project			
J	Broadway/State Historic Park Pedestrian Bridge			

Notes:
sf = square feet; du = dwelling unit
Source: Fehr & Peers 2022

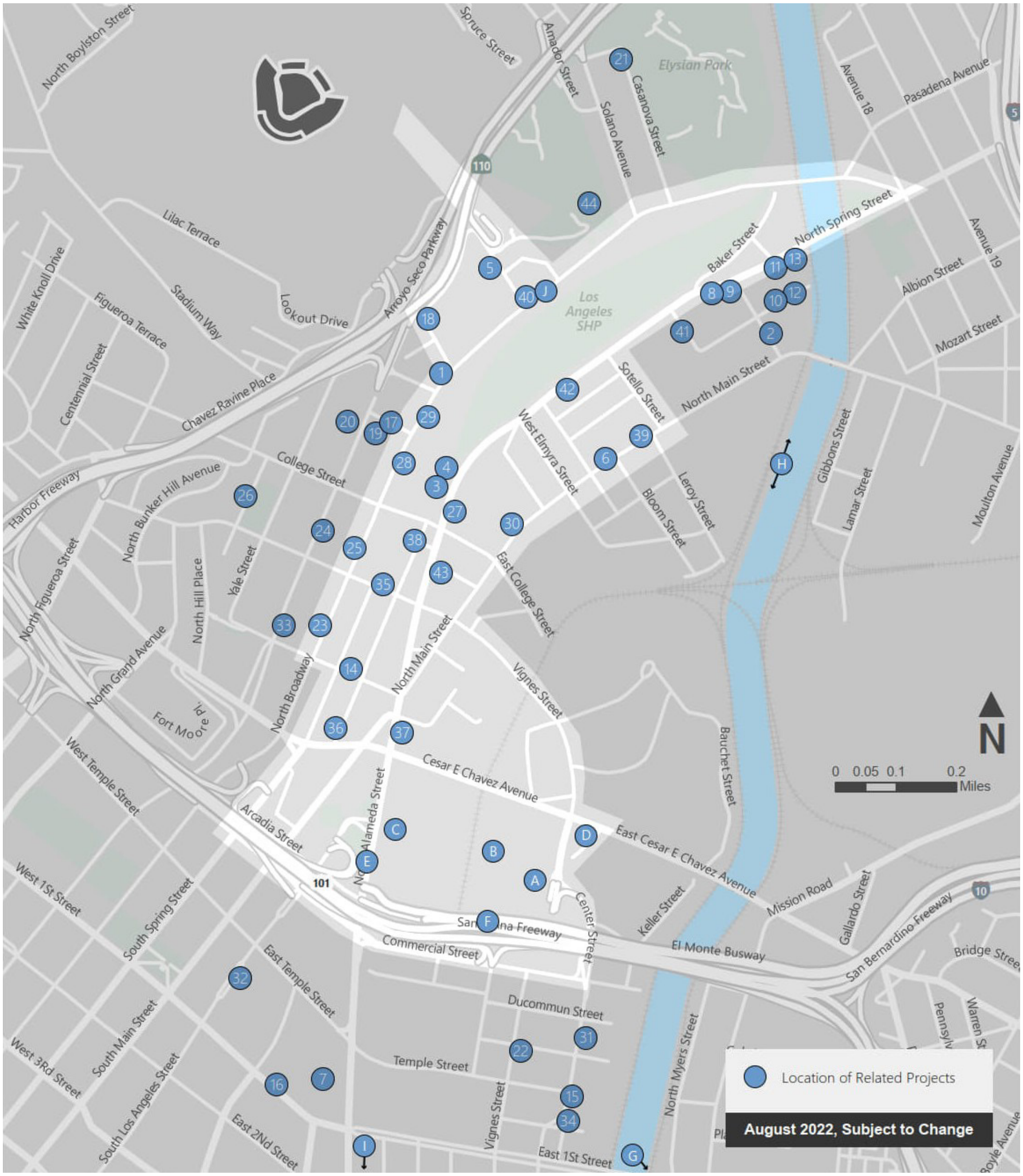


Figure 5-1: Related Projects Map

5.2.1 Aesthetics

To fully understand the viewsheds and context of the Project alignment, the area of potential impact (API) was defined and determined to vary from approximately 0.25-mile up to approximately 0.68-mile from the Project alignment. Further, the Project alignment was subdivided into a series of landscape units (LUs) to capture the overall characteristics of different segments along the alignment. Key Observation Points (KOPs) (also known as key views) critical or representative of the visual character of the area were identified within each LU. Each of the six LUs were assessed for existing visual or aesthetic resources, visual character, and visual quality. Potential viewership of pedestrians, recreationalists, and motorists was considered in order to determine each viewer's exposure and sensitivity to change. It should be noted that under the City of Los Angeles CEQA Thresholds Guide (L.A. CEQA Thresholds Guide), visual impacts are assessed based on changes to views from publicly accessible locations or public views. Commercial and office tenants within buildings are not considered a viewer group in the analysis because their views are private views. As such, commercial and office tenants are not considered a viewer group. Similarly, residents within residential buildings are not considered a viewer group in the analysis. Any references to and analysis of residential views and resident viewer groups, which are assumed to be associated with private residential properties, are provided only for informational purposes, as the L.A. CEQA Thresholds Guide does not protect private views from residential properties.[1] As determined in Section 3.1, Aesthetics, the proposed Project would have a less than significant impact on aesthetics and visual resources, and no mitigation measures would be required. In addition, the proposed Project would require various entitlements and approvals, which would establish land use regulations, and would ensure consistent implementation of development standards throughout the Project alignment. The development standards are in recognition of the Project's unique characteristics, including unique opportunities for public benefits and the unique aspects of an aerial rapid transit system. As such, with the proposed Project's entitlements and approvals, which would include design standards to enhance the visual identity and character of the proposed Project and its surrounding communities, there would not be a conflict with applicable zoning or other regulations governing scenic quality.

The geographic area evaluated for cumulative aesthetics impacts is the local Project vicinity. Many of the related projects listed in Table 5-1 and illustrated in Figure 5-1 are captured within both the Project API and the Project LUs (including proximity to KOPs within the LUs). Related projects include various mixed-use developments, residential developments, and open space/circulation projects. As such, potential aesthetic impacts attributed to these related projects would be similar to those identified in the analysis of the proposed Project, as detailed below.

Scenic Vistas

No designated scenic vistas are present in the API, and the API is characterized by a primarily urban environment featuring a variety of commercial, industrial, and residential development, including passive open space areas and transit/transportation uses. However, views of the downtown Los Angeles skyline, Los Angeles Union Station (LAUS), El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains, are taken into consideration. In addition, views from the Los Angeles State Historic Park towards the surrounding existing urban landscape exhibit various visual values. Many of the related projects represent infill development and expansions, and, in general, would reinforce existing and emerging land use patterns in the area rather than introduce new development characteristics to

[1] City of Los Angeles, CEQA Thresholds Guide, 2006.

the Project area. Furthermore, as with the proposed Project, these related projects would be consistent with existing development in the greater Downtown Los Angeles area.

However, while the proposed Project in combination with the related projects would not block a majority of scenic or panoramic views in the API, such as views of LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains, the proposed Project in combination with the related projects could block views of the downtown Los Angeles skyline.

Although not officially designated as scenic vistas, views of the downtown Los Angeles skyline could be considered scenic to certain viewers. The related projects have the potential to interrupt views of the downtown Los Angeles skyline from publicly accessible locations, such as Los Angeles State Historic Park. As such, the proposed Project in combination with the related projects could have the potential to result in a significant cumulative impact to scenic vistas.

However, the proposed Project would not interrupt scenic or panoramic views of the downtown Los Angeles skyline, as views of the skyline would remain available from prominent view locations, such as park areas, or other sections along local streets, and, as such, would not contribute to a cumulative view impact related to scenic vistas. As such, the proposed Project's contribution to the cumulative impact to scenic vistas is not cumulatively considerable.

Scenic Resources

No State- or County-designated scenic highways or eligible State scenic highways are located in the Project area. The closest officially designated State scenic highway is State Route 2 (SR-2) located approximately 11 miles north of the Project alignment.[2]

The Arroyo Seco Parkway/State Route 110 (SR-110), which runs northeasterly from its interchange with U.S. 101 to East Glenarm Street in Pasadena, is also located within the Project area.[3] While the Arroyo Seco Parkway/SR-110 is a National Scenic Byway and a California Historic Parkway, the SR-110 is not an officially designated State scenic highway, as determined by Caltrans *Scenic Highways – Scenic Highway System List.*[4] Refer to the *Visual Impact Assessment for the Los Angeles Aerial Rapid Transit Project* in Appendix C of this Draft EIR for information on the definitions of and criteria for National Scenic Byways and California Historic Parkways.

Both the proposed Project, as well as related projects located within LU-6, would be visible from the Arroyo Seco Parkway/SR-110. The proposed Stadium Tower, as well as cables and cabins and related projects, would be visible to motorists on Arroyo Seco Parkway/SR-110 both on the northbound and southbound sides. However, related projects and the proposed Project would not damage any scenic resources within a State scenic highway, as the Arroyo Seco Parkway/ SR-110 is not a designated State scenic highway. In addition, the proposed Project itself would not remove any scenic resources and would enhance access to scenic resources, such as historic

[2] Caltrans. 2022. *Scenic Highways – Scenic Highway System Lists.* Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed April 2022.

[3] NPS. 2022. *California: Arroyo Seco Parkway*, Available at: https://www.nps.gov/places/arroyo-seco-parkway.htm. Accessed April 2022.

[4] Caltrans. 2022. *Scenic Highways – Scenic Highway System Lists*. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed April 2022.

neighborhoods within the Project area. As such, the proposed Project, in combination with other related projects, would not damage scenic resources. Therefore, cumulative impacts with respect to scenic resources would be less than significant.

Scenic Quality

Construction

Overall, the construction of the proposed Project and simultaneous construction of related projects would represent a temporary change in the visual quality and character of the API. Motorists, pedestrians, and recreationalists would all have varying views of construction activities. Construction activities would require equipment such as construction barriers and sound walls, cranes, and other appurtenances that would be visible during much of the approximately 25 month construction period, which could begin as early as 2024. Construction activities would include similar equipment to other construction projects in the City, such as high-rise buildings in Chinatown and the Cornfield Arroyo Specific Plan. Certain areas may be fenced off with construction barriers and sound walls, resulting in a contrast and change in visual character from the existing conditions. Construction areas would also experience additional truck traffic compared to existing conditions, with trucks moving materials on and off site, and work crews and construction equipment moving around and in between sites. Certain southwest-facing views of the downtown Los Angeles skyline from the Los Angeles Historic Park would be partially interrupted during construction. In addition, construction of the proposed Chinatown/State Park Station, Broadway Junction, cables, and cabins would represent new elements in the visual environment to recreationalists who seek to enjoy the large open space area and views of the downtown Los Angeles skyline. Construction would represent a temporary change in the visual quality and character of the API, similar to the related projects and other construction projects in the city, which would potentially stand out as memorable or remarkable features in the landscape due to their scale, which would have a temporary impact on visual character and quality of the API and its surroundings compared to existing conditions. Post construction views of Project-related construction activities, equipment, stockpiles, and fencing would be removed once construction is completed. In addition, the proposed Project and other related projects would comply with the best management practices, as well as the City's development standards related to scenic quality during construction, which would be verified during the City's permitting process to reduce impacts. As such, construction of the proposed Project, when combined with related projects, would not conflict with regulations governing scenic quality. Therefore, cumulative impacts with respect to scenic quality would be less than significant.

Operation

The six LUs previously described in Section 3.1.2.6 were used to assess the potential visual character and quality impacts associated with introduction and operation of a new aerial gondola system associated with the proposed Project. Conceptual visual simulations of the Project-related structures were prepared for environmental analysis purposes and are contained in the Visual Impact Assessment in Appendix C of this Draft EIR.

As detailed above, many of the related projects fall within the six LUs. Most of the related projects include various mixed-use developments, residential developments, and open space/circulation projects, and represent infill development and expansions and, in general, would reinforce existing and emerging land use patterns in the area rather than introduce new development characteristics to the Project area. These related projects are similar and consistent to the development in the greater Downtown Los Angeles area that would be implemented by the proposed Project, and thus would provide for generally the same type of visual character, which would not result in a degradation of views.

Furthermore, for a project in an urban area, a significant impact to visual character or quality would occur if the project would conflict with applicable zoning and other regulations governing scenic quality. As with the proposed Project, the related projects would be consistent with the goals and objectives related to scenic quality within the Framework Element of the City of Los Angeles General Plan, the Mobility Plan 2035, as well as the applicable policies related to scenic quality within each respective Community Plan to ensure that they would not conflict with zoning or other regulations that govern scenic quality. The goals for protection of viewshed from within Los Angeles State Historic Park are found in the Los Angeles State Historic Park General Plan. In addition, operation of the proposed Project, when combined with related projects, would not conflict with regulations governing scenic quality. Therefore, cumulative impacts with respect to scenic quality would be less than significant.

Light and Glare

The area around the proposed Project is urbanized and has a high level of existing ambient lighting. The proposed Project would not create a substantial source of light or glare that would result in adverse effects to day/nighttime views of the area. However, the proposed Project in combination with the related projects and other development in the area would increase nighttime lighting and daytime glare. Similar to the proposed Project, the related projects would be expected to comply with applicable City regulations related to light and glare, and to incorporate mitigation measures that would reduce light and glare impacts to the maximum extent feasible. Further, they would be expected to be consistent and compatible with any surrounding residential sensitive receptors with respect to light and glare sensitivity. As such, implementation of the proposed Project, when combined with related projects, would not introduce significant new sources of light or glare. Therefore, cumulative impacts with respect to light and glare would be less than significant.

Shading

As discussed previously, the Project area is heavily urbanized featuring a variety of commercial, industrial, and residential development. Shading is not a required analysis area in the CEQA Guidelines; however, a shadow analysis was conducted as part of the Visual Impact Assessment (Appendix C of this Draft EIR) per requirements in the L.A. CEQA Thresholds Guide.

A project impact would normally be considered significant if shadow-sensitive uses would be shaded by project-related structures for more than three hours between 9:00 a.m. and 3:00 p.m. Pacific Standard Time (late October through early April), or for more than four hours between 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (early April through late October).

Each of the related projects that include development of buildings would create new shadows in various portions of the proposed Project area. It is unknown at this time for most of the related projects if they would include useable outdoor space that would be shaded by the proposed Project or if they could cast shadows on the same resources as the proposed Project.

Certain related projects could result in shadows on Los Angeles State Historic Park. The Project area is characterized by a primarily urban environment featuring a variety of commercial, industrial, and residential development, including passive open space areas and transit/ transportation uses, many of which create shadows in various portions of the proposed Project area. Related projects in the project vicinity also have the potential to create shadows in combination with the proposed Project. However, based on current publicly available information about the related projects and their potential impacts related to shading, it appears unlikely that the proposed Project, in combination with these other projects, would result in the shading of shade-sensitive uses within the Park for durations longer than the thresholds mentioned above. Therefore, cumulative impacts related to shading would be less than significant.

Additionally, regarding the other related projects for which details are unknown, it was determined that some of the Project components could result in the shading of shade-sensitive uses for longer periods than the L.A. CEQA Thresholds. However, the Project area is characterized by a primarily urban environment featuring a variety of commercial, industrial, and residential development, including passive open space areas and transit/transportation uses, and shade-sensitive spaces either would already have shading from adjacent existing structures or would only have a small portion of the parcel that could be directly shaded for longer than the L.A. CEQA Thresholds. As such, the proposed Project, when combined with other related projects, would not result in impacts related to shading. Therefore, cumulative impacts with respect to shading would be less than significant.

5.2.2 Agriculture and Forestry Resources

The geographic context considered for cumulative agricultural resources impacts analysis is the urbanized and developed City of Los Angeles. Cumulative impacts to agricultural resources consider whether impacts of the proposed Project, when combined with related projects in the vicinity of the Project alignment, would result in cumulative agricultural resources impacts.

Any potentially significant impacts of the related projects associated with the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use would be assessed on a project-by-project basis. As discussed in detail in Section 3.2, Agriculture and Forestry Resources, the proposed Project would not impact any farmland, or property zoned or designated for agricultural uses. There are no Williamson Act contracts within Los Angeles County.

As further described in Section 3.2.4, the only Project component sites zoned for agriculture are the Stadium Tower site and the Dodger Stadium Station site, which are both zoned A1. The A1 Zone allows for, among other uses, development of single-family residences; parks, playgrounds or community centers owned and operated by a government agency; farming, nurseries, aviaries, and apiaries; and the keeping of domestic livestock.[5] Notwithstanding the underlying zoning, the Dodger Stadium property is subject to a Conditional Use Permit, which allows for the operation of a Major League Baseball stadium and various ancillary structures and uses, including “mass transportation service” to the site. Additionally, the Stadium Tower site is located on a vegetated hillside, and the Dodger Stadium Station site is developed with a paved surface parking lot and drive aisle. Neither of these sites contain agricultural uses. Therefore, construction and operation of the proposed Project would not conflict with existing zoning for agricultural use or a Williamson Act contract.

Additionally, the proposed Project and related projects are located in an urbanized area of Downtown Los Angeles, and no portion of the Project alignment is developed for farming, agricultural uses, or forest land. The proposed Project and related projects would not result in the loss or conversion of forest land and the nearest forest lands are approximately 11 miles north of the Project alignment. The proposed Project and related projects would not result in the

5 City of Los Angeles Municipal Code. Section 12.05.

conversion of farmland or forest land to urbanized uses. Therefore, cumulative impacts with respect to agriculture and forestry would be less than significant.

5.2.3 Air Quality

The geographic context considered for cumulative air quality is the South Coast Air Basin, which includes the non-desert regions of Los Angeles County (including City of Los Angeles), all of Orange County, Riverside County, and San Bernardino County. The cumulative analysis for air quality is based on guidance provided by the South Coast Air Quality Management District (SCAQMD).[6] By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, projects that exceed the project-specific significance thresholds are considered by the SCAQMD to result in cumulative impacts. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to result in cumulative impacts.

The cumulative analysis focuses on whether a specific project would result in a cumulatively considerable increase in emissions. The nonattainment status of regional pollutants is a result of past and present development in the region, and this regional impact is cumulative rather than attributable to any one source. A project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The thresholds of significance are relevant to whether a project's individual emissions would result in a cumulatively considerable contribution to the existing air quality conditions. If a project's emissions would be less than those threshold levels, the project would not be expected to have a cumulatively considerable contribution.[7]

Air Quality Management Plan Consistency

The cumulative analysis can also be evaluated in terms of consistency with SCAQMD's Air Quality Management Plan (AQMP). The SCAQMD and Southern California Association of Governments (SCAG) are jointly responsible for formulating and implementing the AQMP. SCAG's Regional Mobility Plan and Growth Management Plan form the basis for the land use and transportation control portion of the AQMP. Thus, consistency with the planning assumptions contained within the Regional Transportation Plan/Sustainable Community Strategies (RTP/SCS) demonstrates consistency with SCAQMD's 2016 AQMP.

The proposed Project would not create any overall population growth; therefore, it would have no effect on the growth assumptions used in the 2016 AQMP, 2016-2040 RTP/SCS, and *Connect SoCal*. Moreover, the proposed Project would result in a net reduction in criteria pollutant emissions in both 2026 (Buildout Year) and 2042 (Horizon Year). As a result, the proposed Project would be consistent with SCAG's 2016-2040 RTP/SCS and *Connect SoCal,* and the SCAQMD 2016 AQMP. Therefore, cumulative impacts with respect to the SCAQMD's goals for attainment of air quality standards would be less than significant.

6 SCAQMD. 2003. Cumulative Impacts White Paper-Appendix D. Available at: http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed May 2022.

7 SCAQMD. 2003. Cumulative Impacts White Paper-Appendix D. August. Available at: http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed May 2022.

Construction

As discussed above, if a project exceeds the SCAQMD's recommended significance thresholds for project-specific impacts, then the project would be viewed as having a cumulatively significant impact. The proposed Project's estimated maximum mass daily emissions from construction would be less than the SCAQMD mass daily significance thresholds for all criteria pollutants. Therefore, cumulative impacts with respect to the Project's construction-related contribution to regional air emissions of these pollutants would be less than significant.

Similarly, proposed Project-related construction emissions were evaluated for localized ambient air quality concentrations of nitrogen dioxide, carbon monoxide, and particulate matter of aerodynamic diameter less than 2.5 microns and less than 10 microns using SCAQMD's localized significance threshold methodology, which demonstrated that the Project would have a less than significant impact. Therefore, according to SCAQMD guidance, cumulative impacts with respect to the proposed Project's construction-related contribution to localized air quality concentrations of these pollutants would be less than significant.

In addition, the proposed Project would have a less than significant impact associated with toxic air contaminant (TAC) emissions because it would not exceed SCAQMD's Maximum Incremental Cancer Risk, Chronic Hazard Index, or cancer burden thresholds. Therefore, according to SCAQMD guidance, cumulative impacts with respect to the proposed Project's construction-related contribution to TAC contaminant emissions would be less than significant.

Operational Impacts

The estimated maximum mass daily emissions due to proposed Project operations would be less than the SCAQMD mass daily significance thresholds for all criteria pollutants. Moreover, the proposed Project would result in a net reduction in criteria pollutant emissions in both 2026 (Build Out) and 2042 (Horizon Year). Therefore, according to SCAQMD guidance, cumulative impacts with respect to the proposed Project's contribution to regional air emissions of these pollutants during operations would be less than significant.

The proposed Project would not be a substantial source of TAC emissions, as such emissions are typically associated with large-scale industrial, manufacturing, and transportation hub facilities based on the California Air Resources Board (CARB) Air Quality and Land Use Handbook.[8] The proposed Project would only generate minimal TAC emissions during operations. Therefore, cumulative impacts with respect to TAC emissions would be less than significant.

Odor Impacts

Regarding other emissions such as those leading to potential odor impacts, the proposed Project would not include any land uses identified by SCAQMD as being associated with odors. Thus, potential odor impacts from the proposed Project would be less than significant, and the cumulative impacts with respect to odor impacts would be less than significant.

5.2.4 Biological Resources

The geographic area considered for analysis of biological resource cumulative impacts is the urbanized and developed City of Los Angeles, in which the proposed Project alignment is also

[8] CARB. 2005. Air Quality and Land Use Handbook: A Community Health Perspective. April. Available at: https://ww3.arb.ca.gov/ch/handbook.pdf. Accessed May 2022.

located. Due to its urbanized and developed nature, the Biological Survey Area (BSA) provides little opportunity for wildlife species or other biological resources to exist. No native plant communities occur within or adjacent to the BSA. There are no wildlife corridors within the BSA to support movement of wildlife species. There are no sensitive natural communities such as wetlands, oak woodlands, or coastal sage scrub habitat within the BSA. There are no Habitat Conservation Plans that overlap with the BSA, and the nearest Significant Ecological Area is located approximately five miles north-northwest of Dodger Stadium at Griffith Park. While construction of the proposed Project would result in the removal of trees, as detailed in Table 3.4-1, their removal and replacement would be subject to the City's Native Tree Protection Ordinance, the City of Los Angeles Urban Forestry Division, and a special permit from the California Department of Parks and Recreation. Additionally, the proposed Project would implement standard best management practices and mitigation measures related to the control of fugitive dust, noise, and vibration, including compliance with SCAQMD Rule 403, Mitigation Measures NOI-A and NOI-B, and compliance with the Migratory Bird Treaty Act to minimize impacts to roosting bats and nesting birds. Therefore, the proposed Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and impacts would be less than significant.

Related projects would also be located within the urbanized and developed City of Los Angeles and would also be required to be consistent with applicable federal, State, and local regulations concerning biological resources. Similar to the proposed Project, related projects could result in a potentially significant impact to biological resources. Indirect impacts to roosting bats and nesting birds in the BSA could occur during construction as a result of noise, vibration, dust, and increased human presence resulting from construction activities. In addition, because the Project vicinity consists of similar limited biological resources as the urbanized and developed City of Los Angeles, the less than significant impacts with mitigation from the proposed Project are not anticipated to combine with other development projects to substantially affect these species to a point where their survival in the region is threatened. As such, when combined with other related projects, impacts to roosting bats and nesting birds would be less than significant. Therefore, cumulative impacts with respect to the proposed Project's construction to biological resources would be less than significant.

Operation of the proposed Project and related projects are not expected to significantly impact biological resources as the existing area is characterized by a primarily urban environment featuring a variety of commercial, industrial, and residential developments. Post-construction conditions would be similar to existing conditions as the proposed Project and related projects would not significantly change existing conditions. Therefore, cumulative impacts with respect to the proposed Project's operation to biological resources would be less than significant.

5.2.5 Cultural Resources

The geographic context considered for cumulative cultural resources impacts analysis is the urbanized and developed City of Los Angeles. Cumulative impacts to cultural resources consider whether impacts of the proposed Project, when combined with related projects in the vicinity of the Project alignment, would substantially diminish the number of historic or archaeological resources within the same or similar context or property type. Although impacts to cultural resources tend to be site-specific, a cumulative impact analysis of cultural resources determines whether the proposed Project and related projects would result in a substantial adverse change to the immediate surroundings of these historic and archaeological resources to the degree their eligibility as resources would be materially impaired.

Built Historic Resources

A detailed cumulative impact analysis for each identified built historical resource is discussed in the Historical Resource Technical Report for the Los Angeles Aerial Rapid Transit Project, provided as Appendix G of this Draft EIR, and they are summarized below.

El Grito (The Cry) Mural

Two related projects are located within the vicinity of the *El Grito* mural: the Link Union Station Project and LAUS Forecourt and Esplanade Improvements Project. The Link Union Station Project would not contribute to cumulative impacts due to its distance from the historical resource, which is approximately 0.5 miles to the east. The LAUS Forecourt & Esplanade Improvements Project involves the planned Forecourt improvements to Union Station on the east side of Alameda Street, as well as the esplanade improvements along Alameda, Los Angeles, and Arcadia Streets. Located outside Placita de Dolores and the boundary of the Los Angeles Park Plaza Historic-Cultural Monuments (HCM), the two projects would not contribute to changes in the setting of *El Grito* mural in combination with the proposed Project. Implementation of Mitigation Measures VIB-A and VIB-B, identified in Section 3.13, Noise and Vibration, would reduce impacts to a less-than-significant level. In addition, project design features CUL-PDF-C through CUL-PDF-E, identified in Section 3.5, Cultural Resources, would also be incorporated to minimize impacts. Therefore, cumulative impacts with respect to this historical resource would be less than significant.

Los Angeles Union Station Passenger Terminal

Five related projects are located within the vicinity of the historical resource: Link Union Station; California High-Speed-Rail; Union Station Forecourt and Esplanade Improvements Project; Cesar E. Chavez Avenue Bus Stop Improvement Project; and West Santa Ana Branch Transit Corridor Project. The Project and five related projects have the potential to contribute to cumulative impacts to Union Station due to their location both within and immediately adjacent to the historical resource's boundary.

The Link Union Station Project involves the conversion of Union Station from a "stub-end track station" into a "run-through tracks station" and includes the construction of a new at-grade passenger concourse to the east of the existing terminal building. The project involves the demolition and/or substantial alteration of character-defining features that qualify the historical resource for inclusion in the National Register and California Register. These character-defining features include: the train platforms; butterfly shed canopies; pedestrian passageway, passenger ramps, platform railings, and balustrades; Terminal Tower; Car Supply Building; Macy Street Grade Separation; Vignes Street Undercrossing; and south retaining wall. The Certified Final Environmental Impact Report (Final EIR) for the project, dated June 2019, notes that the project would cause a significant direct impact to the historical resource: "The physical removal of these features would be a substantial change in significance of the historical resource, even though LAUS would retain enough integrity to remain listed in the [National Register/California Register], due to the preservation of the historic main building."[9]

The Final EIR also notes that the Link Union Station project would cause significant indirect and cumulative impacts to the historical resource. In regard to indirect impacts, it states that "the above-grade passenger concourse with the new expanded passageway is incompatible with

[9] *Final Environmental Impact Report: Link Union Station* (Los Angeles County Metropolitan Transit Authority [Metro], June 2019), 3.12-53.

[Union Station] as a historical resource, resulting in indirect visual impacts."[10] The indirect impact analysis therefore concludes that "these indirect impacts on [Union Station] are considered significant."[11]

The cumulative impact analysis in the Final EIR considered the collective changes resulting from the Link Union Station project and Union Station Forecourt and Esplanade Improvements Project. The Final EIR noted that the two projects would result in a substantial adverse change to the setting of Union Station, most notably the setting to the west, east, and south. The analysis conservatively concluded that "when considered together, the past, current, and proposed cumulative projects would result in a cumulatively considerable impact on the historical features of [Union Station]."[12]

The California High-Speed Rail (HSR) Build Alterative would modify improvements constructed as part of the Link Union Station project, including new railroad tracks and platforms. In reference to Union Station, the Burbank to Los Angles Project Section Draft EIR/Environmental Impact Statement (EIS) dated May 2020 notes that the project "would not cause physical destruction of or damage to this historic property, nor would it make alterations that are not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties."[13] The HSR Build Alternative would not result in an impact on Union Station.

The Union Station Forecourt and Esplanade Improvements Project involves the installation of multi-modal improvements to the west of Union Station within the existing forecourt area as well as along Alameda, Los Angeles, and Arcadia Streets. Improvements within the boundary of the historical resource include the construction of a new pedestrian plaza and pavilion at the location of the existing northwest surface parking lot, the construction of a new bike storage facility, as well as the conversion of one of the central driveways from Alameda Street into a pedestrian walkway. Improvements immediately outside the historical resource boundary are located within the public right-of-way (ROW) on Alameda Street and include widening the existing sidewalks, constructing a raised crosswalk, replacing street lighting, constructing a new median, and road restriping. The Draft EIR dated August 2017 noted that the project would not result in a significant direct, indirect, or cumulative impact because "project elements have been designed to comply with the Secretary of the Interior's Standards, thereby avoiding impacts to historical resources."[14] The Addendum #2 to the Final EIR for the project, dated September 2020, reiterated that the modified project would not result in a significant direct or indirect impact to Union Station; however, the addendum does not specifically discuss cumulative impacts as the modified project would not result in any substantial adverse change to historic resources.[15]

The Cesar E. Chavez Avenue Bus Stop Improvement Project has added new bus shelters, paving, landscaping, and small-streetscape features, such as benches, to the northeast and

---

[10] Ibid., 3.12-71.
[11] Ibid., 3.12-73.
[12] Ibid., 4-33. The Final EIR reached a conservative conclusion that the projects would result in a cumulatively considerable impact on Union Station's historical features, given that the Union Station Forecourt and Esplanade Improvements Project on its own would not result in an impact. LA ART does not result in a cumulatively considerable contribution to cumulative impacts on Union Station's historical features, because as discussed below, LA ART would not independently result in a significant impact to Union Station.
[13] *Draft Environmental Impact Report/Environmental Impact Statement: Burbank to Los Angeles Project Section*, (California High-Speed Rail Authority, May 2020), 3.17-71.
[14] *Los Angeles Union Station Forecourt and Esplanade Improvement Project: Draft Environmental Impact Report* (Los Angeles County Metropolitan Transit Authority [Metro], August 2017), 3.6-31.
[15] *Los Angeles Union Station Forecourt and Esplanade Improvement Project: Addendum No. 2 to the Environmental Impact Report* (Los Angeles County Metropolitan Transit Authority [Metro], September 9, 2020), 3.6-27.

southeast corners of the Cesar E. Chavez Avenue and Alameda Street intersection. A Notice of Exemption was completed for the project, which was posted on June 7, 2016.

The West Santa Ana Branch Transit Corridor Project involves the construction of a new light rail transit line between Downtown Los Angeles and Artesia. The new light rail line would operate underground within the boundaries of Downtown Los Angeles. The Draft EIR was released for public comment in July 2021.

Although the proposed Project would introduce additional modern features into Union Station's substantially diminished setting along Alameda Street, it would not further diminish the integrity of Union Station to the degree it would no longer convey its significance or would no longer be eligible for listing as a historic resource defined by CEQA. The historic terminal building on the Union Station property would remain eligible for listing under applicable landmark designation programs, despite the substantial adverse change resulting from the Link Union Station project. State CEQA Guidelines note that "the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Therefore, cumulative impacts with respect to this historical resource would be less than significant.

Los Angeles Plaza Historic District

Four related projects are located within the vicinity of the historical resource: Link Union Station; Union Station Forecourt and Esplanade Improvements Project; Cesar E. Chavez Avenue Bus Stop Improvement Project; and 643-655 North Spring Street Mixed-Use project. Inclusive of the Project, the five projects have the potential to contribute to cumulative impacts to the Los Angeles Plaza Historic District due to their location both within and immediately adjacent to the historical resource's boundary.

The Link Union Station project involves the conversion of Los Angeles Union Station from a "stub-end track station" into a "run-through tracks station" and includes the construction of a new at-grade passenger concourse to the east of the existing terminal building. The Final EIR for the project, dated June 2019, noted that the project would have no direct impact on the Los Angeles Plaza Historic District and the indirect impacts would be less than significant. "The elevated portion of the above-grade passenger concourse would be a maximum height of 90 feet above existing grade, and the appearance of this infrastructure element may result in an indirect visual impact, as it may be visible from portions of the plaza area. However, none of the characteristics that qualify Los Angeles Plaza Historic District for the [California Register] would have their integrity diminished because the views east from the plaza have changed substantially since the end of the period of significance (1932)."[16]

The Union Station Forecourt and Esplanade Improvements Project involves the installation of multi-modal improvements to the west of Union Station within the existing forecourt area as well as along Alameda, Los Angeles, and Arcadia Streets. Improvements immediately adjacent to the Los Angeles Plaza Historic District are located within the public ROW. They include the installation of new pavers at what is currently a turn lane on Los Angeles Street, addition of a raised crosswalk across Alameda Street, widened sidewalks on the east side of Alameda Street, installation of new bollards to demarcate a bike lane on Los Angeles Street, addition of Americans with Disabilities Act (ADA) sidewalk ramps at pedestrian crosswalks, construction of a new median on Alameda Street, and road restriping on Alameda and Los Angeles Street. The northernmost travel lane on Arcadia Street would also be converted into a surface parking area for tour buses. In reference to

[16] *Link Union Station*, 3.12-73.

the Los Angeles Plaza Historic District, the addendum to the Final EIR for the project, dated September 2020, noted that the project would not impact the Los Angeles Plaza Historic District's ability to convey its historic significance, nor would it physically affect the character-defining features of the historical resource. The analysis further states that "all of the proposed modifications would remain compliant with the Secretary of the Interior's Standards."[17]

The Cesar E. Chavez Avenue Bus Stop Improvement Project has added new bus shelters, paving, landscaping, and small-streetscape features, such as benches, to the northeast and southeast corners of the Cesar E. Chavez Avenue and Alameda Street intersection. As noted above, a Notice of Exemption was completed for the project, which was posted on June 7, 2016.

The 643-655 North Spring Street Mixed-Use project would include the construction of a new 26-story mixed use tower at 643-655 North Spring Street between Cesar E. Chavez Avenue and Ord Street. Although this project is located farther away from the Los Angeles Plaza Historic District than the other related projects noted above, it was included in the list of related projects in order to provide a conservative analysis due to the height of the proposed new building. As stated in the Historical Resources Technical Report (HRTR), CEQA documentation could not be located for the project.

As noted above, the proposed Project would add new visual features within the broader setting of the Los Angeles Plaza Historic District, but the impact would be less than significant. The proposed Project and four related projects would add new visual features to the surroundings of the historical resource; however, the setting beyond the boundaries of the Los Angeles Plaza Historic District does not contribute to the significance of the historical resource. Furthermore, while the new features might be visible from certain vantage points within the district boundaries, the existing physical integrity and character-defining features of the district would remain intact, and its important internal cohesiveness would remain undisturbed. Therefore, the Los Angeles Plaza Historic District would continue to convey its historic significance. Cumulative impacts with respect to this historical resource would be less than significant.

Los Angeles Terminal Annex Post Office

Five related projects are located within the vicinity of the historical resource: Data Center Project (900 North Alameda Street); Link Union Station; California High-Speed Rail; Union Station Forecourt and Esplanade Improvements Project; and Cesar E. Chavez Avenue Bus Stop Improvement Project. Inclusive of the proposed Project, the six projects have the potential to contribute to cumulative impacts to the Los Angeles Terminal Annex Post Office due to their location both within and immediately adjacent to the historical resource's boundary.

The Data Center Project involves the adaptive reuse of the Los Angeles Terminal Annex Post Office, changing the use of the historical resource from a post office into a data center. The proposed project also involves the construction of a new four-story building and parking garage to the north of the existing historical resource. A new covered walkway would connect the historical resource to the new building. The parking lot to the west of the post office annex would be reconfigured and new landscaping and small-scale features added. The addendum to the Final EIR, dated July 2018, noted that the project's impacts to the post office annex "were determined to be less than significant."[18]

[17] *Forecourt and Esplanade Improvement Project*, 3.6-27.

[18] Circlepoint, *Final Environmental Impact Report: Alameda District Specific Plan Addendum No. 1* (City of Los Angeles Department of City Planning, July 2018), 41-42.

The Link Union Station project involves the demolition of the Macy Street Grade Separation and the construction of a new railroad bridge. The existing bridge is located immediately adjacent to the post office annex's west elevation. The Final EIR for the project, dated June 2019, noted that the project's impacts to the post office annex "are considered less than significant."[19]

The California HSR Build Alterative would add a new Overhead Cantenary System (OCS) 70 feet to the east of the post office annex. The new OCS would be located above railroad tracks that would be constructed as part of the Link Union Station project. The Draft EIR/EIS notes that the project "would not change the character of the historic property's use or physical setting in a manner that would diminish its integrity."[20]

The Union Station Forecourt and Esplanade Improvements Project would add new streetscape features along the eastside of Alameda Street, including wider sidewalks, pedestrian/bike path, street trees, and road restriping. The Draft EIR, dated August 2017, does not analyze potential project impacts to the post office annex. The report notes that the post office annex "would not be affected by the proposed project because it is already not visible from the portion of Alameda Street within the project site due to the presence of the approximately 50-foot-high Mozaic Apartment complex in the foreground."[21] Therefore, the Union Station Forecourt and Esplanade Improvements Project would have no direct or indirect impact on the historical resource.

The Cesar E. Chavez Avenue Bus Stop Improvement Project would add new bus shelters, paving, landscaping, and small-streetscape features, such as benches, to the northeast and southeast corners of the Cesar E. Chavez Avenue and Alameda Street intersection. As noted in the HRTR, CEQA documentation could not be located for the project.

As noted above, the proposed Project would add new visual features within the setting of the Los Angeles Terminal Annex Post Office, but the impact would be less than significant. The proposed Project and five related projects would add new visual features to the historical resource's setting; however, the broad setting in the vicinity of the historical resource has noticeably changed and does not contribute to the significance of the historical resource. Therefore, because the integrity of setting has been substantially diminished by changes over time, the introduction of additional modern features would not diminish the integrity of the Los Angeles Terminal Annex Post Office to the degree that it would no longer convey its significance. The Los Angeles Terminal Annex Post Office would remain a prominent feature in the area. Therefore, cumulative impacts with respect to this historical resource would be less than significant.

Philippe the Original

There is one related project located within the vicinity of the historical resource, the 643-655 North Spring Street Mixed-Use Project. The project would include the construction of a new 26-story mixed use tower at 643-655 North Spring Street between Cesar E. Chavez Avenue and Ord Street. Although this project is located within approximately 400 feet of the historical resource, it was included in order to provide a conservative analysis due to the height of the proposed new building. CEQA documentation could not be located for the project. Inclusive of the proposed Project, the two projects have the potential to contribute to cumulative impacts to Philippe the Original due to their location adjacent to the historical resource's boundary.

[19] *Link Union Station,* 3.12-73.
[20] *Burbank to Los Angeles*, 3.17-71.
[21] *Forecourt and Esplanade Improvement Project*, 3.1-22.

As noted above, the proposed Project would add new visual features within the setting of Philippe the Original, but the impact would be less than significant. The proposed Project and related project would add new visual features to the historical resource's setting; however, the broad setting in the vicinity of the historical resource has noticeably changed and does not contribute to the significance of the historical resource. Therefore, because the integrity of setting has been substantially diminished by changes over time, the introduction of additional modern features would not diminish the integrity of Philippe the Original to the degree that it would no longer convey its significance. Philippe the Original would continue to remain visible and thus would remain a prominent feature in the area. Therefore, cumulative impacts with respect to this historical resource would be less than significant.

Capitol Milling Company

There are four related projects located within the vicinity of the historical resource: the College Station project, 843 North Spring Street project, Harmony project, and Buena Vista project. Inclusive of the proposed Project, the five projects have the potential to contribute to cumulative impacts to the Capitol Milling Company due to their location immediately adjacent to the historical resource's boundary.

The College Station project is located at 129 West College Street on the east side of Spring Street opposite from the Capitol Milling Company buildings. It involves the construction of a new mixed-use development on a vacant parcel. The new building is composed of a two-story podium structure with six five-story residential towers. The Draft EIR, dated March 2018, noted that an analysis of the project's impact on Cultural Resources was scoped out of the EIR analysis.[22] Therefore, because the College Station project does not have a direct or indirect impact on the historical resource, there is no potential to contribute to cumulative impacts.

The 843 North Spring Street project is located on the south side of College Street at the intersection with Spring Street. It involves the construction of a new four-story commercial retail and office building. As stated in the HRTR, CEQA documentation could not be located for the project.

The Harmony project is located at 942 North Broadway immediately to the west of the Capitol Milling Company buildings. The project involves the construction of a new 27-story building with 178 residential condominiums. It qualified as a Sustainable Communities Project and received a Notice of Exemption on November 27, 2019. The project was designed to avoid impacts on the Zanja Madre, and potential impacts on other historical resources in the vicinity were not identified.

The Buena Vista project is located at 1030-1380 North Broadway and 1251 North Spring Street immediately to the north of the Capitol Milling Company buildings. The project involves the construction of a mixed-use development of residential and commercial uses with approximately 986 residential units (including 200 affordable housing units); 15,000 square feet of neighborhood-serving retail uses; 23,800 square feet of indoor and outdoor restaurant uses; and 116,263 square feet of outdoor trellis/building overhangs. The new building closest to the historical resource would be approximately 26 stories above grade. A Notice of Preparation (NOP) to prepare a Draft EIR was published on August 2, 2021; however, the Draft EIR has not yet been released.

As noted above, the proposed Project would add new visual features within the setting of the Capitol Milling Company, but the impact would be less than significant. The proposed Project and

---

22 ESA, *Draft Environmental Impact Report: College Station Project* (City of Los Angeles Planning Department, March 2018), ES-11.

four related projects would add new visual features to the historical resource's setting; however, the broad setting in the vicinity of the historical resource has noticeably changed and does not contribute to the significance of the historical resource. Therefore, because the integrity of setting has been substantially diminished by changes over time, the introduction of additional modern features would not diminish the integrity of the Capitol Milling Company buildings to the degree that they would no longer convey its significance. The Capitol Milling Company resource would retain its existing level of visibility from Spring Street. Therefore, cumulative impacts with respect to this historical resource would be less than significant.

1035 North Broadway

There are two related projects located within the vicinity of the historical resource: the Harmony project and Buena Vista project. Inclusive of the proposed Project, the three projects have the potential to contribute to cumulative impacts to 1035 North Broadway due to their location adjacent to the historical resource's boundary.

The Harmony project is located at 942 North Broadway, south of 1035 North Broadway. The project involves the construction of a new 27-story building with 178 residential condominiums. It qualified as a Sustainable Communities Project and received a Notice of Exemption on November 27, 2019. The project was designed to avoid impacts on the Zanja Madre, and potential impacts on other historical resources in the vicinity were not identified.

The Buena Vista project is located at 1030-1380 North Broadway and 1251 North Spring Street immediately to the east of 1035 North Broadway. The project involves: the construction of a mixed-use development of residential and commercial uses with approximately 986 residential units (including 200 affordable housing units); 15,000 square feet of neighborhood-serving retail uses; 23,800 square feet of indoor and outdoor restaurant uses; and 116,263 square feet of outdoor trellis/building overhangs. The new building closest to the historical resource would be approximately 22 stories above grade. An NOP to prepare a Draft EIR was published on August 2, 2021; however, the Draft EIR has not yet been released.

As noted above, the proposed Project would add new visual features within the setting of 1035 North Broadway, but the impact would be less than significant. The proposed Project and two related projects would add new visual features to the historical resource's setting; however, the broad setting in the vicinity of the historical resource does not contribute to its significance. Therefore, the introduction of additional modern features would not diminish the integrity of 1035 North Broadway to the degree that it would no longer convey its significance. Therefore, cumulative impacts with respect to this historical resource would be less than significant.

St. Peter's Italian Catholic Church

There are two related projects located within the vicinity of the historical resource: the Buena Vista project and the 1201 North Broadway project. The Buena Vista project is located at 1030-1380 North Broadway and 1251 North Spring Street immediately to the east of St. Peter's Italian Catholic Church. The project involves the construction of a mixed-use development of residential and commercial uses with approximately 986 residential units (including 200 affordable housing units); 15,000 square feet of neighborhood-serving retail uses; 23,800 square feet of indoor and outdoor restaurant uses; and 116,263 square feet of outdoor trellis/building overhangs. The new building closest to the historical resource would be approximately 22 stories above grade. A NOP to prepare a Draft EIR was published on August 2, 2021; however, the Draft EIR has not yet been released.

The 1201 North Broadway project involves the construction of a new seven-story mixed use building on the corner of North Broadway and Bishops Road. The Mitigated Negative Declaration for the project dated May 2017 noted that "the proposed project would result in less than significant impacts to historical resources," including Cathedral High School, of which St. Peter's Catholic Church is a part.[23]

As noted above, the proposed Project would add new visual features within the setting of St. Peter's Italian Catholic Church, but the impact would be less than significant. The proposed Project and two related projects would add new visual features to the historical resource's setting; however, the broad setting in the vicinity of the historical resource has already been diminished over time and does not contribute to the resource's significance. Therefore, the introduction of additional modern features would not diminish the integrity of St. Peter's Italian Catholic Church to the degree that it would no longer convey its significance. Therefore, cumulative impacts with respect to this historical resource would be less than significant.

Cathedral High School

There are two related projects located within the vicinity of the historical resource: the Buena Vista project and the 1201 North Broadway project. Inclusive of the proposed Project, the three projects have the potential to contribute to cumulative impacts to Cathedral High School due to their location adjacent to the historical resource's boundary.

The Buena Vista project is located at 1030-1380 North Broadway and 1251 North Spring Street immediately to the north of the Capitol Milling Company buildings. The project involves the construction of a mixed-use development of residential and commercial uses with approximately 986 residential units (including 200 affordable housing units); 15,000 square feet of neighborhood-serving retail uses; 23,800 square feet of indoor and outdoor restaurant uses; and 116,263 square feet of outdoor trellis/building overhangs. The new building closest to the historical resource would be approximately 26 stories above grade. An NOP to prepare a Draft EIR was published on August 2, 2021; however, the Draft EIR has not yet been released.

The 1201 North Broadway project involves the construction of a new seven-story mixed-use building on the corner of Broadway and Bishops Road. The Mitigated Negative Declaration for the project dated May 2017 noted that "the proposed project would result in less than significant impacts to historical resources," including Cathedral High School.[24]

As noted above, the proposed Project would add new visual features within the setting of the Cathedral High School campus, but the impact would be less than significant. The proposed Project and related project would add new visual features to the historical resource's setting; however, the broad setting in the vicinity of the historical resource has noticeably changed and does not contribute to the significance of the historical resource. Therefore, because the integrity of setting has been substantially diminished by changes over time, the introduction of additional modern features would not diminish the integrity of the Cathedral High School campus to the degree that it would no longer convey its significance. Cathedral High School would remain a prominent feature in the area. While the proposed Project would contribute to changes in setting, the cumulative impact on the historical resource would be less than significant.

---

[23] ESA PCR, *1201 N. Broadway Proposed Mitigated Negative Declaration* (City of Los Angeles Planning Department, May 2017), B-36.

[24] Ibid.

451 East Savoy Street

There is one related project in the vicinity of the historical resource, the 1201 North Broadway project. The 1201 North Broadway project involves the construction of a new seven-story mixed use building on the corner of Broadway and Bishops Road for which a Mitigated Negative Declaration was prepared, dated May 2017.[25] Inclusive of the proposed Project, the two projects have the potential to contribute to cumulative impacts to 451 East Savoy Street due to their location immediately adjacent to the historical resource's boundary.

As noted above, the proposed Project would add new visual features within the setting of the historical resource, but the impact would be less than significant. The proposed Project and related project would add new visual features to the historical resource's setting; however, the broad setting in the vicinity of the historical resource has noticeably changed. Therefore, because the integrity of setting has been substantially diminished by changes over time, the introduction of additional modern features would not diminish the integrity of 451 East Savoy Street to the degree it would no longer convey its significance. 451 East Savoy Street would continue to remain visible and thus would remain a prominent feature in the area. While the proposed Project would contribute to changes in setting, the cumulative impact on the historical resource would be less than significant.

Charles B. Wellman Residence

There is one related project in the vicinity of the historical resource, the 1201 North Broadway project. The Mitigated Negative Declaration for the project dated May 2017 notes that "the proposed project would result in less than significant impacts to historical resources," including the Charles B. Wellman Residence.[26] Inclusive of the proposed Project, the two projects have the potential to contribute to cumulative impacts to the Charles B. Wellman Residence due to their location immediately adjacent to the historical resource's boundary.

As noted above, the proposed Project would add new visual features within the setting of the Charles B. Wellman Residence, but the impact would be less than significant. The proposed Project and related project would add new visual features to the historical resource's setting. However, the Charles B. Wellman Residence features a substantial setback from the street and therefore, new visual features in the vicinity are geographically and visually separated from the historical resource by this intervening space. The introduction of new visual features would not impact the historical resource's relationship to its immediate setting. While the proposed Project would contribute to changes in setting, the cumulative impact on the historical resource would be less than significant.

Other Resources

In regard to the Arroyo Seco Parkway Historic District and Granite Block Paving, there are no related projects located within the vicinity or that are located adjacent to the proposed Project or within a direct line-of-sight; therefore, there is no potential for cumulative impacts to the historical resources.

Operation of the proposed Project would result in direct impacts and indirect impacts to historical resources; however, all impacts would be less than significant. Direct impacts include physical components located within historical resource boundaries. Indirect impacts include visual,

[25] ESA PCR, B-36.
[26] Ibid.

auditory, and atmospheric changes to the setting of identified historical resources. Overall, the mitigation measures discussed above would ensure that the proposed Project, when combined with other related projects, would not result in significant impacts to historic resources. Therefore, cumulative impacts with respect to historic resources would be less than significant.

Archaeological Resources

As described in Section 3.5, Cultural Resources, there are eight archaeological historical resources identified within the Area of Direct Impacts for the proposed Project. As further detailed in Section 3.5, Cultural Resources, Table 3.5-2, of the eight identified archaeological resources, three archaeological resources were identified at the proposed Alameda Station site, three at the proposed Alameda Tower site, and one archaeological resource was identified at the proposed Chinatown/State Park Station site and the proposed Dodger Stadium Station site.

The field surveys described in Section 3.5, Cultural Resources, revealed that the Area of Direct Impacts is almost entirely paved over, with the exception of portion that is located within the Alameda Triangle, planters and street tree wells along Alameda Street that include artificial fill, portions of the Chinatown/State Park Station, the proposed Stadium Tower, and portions of the proposed Dodger Stadium Station. The eight archaeological sites are currently paved over and were not encountered on the field survey, and no new surface-visible archaeological resources in the Area of Direct Impacts were revealed.

As described in Section 3.5, Cultural Resources, construction of the proposed Project has the potential to affect archaeological resources, including previously unidentified archaeological resources. However, implementation of Mitigation Measures CUL-A through CUL-F, as identified in Section 3.5, Cultural Resources, would reduce potential impacts to a less than significant level. These measures include a Cultural Resources Monitoring and Mitigation Plan (CRMMP), a cultural resources worker training program, and archaeological testing and data recovery plans for LAUS Forecourt and the Los Angeles State Historic Park.

Archaeological sites would only be subject to adverse effects during construction activities as all the archaeological resources within the proposed Project area are buried or inaccessible to the public. Operation of the proposed Project would not require any ground disturbing activities that could expose archaeological sites and result in disturbance of the resources.

Related projects would also be required to comply with regulatory requirements to reduce impacts to archaeological resources. As such, the proposed Project, when combined with other related projects, would not contribute to a cumulative loss of archaeological resources. Therefore, cumulative impacts with respect to archaeological resources would be less than significant.

5.2.6 Energy

The geographic context for cumulative analysis of energy is the State of California and the City of Los Angeles, which have established local- and State-level plans for increased renewable energy and energy efficiency. The proposed Project would use energy in the form of electricity and fuels during construction, which would result in a less-than-significant impact related to wasteful, inefficient, or unnecessary consumption of energy. During Project operation, electricity use for the proposed Project would represent an extremely small percentage of regional estimates for the Los Angeles Department of Water and Power and would be consistent with the State's planned long-term electricity usage. In addition, operation of the proposed Project would decrease the number of people traveling to Dodger Stadium and the surrounding area in passenger vehicles and increase the number of people using public transit. The overall shift in transportation mode is anticipated to reduce total Vehicle Miles Traveled (VMT) and vehicle idling time in and around Dodger Stadium associated with passenger vehicles, therefore reducing associated emissions and fuel use compared to existing conditions. Overall, the proposed Project would decrease regional fuel consumption resulting in a beneficial energy impact. In addition, as discussed in Section 3.6, Energy, the proposed Project aligns with local- and State-level plans for increased renewable energy or energy efficiency, and would be designed to comply with all applicable State and local codes, including conformance with the City of Los Angeles Green Building Ordinance.

As with the proposed Project, the applicants of related projects within the Project vicinity would be required to comply with building codes and energy efficiency standards, such as Title 24 requirements and the City of Los Angeles Green Building Ordinance. With implementation of the existing energy efficiency standards and the proposed Project’s beneficial reduction in fuel consumption, the cumulative energy impacts would be less than significant.

5.2.7 Geology and Soils

Geologic Resources

The geologic area considered for the analysis of cumulative impacts related to geologic resources and hazards is within the immediate Project vicinity. The potential cumulative exposure of people or structures to unstable geologic units and/or expansive soils that have the potential to result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, movement, or collapse tend to be region wide in nature, even though each site-specific development has unique geologic considerations. As described further in Section 3.7.1, Geology and Soils, site-specific development projects within the City of Los Angeles are subject to uniform site-development policies and construction standards that are based on the State requirements in the California Building Code (CBC), the City of Los Angeles Municipal Code regulations related to geology and soils, and site-specific geotechnical studies prepared to define site-specific conditions that might pose a risk to safety, such as those described previously for the proposed Project.

The proposed Project would result in less than significant impacts related to strong seismic ground shaking, seismic-related ground failure, unstable soils, landslides, lateral spreading, subsidence, liquefaction, collapse, expansive soil, soil corrosion with the implementation of Mitigation Measure GEO-A, which would require the preparation and submittal of a site-specific final geotechnical report. In addition, the proposed Project alignment is not located within a State of California Earthquake Fault Zone for known Holocene active faults capable of fault surface rupture or located within an Alquist-Priolo Earthquake Fault Zone. The Elysian Park fault traverses the Project area; however, it is a blind thrust fault, which means it is not capable of surface fault rupture. As such, the risk of surface rupture due to faulting is considered low. Furthermore, the proposed Project would be constructed in accordance with applicable standards, requirements, and building codes, which would ensure structural integrity and safe construction. Thus, the potential impacts from seismic ground shaking, seismic-related ground failure, liquefaction, expansive soils, subsidence, and collapse from the Project were determined to be less than significant with the implementation of mitigation.

While increases in the number of people and structures subject to unstable geologic units and soils would increase in the Project area with development from related projects, given the application of CBC and Los Angeles Municipal Code requirements by the City through the construction permitting process, the cumulative effects of development related to unstable geologic units and/or expansive soils--including landslides, lateral spreading, subsidence, liquefaction, movement, or collapse--would be less than significant. Therefore, cumulative impacts with respect to geology and soils would be less than significant.

Paleontological Resources

Potential cumulative impacts to paleontological resources would result from projects that combine to create an environment where fossils, exposed on the surface, are vulnerable to destruction by earthmoving equipment, looting by the public, and natural causes such as weathering and erosion. The proposed Project would implement Mitigation Measure GEO-B, which requires preparation of a Paleontological Resources Monitoring and Mitigation Plan, to ensure that any significant paleontological resources uncovered during excavations would be properly analyzed and salvaged by the on-site paleontological monitor. In addition, related projects would also be required to assess impacts to paleontological resources and incorporate individual mitigation for site-specific geological units present on each individual project site. Therefore, cumulative impacts with respect to paleontological resources would be less than significant.

5.2.8 Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions are regionally cumulative in nature. The analysis of GHG emission impacts under CEQA contained in this Draft EIR effectively constitutes an analysis of the Project’s contribution to the cumulative impact of GHG emissions. As discussed in Section 3.7, Greenhouse Gas Emissions, current vehicular emissions are associated with games and events at Dodger Stadium as a result of passengers in vehicles traveling to the Stadium, along with employees (i.e., total VMT). By transitioning a portion of the passengers of these vehicles to the proposed Project, total VMT would be reduced along with corresponding reductions in emissions. During operation, the proposed Project would obtain power through renewable electricity, and as such, GHG emissions associated with electricity usage for gondola operations would be zero. Additionally, the proposed Project would feature battery storage in lieu of diesel generators as a backup power supply to allow for unloading of the aerial gondola system in the event of a temporary power grid failure. Ultimately, the proposed Project would reduce GHG emissions compared to the baseline conditions. In addition, the proposed Project would be consistent with applicable plans for the reduction of GHG emissions. Therefore, cumulative impacts with respect to GHG emissions would be less than significant.

5.2.9 Hazards and Hazardous Materials

Cumulative hazardous materials effects could occur if the related projects within the City of Los Angeles, when combined with the proposed Project, would have the potential to expose future area residents, employees, and visitors to chemical hazards through redevelopment of sites and structures that may be contaminated from either historic or ongoing uses. The proposed Project and related projects would be required to comply with applicable federal, State, and local regulations that govern hazardous materials during construction. The proposed Project would have the potential to encounter contaminated soils or groundwater during construction. The proposed Project is also located on a site included on a list included on a list of hazardous materials sites. However, Mitigation Measures HAZ-A and HAZ-B described further in Section 3.9, Hazards and Hazardous Materials, include the preparation of a Soil and Groundwater Management Plan and hazardous materials abatement measures to minimize impacts related to hazards and hazardous materials. Following implementation of HAZ-A and HAZ-B, the proposed Project would result in less than significant impacts related to hazardous materials during construction.

Once operational, the proposed Project would include security features and preparation of an Emergency Operations Plan, which would include emergency response protocols and safety procedures developed in conjunction with the operator, system provider, and local and State authorities (e.g., Los Angeles Fire Department [LAFD], Los Angeles Police Department [LAPD], and State Parks as applicable). The plan would address operational changes and communications protocols required in response to a range of potential emergencies, such as a medical emergency in a cabin or in a station, or a fire near the alignment. The plan would consider a wide range of scenarios for which default operational responses would be determined. In addition, the plan would include communication protocols with local and State authorities for further instruction and coordination. Further, as discussed in Section 3.9, Hazards and Hazardous Materials, storage and disposal of hazardous materials and waste would be conducted in accordance with all federal, State, and regulatory requirements. This includes preparation of a Hazardous Waste Business Plan, as well as implementation of a Stormwater Pollution and Prevention Plan (SWPPP) and associated BMPs in accordance with the Construction General Permit (CGP). These requirements are intended to prevent or manage hazards, and if a spill does occur, it would be remediated accordingly.

Related projects in the Project vicinity are listed on Table 5-1 and generally include various mixed-use developments, residential developments, and open space/circulation projects. They do not include industrial uses or activities that would result in the use or discharge of unregulated hazardous materials. The severity of potential hazards for individual projects would depend upon the location, type, and size of development and the specific hazards associated with individual sites. All hazardous materials users and transporters, as well as hazardous waste generators and disposers, are subject to regulations that require proper transport, handling, use, storage, and disposal of such materials to ensure public safety. Thus, if hazardous materials are found on present or future project sites, appropriate remediation activities would be required pursuant to standard federal, State, and regional regulations. In addition, similar to the proposed Project, the applicants of the related projects would be required to incorporate appropriate safety features into the design and construction of their respective projects to minimize the potential for a hazardous materials incident. As such, compliance with the relevant federal, State, and local regulations during the construction and operation of the proposed Project, when combined with other related projects, would ensure that impacts from hazardous materials would be less than significant. Therefore, cumulative impacts with respect to hazards and hazardous materials would be less than significant.

5.2.10 Hydrology and Water Quality

The geographic context for the cumulative impact analysis for hydrology and drainage is the Los Angeles River Watershed. Cumulative projects within the Los Angeles River Watershed could increase impervious areas and increase stormwater runoff rates. However, as discussed in Section 3.10, Hydrology and Water Quality, the proposed Project would not result in a significant increase in impervious surfaces because most of the land surfaces in the Project study area are developed and covered by existing impervious surfaces. In addition, related projects in the Project vicinity are also located in urbanized area, which is typically characterized by pavement and other impermeable surfaces. Accordingly, the potential to generate a notable amount of new impermeable surfaces for the proposed Project in conjunction with related projects is limited. Additionally, the proposed Project would comply with all applicable federal, State, regional, and local agency water quality protection laws and regulations, as well as commonly utilized industry standards during construction. The Project Sponsor would also prepare and submit a construction SWPPP, in accordance with National Pollutant Discharge Elimination System (NPDES) Construction General Permit permitting requirements, which must be submitted to the State Water

Resources Control Board (SWRCB) prior to and adhered to during construction. The proposed Project would be designed to incorporate several sustainability features and would be in compliance with the City of Los Angeles Best Management Practices Handbook and the City's Low Impact Development (LID) requirements, as applicable. During operation, the Project Sponsor would be required to comply with the City of Los Angeles Municipal Code; NPDES Industrial General Permit (IGP); and all other applicable regulations for all operational activities, including the preparation of an industrial SWPPP, which must be submitted to the SWRCB prior to and adhered to during operations. As the related projects are also located in a highly urbanized area, any potential increase in stormwater runoff flows due to the overall net change in impervious surfaces within the area encompassed by the related project sites would be minimal in the context of the regional groundwater basin. Additionally, the development of the related projects would be subject to review and approval pursuant to all applicable regulatory requirements, including any required mitigation of potential hydrology impacts. Therefore, cumulative impacts with respect to drainage would be less than significant.

The area considered for water quality impacts is the LARWQCB's jurisdiction. The proposed Project and related projects have the potential to generate pollutants during project construction and operation. All construction projects that disturb one acre or more of land would be required to prepare and implement SWPPPs in order to obtain coverage under the Statewide CGP. All projects within the watershed would also be required to prepare and implement LID reports specifying BMPs, that would be applied during project design and project operation to minimize water pollution from project operation. Additionally, as stated in Section 3.9, Hazards and Hazardous Materials, a Soil and Groundwater Management Plan would be prepared and implemented to specify methods for handling and disposal in the event contaminated groundwater is encountered during construction. The Project Sponsor would prepare and submit an IGP SWPPP, which must be submitted to the SWRCB prior to and adhered to during operations. The IGP SWPPP, which would apply to portions of the proposed Project that include defined industrial activities, such as maintenance and equipment cleaning areas, and the LID Plan would identify the BMPs for Project operations. Therefore, cumulative impacts with respect to water quality would be less than significant.

The geographic context for the cumulative impact analysis on groundwater level is the Central Subbasin. As previously discussed, implementation of the proposed Project would not result in a substantial increase in impervious surface area. Development of the related projects could result in changes in impervious surface area within their respective project sites. However, it is not expected that the related projects would increase or decrease impervious or pervious surfaces that might affect groundwater hydrology as the related projects are located in an urban area where reduction in groundwater recharge is not expected because they are generally developed and impervious. Additionally, the proposed Project and related projects would be subject to all applicable regulatory requirements for water quality standards and waste discharge requirements, including any required mitigation of potential groundwater hydrology impacts.

Any potentially significant impacts of the related projects associated with the violation of water quality standards, alteration of drainage patterns, water runoff, and flood hazards, would be assessed on a project-by-project basis. The related projects in conjunction with the proposed Project would not impact the hydrology and water quality of the watershed as each project would be required to comply with local and State standards. Therefore, cumulative impacts with respect to hydrology and water quality would be less than significant.

5.2.11 Land Use and Planning

The geographic context for Land Use and Planning are the communities along the project alignment. The proposed Project alignment and components would be located within or adjacent to the downtown, El Pueblo, Chinatown, Mission Junction, Elysian Park, and Solano Canyon communities of the City of Los Angeles. The specific conditions at each of the proposed Project component locations are described in Section 3.11, Land Use and Planning. In order to characterize the existing land use conditions in the vicinity of the proposed Project, a 0.25-mile buffer around the proposed Project alignment was established as the Project Study Area.

The area surrounding the proposed Project alignment is characterized by dense urban development, including a mix of transit, public facilities, commercial, industrial, open space, and single-family and multi-family residential uses. Additionally, the proposed Project area is being developed with various mixed-use developments which include both residential units and commercial office spaces. The approved College Station seven-story mixed-use development project at the intersection of College Street and Spring Street will include up to 725 multi-family residential units and 51,600 square feet of commercial uses. The approved Harmony project at 942 North Broadway will include a 27-story tower with 178 residential units and two floors of office and retail space with below-grade parking. The under-construction 200 Mesnager project at 200 North Mesnager Street includes a seven-story building and 278 residential units. The recently constructed Blossom Plaza project at 900 N. Broadway includes a five-story building and 237 residential units with 334 parking spaces. The constructed Llewellyn project at 1101 North Main Street includes a seven-story building with 318 residential units atop a 526 car parking garage, one block east of the Metro L Line (Gold) Station. The proposed Buena Vista Project would be located at 1251 North Spring Street and 1030 - 1380 North Broadway and would include a mixed-use development of residential and commercial uses in buildings of varying heights ranging from approximately 56 feet to 347 feet.

The proposed Project construction would not divide an established community, as any closures would be temporary and would only occur during the construction phase. Additionally, in some locations, closures would only occur during construction hours and some travel lanes would be restored during non-construction hours. Communities would remain accessible from surrounding streets during construction. The required aerial easements for the proposed Project alignment would not physically divide an established community because the aerial easement would not impede vehicular and/or pedestrian circulation by virtue of its aerial nature. Moreover, as the projects identified above would occur within already developed parcels and/or rights-of-way, they would not, in combination with the proposed Project, divide established communities along the project alignment. Finally, the proposed Project would be subject to the policies, regulations, goals, and/or objectives of the Los Angeles State Historic Park General Plan and Los Angeles State Historic Park Interpretive Master Plan at the State level, SCAG's RTP/SCS at the regional level, the Dodger Stadium Conditional Use Permit, and the City of Los Angeles General Plan, including the Community Plans, Alameda District Specific Plan, Cornfield Arroyo Seco Specific Plan, City of Los Angeles Municipal Code and River Improvement Overlay (RIO) District Ordinance at the local level, as described in Section 3.11, Land Use and Planning. Similar to the proposed Project, State Parks has determined that the proposed Project would be inconsistent with the Los Angeles State Historic Park General Plan because the identified land uses in the General Plan's Preferred Park Concept Elements did not contemplate a transit station like the proposed Project's Chinatown/State Park Station. State Parks considers this inconsistency a potentially significant impact. Mitigation Measure LUP-A would be implemented to require the proposed Project to obtain a LASHP General Plan Amendment, which would reduce this impact to less than significant.

As with the proposed Project, the applicants of the related projects, including the transportation projects referenced in Section 5.2.17 below, would be required to adhere to the applicable and related policies, regulations, goals, and/or objectives, and would incorporate appropriate measures into the respective projects to minimize the potential for division of a community. Therefore, cumulative impacts with respect to Land Use would be less than significant.

5.2.12 Mineral Resources

The geographic context considered for cumulative mineral resources impacts analysis is the County of Los Angeles. The proposed Project alignment is located in an area designated as MRZ-3, which includes areas containing mineral deposits, the significance of which cannot be evaluated from available data. Therefore, the proposed Project alignment does not contain known mineral resources that would be of value to the region or State, is not delineated as a locally-important mineral resources recovery site on a local general plan, specific plan, or other land use plan, and as such, no impact would occur. Therefore, cumulative impact analysis of the proposed Project with respect to mineral resources is not required.

5.2.13 Noise and Vibration

The geographic context for the cumulative impact analysis for noise and vibration is the vicinity of the proposed Project alignment and construction haul routes.

Cumulative Noise - Construction

Cumulative Noise

The primary source of existing ambient noise is vehicle traffic. Community Noise Equivalent Levels (CNEL) are classified as Normally Unacceptable in several locations along the proposed alignment (see Table 3.13-11: Existing Ambient Noise Level Summary, in Section 3.13), as they are above 70 dBA CNEL, indicating significant existing cumulative noise levels.

On-Site Construction Noise

Construction of the related projects (see Table 5-1 and Figure 5-1) located along the proposed Project alignment, would likely produce noise levels in excess of the Los Angeles Municipal Code maximum allowable noise level for construction equipment of 75 dBA when measured at 50 feet from the noise source as well as exceed exterior ambient noise levels by 5 dBA or more at a noise-sensitive use for construction activities lasting more than 10 days in a three-month period. These construction activities would also likely exceed the Federal Transit Administration's thresholds of 80 dBA L_{eq} during daytime at a residential, school, church, or park use property or 85 dBA at a commercial property.

Under Impact Threshold NV-1, on-site construction activities for the proposed Project were found to exceed these thresholds at a number of locations of sensitive receptors that are in the vicinity of the related projects. To the extent certain of the related projects may be constructed during the same time period as the proposed Project, noise emissions from construction of the proposed Project, in combination with construction of related projects, would also exceed applicable noise thresholds resulting in a cumulative noise impact The proposed Project's contribution to this cumulative noise impact would be cumulatively considerable. Implementation of Mitigation Measure NOI-A would reduce construction noise impacts of the proposed Project, but noise levels in a number of locations would remain above the thresholds. Therefore, the cumulative impact of on-site construction noise would be significant and unavoidable.

Off-Site Construction Noise

Construction of related projects along the Project alignment would generate noise from trucks and other vehicles, including the potential for certain of the related projects to use the same haul routes as the proposed Project. On these haul truck routes, the ambient noise is dominated by vehicle traffic. The cumulative condition is the change in noise levels from existing conditions to 2026, which is the earliest build-out year of the proposed Project and would cover the period in which the Project and related projects' construction could occur at the same time. Based on traffic volume increases, and adding in the proposed Project's 16 heavy truck trips per hour along the haul routes, the Cumulative + Project PM Peak Hour noise increases would range from .3 dBA to 1.5 dBA in 2026 (see Table 5-2 below), which is below the threshold of a 5 dBA increase over existing noise levels as per LAMC and L.A. CEQA Thresholds Guide. Furthermore, although potential additional truck traffic from other construction projects in the area is possible, an increase of more than 200 trucks per hour to the haul routes would be required to generate a 5 dBA increase at the closest noise-sensitive receptors. This level of truck traffic from simultaneous construction of related projects is not logistically practical. Therefore, the cumulative impact from off-site construction activities would be less than significant.

Table 5-2: Cumulative + Project PM Peak Hour Noise Increases on Construction Haul Routes

Roadway	Segment	2026 dBA Increase (Cumulative + Project PM Peak Hour)
Alameda Street	Los Angeles Street to Cesar E. Chavez Avenue	1.1
Alameda Street	Cesar E. Chavez Avenue to Bauchet Street/Main Street	1.0
Alameda Street	Bauchet Street/Main Street to Alpine Street	1.1
Alameda Street	Alpine Street to College Street	1.1
Spring Street	College Street to Ann Street	1.5
Spring Street	Ann Street to Avenue 18	0.3
Broadway	Avenue 18 to Bishops Road	0.6
Broadway	Bishops Road to Cottage Home Street	0.5
Bishops Road	Broadway to SR-110	0.8

Source: AECOM

Cumulative Vibration - Construction

On-Site Construction Vibration - Building Damage

Impact Threshold NV-2 concluded that potential vibration damage thresholds could be exceeded at three locations, including the Avila Adobe - 1970s addition (VSR-4b), the Old Winery (VSR-5), and El Grito Mural (VSR-3) due to construction activity associated with the installation of vertical circulation elements for the Alameda Station. With implementation of Mitigation Measures VIB-A and VIB-B, vibration damage impacts at these locations would be less than significant. Impact Threshold NV-2 also concluded that vibration damage impacts would be less than significant at all other structures along the proposed Project alignment and that no mitigation measures would be required. Further, as ground-borne vibration decreases rapidly with distance, it is not anticipated that construction of related projects, if it were to occur simultaneously with that of the proposed Project, would in combination cause a significant cumulative impact of building damage from construction vibration. Nevertheless, because vibration damage thresholds were exceeded at VSR-3, VSR-4b, and VSR-5 from installation of vertical circulation elements for the Alameda Station, potential cumulative vibration impacts are evaluated in detail at these locations from simultaneous construction of the Project and four related projects:

- 900 Alameda Street
- 643 N. Spring Street
- Link Union Station
- Forecourt and Esplanade Improvements Project

The 900 Alameda Street project is an internal conversion of the U.S. Post Office-Los Angeles Terminal Annex to allow it to be used as a data center and would not be anticipated to involve vibration-generating construction activities. The 643 N. Spring Street project is a proposed mixed-use tower that could generate vibrations during construction. However, it is located north of E. Cesar Chavez Boulevard, at least 400 feet from VSR-3, VSR-4b, and VSR-5, which is too far to have an additive vibration-generating effect. The Concourse Segment of the Link Union Station project would be constructed in the rail yard east of Union Station. This project is located more than 700 feet from VSR-3, VSR-4b, and VSR-5 and therefore too far away to contribute to have an additive effect. The Forecourt and Esplanade Improvements Project would involve improvements to both sides of Alameda Street, including a narrowing of the street as far north as E. Cesar Chavez Boulevard. However, the Environmental Impact Report[27] for the Forecourt and Esplanade Improvements Project concluded that it would result in no impacts in relation to generation of excessive ground-borne vibration; therefore, no additive vibration effect would occur in conjunction with construction of the proposed Project. Thus, because these four projects are either too distant from the proposed Project or would not involve vibration-generating construction activities, the cumulative impact for vibration related to building damage would be less than significant.

On-Site Construction Vibration - Human Annoyance

Impact Threshold NV-2 also evaluated human annoyance from on-site construction vibration and concluded that the human annoyance threshold would be exceeded at Alameda Station (VSR-1, -2, -3 -4, -5, and -6), Alameda Tower (VSR-7, -8 and -9), Alpine Tower (VSR-10 and -11), Chinatown/State Park Station (VSR-13 and VSR-19), and Broadway Junction (VSR-14, -15, -16, and -17). This impact was determined to be significant and unavoidable because no feasible mitigation measures are available to reduce the vibration annoyance impacts identified for vibration-sensitive receptors from on-site construction activities of the proposed Project. This is because the human annoyance threshold is exceeded by common occurrences such as vehicle pass-bys during construction. Such equipment is needed to build the Project and there is no alignment that would create sufficient separation from adjacent uses to eliminate the human impact.

Related projects could also be constructed at the same time and in proximity to the proposed Project. Vibration levels generated by construction of related projects in combination with construction of the stations and towers of the proposed Project would generally not increase the magnitude of the vibration levels at the closest sensitive receptors due to the distances between

[27] Los Angeles Union Station Forecourt and Esplanade Improvements Project, Environmental Impact Report, State Clearinghouse Number 3016121064, certified by the LA Metro Board of Directors in March 2018.

construction activities for each related project and the closest VSRs. Nevertheless, to the extent that simulatenous construction were to occur for equipment generating high vibration levels that are also nearly equidistant from the same VSRs, the vibration levels at the closest VSRs could increase and could exceed the human annoyance threshold. In that case, the cumulative vibration impact of construction in terms of human annoyance from on-site construction activities would be significant and unavoidable and the Project's contribution would be cumulatively considerable.

Off-Site Construction Vibration - Building Damage

Impact Threshold NV-2 concluded that potential vibration from loaded heavy trucks operating on local haul routes [primarily sections of Alameda Street (VSRs 1-19), Spring Street (VSR-19), North Broadway (VSR-14 and -15), and Bishops Road (VSR-15 and -16)] would remain below the minimum potential building damage threshold of 0.12 in/sec PPV. Construction of related projects could cause potential cumulative vibration impacts from loaded heavy trucks operating on local haul routes in the project vicinity to the extent certain of the related projects would use the same haul routes as the proposed Project. However, unlike noise, vibration levels related to truck traffic are not additive. Specifically, rather than the averages required for rating noise levels, the vibration damage limit is based on an instantaneous level generated by a single truck pass-by. If more trucks are added to the haul routes, there would be more pass-by events but the magnitude of the vibration levels at the closest sensitive receptors would not increase. Only the duration of exposures would increase, thus not causing an increase in vibration levels at any receptor from an increase in truck traffic along a specific roadway segment that could cause building damage. In any case, building damage impacts would not be possible from passing trucks on haul routes. Therefore, the cumulative impact for vibration related to off-site construction (building damage) would be less than significant.

Off-Site Construction Vibration - Human Annoyance

Impact Threshold NV-2 concluded that significant human annoyance impacts would occur at Alameda Station (VSRs 1-6), Alameda Tower (VSRs 7-9), Alpine Tower (VSR-10 and -11), Chinatown/State Park Station (VSR-13 and -19), Broadway Junction (VSR-14 and -15), and Bishops Road (VSRs 15-17), and no mitigation is available to reduce these impacts due to the proximity of Project haul routes to vibration-sensitive residential and institutional uses and lack of options for re-routing this traffic. Related projects could be constructed during the same period and also use these haul routes. Accordingly, it is anticipated that related projects may also have a significant human annoyance impact from off-site construction activities. As mentioned above, vibration levels related to truck traffic are not additive and the vibration annoyance limit is based on an instantaneous level generated by a single truck pass-by. If more trucks are added to the haul routes, there would be more pass-by events but, the magnitude of the vibration levels at the closest sensitive receptors would not increase. Only the duration of exposures would increase, thus not causing an increase in vibration levels at any receptor from an increase in truck traffic along a specific roadway segment. Nevertheless, to the extent related projects use the same haul routes concurrent with the proposed Project, impacts on human annoyance from off-site vibrations would be significant and unavoidable, and the Project's contribution would be cumulatively considerable, and the cumulative impact would be significant and unavoidable.

Noise and Vibration - Operations

Operational Noise

Related projects include land use projects (e.g., apartments, retail, offices, and hotels) as well as transportation projects. Operation of these projects would generate noise from added vehicle trips and use of stationary equipment, such as building HVAC systems. The proposed Project's operational noise at noise-sensitive receptors (NSR) are generally well below the allowable increases and therefore, unlikely to combine with noise generated by related projects to produce a significant cumulative impact. However, at NSR 14N, which is located on the northwest side of Los Angeles State Historic Park, approximately 200 feet south of the intersection of N. Broadway and Bishops Road, operation of the Broadway Junction would cause an increase of 4.1 dBA over existing noise levels during a 2042 Weekday Dodger Game Day, with the allowable increase being 5 dBA.

Operational noise sources from related projects in the vicinity would include the Buena Vista project at 1251 North Spring St (residential/commercial), 1201 North Broadway (apartments/retail), and the College Station project at W. College Street and N. Spring Street. These multi-story buildings would generate additional vehicle trips and would have HVAC equipment, which is generally located on rooftops and is required by LAMC Section 112.02 to reduce noise such that the noise levels of adjoining units and adjacent properties do not exceed ambient noise levels by 5 dBA. The closest of these buildings, 1201 North Broadway, would be located approximately 300 feet from NSR 14N, with the buildings of the other related projects located between 600 feet and 1,000 feet away. Due to the low noise emissions of HVAC equipment, shielding, lack of line-of-sight to ground level, and distance from NSR 14N, HVAC noise from these related projects would be unlikely to combine with the noise levels from the operation of the Broadway Junction to cause an exceedance of impact thresholds.

Vehicle trips from operation of these related projects would be accounted for by increases in traffic volume on N. Spring Street and N. Broadway through 2042. The maximum hourly noise increase from the projected traffic volume on N. Spring Street in 2042 with the Project would be 1.5 dBA. However, because the roadway is approximately 500 feet from NSR 14N and noise attenuation with distance in an urban environment typically results in source levels below the ambient at such distances, noise emissions from related project traffic would be too low to combine with the Project's noise from operations of the Broadway Junction and would not cause an exceedance of applicable noise thresholds. The maximum hourly noise increase from the projected traffic volume on N. Broadway in 2042 with the Project would be .9 dBA. At approximately 200 feet from NSR 14N, and considering shielding from the roadway wall, this traffic noise source would also be attenuated and thus would not combine with the Project's noise from operations of the Broadway Junction and would not cause an exceedance of applicable noise thresholds. Therefore, cumulative impacts with respect to the proposed Project's operations to noise would be less than significant.

Operational Vibration

NV-2 concluded that none of the proposed Project's operations are anticipated to produce perceptible vibration beyond the Project footprint. Related projects may contain on-site vibration sources, such as escalators and elevators. However, as with the proposed Project, these sources are unlikely to produce perceptible vibration beyond their own footprints that would combine with those of the Project. In addition, as noted above, even if the sources were to combine, the magnitude of the vibration levels at the closest sensitive receptors would not increase. Only the duration of exposures would increase, thus not causing an increase in vibration levels at any receptor from cumulative operations. Therefore, the cumulative impact with respect to vibrations from operations would be less than significant.

5.2.14 Population and Housing

The geographic context considered for cumulative population and housing impacts analysis is the urbanized and developed City of Los Angeles. The proposed Project is not expected to induce substantial population growth either directly or indirectly. No new housing is proposed and the local labor force would support the employment required for construction and operation. Additionally, the proposed Project would not displace existing people or housing to necessitate the construction of replacement housing elsewhere during construction or operation. Although the proposed Project would provide infrastructure through an ART system, the proposed Project would support the attainment of mobility, access, and land use objectives stated in the applicable regional and local policies by connecting a major regional transit hub (LAUS) to Dodger Stadium, as well as connecting surrounding communities to the Los Angeles State Historic Park.

The proposed Project is not anticipated to stimulate development to a level inconsistent with applicable planned local land use designations. As demonstrated by the list of related projects in the area, 19 of which include a residential component for a total of approximately 5,405 new dwelling units, the area around the proposed Project alignment already contemplates population growth. Additionally, new businesses including hotels, restaurants, and office and retail uses, are also contemplated for the area. Given the planned development within the Project area, including the residential development currently underway in the Project area, the proposed Project as a transit project located within the public ROW, over Los Angeles State Historic Park, or on non-residential privately owned property, would not substantially generate new development beyond what is already planned within the area. Therefore, cumulative impacts with respect to population and housing would be less than significant.

5.2.15 Public Services

The geographic area considered for the analysis of cumulative impacts pertaining to public services is the urbanized and developed City of Los Angeles. A cumulatively significant impact would occur to public services if the service area experienced population growth due to implementation of the proposed Project and related projects such that new or physically altered facilities were needed to maintain acceptable service ratios, response times, or other performance objectives. An analysis per public service is provided below.

Fire Protection

As determined in Section 3.15, Public Services, the proposed Project would not generate population growth as it does not include any housing and the employees required for construction and operation would be fulfilled by the local labor force. However, a number of related projects could increase population growth, including residential, retail, restaurant, hotel, and office uses to the point of creating demands on fire protection staffing, equipment, or facilities such that development of a new or expanded station would be required. As a result, cumulative impacts of the related projects could be significant.

Construction activities associated with the proposed Project would be short term and would take precautions to minimize incidents that could result in the demand for fire protection. In compliance with regulatory requirements, including from OSHA, the California Fire Code, and the California Building Code requirements, construction managers and personnel would be trained in fire prevention and emergency response. Fire suppression equipment specific to construction would be maintained on site, and in accordance with Los Angeles Fire Code (LAFC) section 3312, the proposed Project would provide water for fire protection as soon as combustible material arrives on site. Additionally, as noted in Section 3.20, Wildfire, a Fire Prevention Program Superintendent will be designated to interface with the LAFD and coordinate fire watch and site fire prevention and response efforts. Once operational, the proposed Project would include preparation of an Emergency Operations Plan, which would include emergency response protocols and safety procedures developed in conjunction with the operator, system provider, and local authorities (e.g., LAFD, LAPD, and State Parks as applicable). The plan would address operational changes and communications protocols required in response to a range of potential emergencies, such as a medical emergency in a cabin or in a station, or a fire near the alignment. The plan would consider a wide range of scenarios for which default operational responses would be determined. In addition, the plan would include communication protocols with local and State authorities for further instruction and coordination.

In the event that proposed Project construction occurs concurrently with related projects in proximity to the Project site, specific coordination among these multiple construction sites would be required and implemented through the proposed Project's Construction Traffic Management Plan, as outlined in Mitigation Measure TRA-B in Section 3.17, Transportation, which would be required to ensure adequate emergency access is maintained on adjacent ROWS throughout all construction activities. As such, Mitigation Measure TRA-B would ensure that the proposed Project would not have significant impacts on emergency access and safety. In addition, construction-related traffic generated by the proposed Project and related projects would not significantly impact LAFD response times within the Project Study Area as drivers of fire and emergency vehicles have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes opposing traffic. Further, each related project would implement similar design features during construction that would be subject to compliance with all applicable State, Department of Building and Safety, and other City requirements regarding fire protection. This includes plan reviews by LAFD during the City's permitting process to ensure that the emergency response, emergency access, fire safety operations, and fire suppression measures are sufficient to reduce potential impacts to fire protection services during construction.

The proposed Project and related projects also have the potential to increase population growth to the point of creating demands on fire protection staffing, equipment, or facilities such that development of a new or expanded station may be required. However, the proposed Project would not generate population growth, as it does not include any housing, and the employees required for construction and operation would be fulfilled by the local labor force.

The proposed Project and related projects would be required to adhere to LAFD requirements and coordinate with LAFD to ensure fire flow requirements are met and any required upgrades to the existing water distribution system are addressed for each individual project. In addition, the preparation of an Emergency Operations Plan as part of the proposed Project would minimize the potential for an increased demand for fire protection. Further, as discussed previously, the proposed Project and the related projects would be individually subject to LAFD review and would be required to comply with the Los Angeles Fire Code and all applicable LAFD, Department of Building and Safety, and other City fire safety requirements, including hydrant and access improvements, if necessary, to adequately mitigate fire protection impacts, which would be ensured as part of the City's permitting process. State agency review would be required for State property. Overall, compliance with applicable regulatory requirements would ensure that adequate fire prevention features would be provided and would reduce demand on LAFD facilities and equipment.

The proposed Project and related projects would also generate revenues to the City's Municipal Fund, and such revenues could be applied towards new fire station facilities and related staffing, as deemed appropriate by the City. At such time new or expanded LAFD facilities are identified, the environmental impacts of those facilities would be evaluated under CEQA as a project independent of the proposed Project.

Moreover, the proposed Project and the related projects are located within an urbanized area within a location that is currently serviced by one or more existing fire stations. As such, in accordance with Fire Code requirements, if a related project is not within an acceptable distance from a fire station, that related project would be required to install an automatic fire sprinkler system to comply with response distance requirements. Similarly, as with the proposed Project, the related projects would be required to comply with all applicable Building Code and Fire Code requirements regarding site access, which would also be reviewed by the LAFD during the City's permitting process.

Furthermore, consistent with *City of Hayward v. Board of Trustees of California State University* (2015) 242 Cal.App.4th 833 ruling and the requirements stated in the California Constitution Article XIII, Section 35(a)(2), the obligation to provide adequate fire protection services is the responsibility of the City. Through the City's regular budgeting efforts, LAFD's resource needs, including staffing, equipment, trucks and engines, ambulances, other special apparatuses and possibly station expansions or new station construction, would be identified and allocated. Further analysis, including a specific location for a new fire station or expansion or alteration of the existing fire stations which would service the proposed Project and the related projects, would be speculative and, therefore, beyond the scope of this Draft EIR. Therefore, cumulative impacts with respect to fire protection would be less than significant.

Police Protection

As determined in Section 3.15, Public Services, the proposed Project would not generate population growth as it does not include any housing, and the employees required for construction and operation would be fulfilled by the local labor force. However, a number of related projects could increase population growth, including residential, retail, restaurant, hotel, and office uses to the point of creating demands on police protection staffing, equipment, or facilities such that development of a new or expanded station would be required. As a result, cumulative impacts of the related projects could be significant.

Construction activities associated with the proposed Project would be short term and would take precautions to minimize security incidents that could result in demand for police protection through fencing and other security barriers. Once operational, the proposed Project would include security features, including lighting, staffing, cameras, and access closures at night; cabins with surveillance, secured windows, and two-way communication to system control rooms; and preparation of an Emergency Operations Plan, which would include emergency response protocols and safety procedures developed in conjunction with the operator, system provider, and local and state authorities (e.g., LAFD, LAPD, and State Parks as applicable. The plan would address operational changes and communications protocols required in response to a range of potential emergencies, such as a medical emergency in a cabin or in a station, or a fire near the alignment. The plan would consider a wide range of scenarios for which default operational responses would be determined. In addition, the plan would include communication protocols with local and state authorities for further instruction and coordination.

The proposed Project and each of the related projects also would be individually subject to comply with all applicable state, Department of Building and Safety, and other City requirements regarding emergency access, which would be addressed as part of each project's respective environmental review process. Similar to the proposed Project, each related project would be required to ensure that adequate emergency access to the property and neighboring properties is maintained. As is the case under the existing condition, emergency vehicles would access the Project site and each of the related projects directly from surrounding roadways, and emergency access to the Project vicinity would be maintained at all times. As the proposed Project would introduce construction to the Project Study Area, resulting in construction workers and lane closures that may indirectly impact acceptable service ratios, response times, or other performance objectives for police protection, the proposed Project's Construction Traffic Management Plan, as outlined in Mitigation Measure TRA-B in Section 3.17, Transportation, would ensure adequate emergency access is maintained on adjacent ROWs throughout all construction activities. As such, Mitigation Measure TRA-B would ensure that the proposed Project would not have significant impacts on emergency access and safety.

The proposed Project and related projects also have the potential to increase population growth to the point of creating demands on police protection staffing, equipment, or facilities such that development of a new or expanded station could be required. However, the proposed Project would not generate population growth as it does not include any housing, and the employees required for construction and operation would be fulfilled by the local labor force. The proposed Project's operational security features and preparation of an Emergency Operations Plan would minimize the potential for an increased demand for police protection and maximize safety. In addition, the proposed Project would, and related projects are expected to, include measures that would serve to reduce traffic congestion. Furthermore, as previously stated, emergency response vehicles can use a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Therefore, despite a potential cumulative increase in traffic, the proposed Project and related projects would not significantly impair the LAPD from responding to emergencies at the Project site or the surrounding area.

In addition, as discussed previously, the proposed Project and related projects would also generate revenues to the City's Municipal Fund, and such revenues could fund LAPD expenditures as necessary to offset the cumulative incremental impact on police services, as deemed appropriate by the City. At such time new or expanded LAPD facilities are identified, the environmental impacts of those facilities would be evaluated under CEQA as a project independent of the proposed Project.

Further, consistent with *City of Hayward v. Board of Trustees of California State University* (2015) 242 Cal.App.4th 833 ruling and the requirements stated in the California Constitution Article XIII, Section 35(a)(2), the obligation to provide adequate police protection services is the responsibility of the City. Through the City's regular budgeting efforts, LAPD's resource needs and possibly station expansions or new station construction would be identified and allocated. Further analysis, including a specific location for a new police station or expansion or alteration of the existing police stations which would service the proposed Project and the related projects, would be speculative and, therefore, beyond the scope of this Draft EIR.

Therefore, cumulative impacts related to police protection would be less than significant.

Schools

Construction and operation of the proposed Project would not generate population growth as it does not include any housing, and as such, is not anticipated to cause a substantial demand for schools such that it would require the provision of new or physical altered governmental facilities (i.e. schools).

As with the proposed Project, construction of the related projects would be short term in nature and thus, it is reasonable to assume that construction workers would work on construction sites on a temporary basis only and are not likely to relocate their households as a consequence of the construction job opportunities.

However, there are schools located in the immediate vicinity of some of the related projects that could be affected by construction of those projects. Each of the related projects would be required to consult with the Los Angeles Unified School District (LAUSD) to ensure that their respective construction activities or road/sidewalk closures and detours would not affect school routes or other operational aspects of nearby schools.

The proposed Project does not have a residential component, and therefore, would not generate new students that would attend LAUSD schools. However, the related projects with residential components have the potential to require new or expanded school facilities. As such, it is estimated that the related projects would result in approximately 5,405 new dwelling units. Based on the LAUSD generation rate of 0.4370 students per household,[28] approximately 2,362 students from residential related projects could be introduced. LAUSD monitors enrollment numbers at schools within the District and can make operational changes to address capacity shortages, including changes to boundaries, portable classrooms, student transfers, and new or expanded school facilities. It would be speculative to determine how school capacity shortages would be addressed, including where and what type of expanded or new facilities may be provided. Moreover, all related projects would be required to pay developer fees to address the impacts of new development of school facilities. At such time new or expanded schools were identified by LAUSD, the environmental impacts of those facilities would be evaluated under CEQA as a project independent of the proposed Project. In addition, the projected student population increase from cumulative projects is likely to be conservative and overstated. Projected student generation is likely to be less than estimated in the above analysis, as it assumes that no future residents or employees of the related projects with families would already have students attending schools in the area; a portion of the school-aged children could attend other non-LAUSD schools (e.g., private or charter schools); related projects that may not be constructed and occupied; and related projects that may be reduced in size. Because actual enrollment is based on the number of students enrolled, actual enrollment tends to run lower than the number of residential students. For these reasons, the above analysis is considered conservative and likely overestimates the related projects' actual potential to generate new students.

Further, pursuant to Government Code Section 65995, all related projects would be required to pay developer fees under the provisions of Senate Bill (SB) 50 to address the impacts of new development on school facilities. Payment of such fees is intended for the general purpose of addressing the construction of new school facilities. Pursuant to Section 65995(h) of the California Government Code, payment of such fees is deemed full mitigation of a project's development impacts. Therefore, with the payment of the developer fees under the provisions of SB 50, the related projects would not result in a substantial adverse physical impact associated with the provision of new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools. Therefore, cumulative impacts with respect to schools would be less than significant.

[28] LAUSD. 2020 Developer Fee Justification Study, Los Angeles School District, available at: https://achieve.lausd.net/cms/lib/CA01000043/Centricity/Domain/921/LAUSD%20Dev%20Fee%20Study%202020_Final.pdf, accessed May 2022.

Other Public Facilities

Construction and operation of the proposed Project would not generate population growth as it does not include any housing, and as such, is not anticipated to cause a substantial demand for other public facilities, such as libraries, senior centers, homeless bridge housing facilities, or childcare services. As with the proposed Project, construction of the related projects would be short term in nature and thus, it is reasonable to assume that construction workers would work on construction sites on a temporary basis only and are not likely to relocate their households as a consequence of the construction job opportunities.

As discussed previously, the proposed Project and related projects would also generate revenues to the City's Municipal Fund, and such revenues could be applied to enhancing other public facilities, as deemed appropriate by the City. These revenues to the City's General Fund would help offset the increase in demand for other public facilities as a result of the Project and the related projects.

Related projects with a residential component may require new or expanded public facilities. It would be speculative to determine what type of expanded or new facilities may be required or provided, including where and what those facilities may be. At such time new or expanded public facilities were identified, the environmental impacts of those facilities would be evaluated under CEQA as a project independent of the proposed Project.

Based on the above, the proposed Project in combination with related projects would not have a significant cumulative impact on other public facilities. New or expanded public facilities may be considered to accommodate the demands associated with cumulative population growth; however, since the environmental impacts of the new or expanded facilities cannot be known until the City identifies new or expanded facility sites, they are not considered in this analysis. Therefore, impacts resulting from operation of the proposed Project and related projects would not create the need for other new or physically altered public facilities, the construction of which would result in substantial adverse physical environmental impacts, in order to maintain acceptable service ratios or objectives. Therefore, cumulative impacts with respect to other public facilities would be less than significant.

5.2.16 Recreational Facilities

The geographic area considered for the analysis of cumulative impacts related to recreation is the urbanized and developed City of Los Angeles. Cumulative recreation impacts could occur if related projects in the vicinity of the Project site would result in recreation impacts in conjunction with the proposed Project. The demand for parks and recreation services is generally associated with an increase in housing or population, and thus, this cumulative analysis considers related projects with a residential component. Based on Table 5-1, there are 19 related projects with residential components that could result in cumulative recreational impacts in conjunction with the proposed Project. During construction of the proposed Project and related projects, construction workers may use parks or recreational facilities in the Project area on lunch breaks or after their shifts end, but the use would be temporary and cease following construction. During operation, the proposed Project would not include a component (i.e. housing) that would generate increased population that would directly increase the demand for parks or recreational facilities. Operation of the proposed Project is anticipated to require up to 20 employees, who may use parks within the Project area on lunch breaks or after their shifts end. However, the number of employees is considered nominal and would not result in a noticeable increased use of existing parks or other recreational facilities.

The proposed Project would provide infrastructure through an ART system within urbanized downtown Los Angeles, and would increase connectivity in the Project Study Area, providing direct linkages for existing residents and communities to parks and recreational facilities, including Los Angeles Plaza Park, Placita de Dolores, and the adjacent Olvera Street; Los Angeles State Historic Park; and Elysian Park. As discussed in Section 3.17, Recreation, such improvements would align the proposed Project with the objectives, goals, programs, and policies of regulatory plans such as Metro's Transit to Parks Strategic Plan, the Los Angeles State Historic Park General Plan, the City of Los Angeles Open Space Element, and the various community plans within the Project Study Area, which all strive to provide local access to existing parks via public transit. Thus, the proposed Project would have the beneficial effect of increasing transit accessibility to parklands and recreational facilities for potential visitors of the parks through a connection to the Metro and regional transit system. New residential development in the Project area, including the 19 related projects with residential components, would be required to mitigate potential impacts related to the increased population. The related projects may include open space amenities to meet project demand for parks and recreational facilities, as required by the Los Angeles Municipal Code regulating park and open space requirements. Ordinance 184,505 (Parks Dedication and Fee Update ordinance) requires most residential projects that create new dwelling units or joint living and work quarters to dedicate land or to pay a fee for the purpose of developing park and recreational facilities. Residential projects that propose one or more additional dwelling units will be subject to the new Park Fee unless they meet one of the exceptions listed in Los Angeles Municipal Code Section 12.33 C.3 (e.g. certain affordable housing units and secondary dwelling units may be exempt from any requirement to pay a fee).[29] Both the proposed Project and other related projects would be required to mitigate potential impacts to parks and recreational facilities through land dedication and required park dedication fees. Therefore, cumulative impacts with respect to recreational facilities would be less than significant.

5.2.17 Transportation

The geographic area considered for the analysis of cumulative impacts pertaining to public services is the urbanized and developed City of Los Angeles. Cumulative (or related) projects are land use developments expected to be implemented in the study area prior to the buildout date of the proposed Project. A total of 46 known related development projects were identified in the study area through coordination with the LADOT and the Department of City Planning at the time of the issuance of the notice of preparation for this Draft EIR. These projects are also listed and mapped in Table 5-1 and Figure 5-1.

As further described in Section 3.17, Transportation, project construction would introduce lane closures and closed worksites within City streets for construction activities, which would result in potentially significant impacts related to increased hazards and emergency access. The temporary lane closures during construction would, by necessity, increase traffic volumes on the detour routes, which could increase traffic congestion on those routes. Construction worksites would be fenced, and lane closures and associated lane tapers, temporary advance warning signs, detour signs, etc., would be implemented in accordance with the California Manual on Uniform Traffic Control Devices (MUTCD) and LADOT requirements. Drivers of emergency vehicles normally have a variety of options for avoiding congestion, such as using sirens to clear a path of travel, driving in the lanes of opposing traffic or center turn lanes, and bypassing signals and stopped traffic. However, implementation of Mitigation Measures TRA-A and TRA-B would be required to mitigate construction impacts to a less than significant level. Additionally, related

29 City of Los Angeles Department of Recreation and Parks. 2022. Available at: https://www.laparks.org/planning/park-fees. Accessed May 2022.

projects in the vicinity would also be required to analyze and mitigate for transportation-related construction impacts.

The following sections describe the transportation network changes that are considered for future scenarios. The impact analysis presented in this Draft EIR uses 2026 and 2042 future years to analyze the potential for project traffic impacts on the surrounding street system.

Transit Projects

The following transit projects are planned in the study area:

- Cesar E. Chavez / Vignes Bus Stop Improvements: The Cesar E. Chavez Bus Stop Improvements project will add amenities at four locations near Union Station on Cesar E. Chavez Avenue between Alameda Street and Vignes Street. The purpose of these improvements is to improve the ridership experience and strengthen connections to other modes of transit in the area. A new transit pavilion is planned at the southeast corner of Cesar E. Chavez Avenue and Vignes Street; the pavilion includes new transit shelters, transit schedule information, lighting and bicycle amenities.
- Silver Line Station: The Silver Line Station is a new bus platform within the median of the El Monte busway for the Silver Line. The new station will replace an existing bus stop near the El Monte Busway terminus at Alameda Street and will improve connections to other bus and rail service at Union Station via a pedestrian bridge connecting to Patsaouras Plaza.
- Purple Line Portal Widening / Arts District Station: Metro is planning facility improvements for the Division 20 Rail Yard (Arts District Station) to accommodate increased service levels for the Metro B Line (Red) and Metro D Line (Purple). Improvements will include widening the heavy rail tunnel portal south of the US-101 freeway, building a new turnback facility, and expanding and reconfiguring rail storage track. These improvements will allow for improved service times at Union Station and throughout the Metro B (Red) and D (Purple) Lines.
- LinkUS: The Link Union Station project (LinkUS), previously known as the Southern California Regional Interconnector Project (SCRIP), aims to improve station efficiency and service. Improvements include extending current ”dead-end” tracks across the US-101 freeway south of the station, turning them into “through” tracks; reconfiguring station entry tracks, as well as the station arrival and boarding area; adding a new passenger concourse with retail, food services, passenger waiting areas, and other amenities; adding a new loop track; and accommodating future transportation improvements, such as HSR.
- High-Speed Rail (HSR): LAUS will serve as a hub in California’s HSR system, which will connect San Francisco to Los Angeles and Anaheim, and eventually Sacramento and San Diego. Southbound high-speed trains will join the existing Los Angeles–San Diego–San Luis Obispo (LOSSAN) Rail Corridor after a multimodal station adjacent to Hollywood Burbank Airport. The high-speed trains will then service LAUS on new run through tracks (part of the LinkUS project) and then continue along the corridor to the existing Anaheim Regional Transportation Intermodal Center (ARTIC) in Orange County.
- West Santa Ana Branch: The West Santa Ana Branch Transit Corridor Project involves the construction of a new light rail transit line between Downtown Los Angeles and Artesia. On January 27, 2022, the Metro Board selected a Locally Preferred Alternative for the initial operating segment between the proposed Pioneer Station and the A Line Slauson

Station. The ultimate terminus would be at Union Station, with two alternatives, either within the Union Station Forecourt or behind the Metropolitan Water District building.

- Regional Connector: The Regional Connector project extends the Metro light-rail system to connect the Little Tokyo/Arts District Station to the 7th Street/Metro Center Station through the development of three new stations at 1st Street and Central Avenue (Little Tokyo/Arts District Station), 2nd Street and Broadway (Historic Broadway Station), and 2nd Place and Hope Street (Grand Avenue Arts/Bunker Hill Station). This project will improve local and regional access by providing a direct connection between each end of the light rail system (Azusa to Long Beach and East Los Angeles to Santa Monica). Passengers will no longer need to transfer at Union Station and are expected to experience reduced travel times.

Active Transportation Projects

The following active transportation corridor improvements are planned in the study area, including some corridors identified in the ConnectUS Action Plan[30] or Mobility Plan 2035. Some of these corridors will result in the repurposing of general travel lanes.

- The Union Station Forecourt and Esplanade Improvements project, which implements a piece of the ConnectUS Plan and enhances pedestrian and bicycle access and safety to and from LAUS. The project includes the repurposing of two vehicle travel lanes on Alameda Street between Arcadia Street and Cesar E. Chavez Avenue to implement a pedestrian and bicycle esplanade on the east side of Alameda Street largely along the Union Station frontage. Additional features of the project will include the reconfiguration of the Alameda Street and Los Angeles Street intersection, including closing the northern portion of Los Angeles Street and the northern Union Station driveway and consolidating two-way travel on the southern portion of both. A raised crossing across Alameda Street will be introduced to improve pedestrian and bicycle connections between El Pueblo and the Union Station Forecourt. An extension of the Los Angeles Street Cycle Track will provide a dedicated two-way bicycle facility to complete the missing gap between the Los Angeles Cycle Track and Union Station. A new curbside vehicle drop-off area will be introduced north of Los Angeles Street along the Union Station frontage. To safely transition from the new Alameda Street cross section back to existing striping north of and south of the project area, additional traffic capacity modifications will extend south to Arcadia Street, and north to Alpine Street.
- New bikeway on San Pedro Street/Judge John Aiso Street, south of Temple Street to the southern edge of the study area: The design of the bikeway has not been finalized, but it is expected to reduce the number of general travel lanes from two to one in each direction.
- New bikeway on 1st Street, east of San Pedro Street/Judge John Aiso Street to the eastern edge of the study area: The design of the bikeway has not been finalized, but it is expected to reduce the number of general travel lanes from two to one in each direction.
- New bikeway on Vignes Street/Ramirez Street east of LAUS to the intersection with Commercial Street: The design of the bikeway has not been finalized, but it is expected to reduce the number of general travel lanes from two to one in each direction on portions of the street.

[30] Metro is implementing some ConnectUS projects around the Arts District/Little Tokyo Regional Connector station. Those projects are undergoing their own design and environmental review process.

- New biking and walking Esplanade on Alameda Street from Commercial Street to 1st Street: The design of the esplanade has not been finalized, but it is not expected to reduce the number of general travel lanes.
- New bikeway on Ramirez Street and Center Street, from Vignes Street to Commercial Street: The design of the bikeway has not been finalized, but it is expected to reduce the number of general travel lanes from two to one in each direction.
- LA River Bike Path: The Los Angeles (LA) River Bike path is a proposed bicycle and pedestrian path along an approximately eight-mile stretch of the LA River that would connect Elysian Valley to the City of Maywood via Downtown Los Angeles. This project would close a gap on the LA River Bike Path and when completed, provide a 32-mile grade-separated corridor through Los Angeles County. Conceptual designs and draft alternatives have been developed for the project and shared with the public. The path is projected to open between 2025 and 2027.
- Eastside Access 1st/Central: The Eastside Access Improvements Project is located at the future Regional Connector station at 1st Street and Central Avenue. This project would implement streetscape, pedestrian safety, and bicycle access improvements in a one-mile radius around the station. These improvements would improve connections to Union Station and the surrounding transportation system.

In addition to the specific land use development projects proposed in the study area, additional growth is expected by the proposed Project opening year of 2026 and the Horizon Year (2042). Particularly in Downtown Los Angeles and the Cornfield Arroyo Seco Specific Plan area, substantial growth is anticipated. In order to ensure that the cumulative forecasts used to assess the Project are consistent with the expected level of development in the Study Area, the City of Los Angeles Travel Demand Model forecast for the Downtown Community Plan Update/New Zoning Code for Downtown Community Plan Draft Environmental Impact Report[31] was used to estimate cumulative conditions because it is expected to have the most current detail on growth forecasts in the immediate vicinity of the Project. The City of Los Angeles model analysis years are 2016 and 2040. To estimate the change in traffic volumes due to the underlying development in the Central City area (and beyond), the forecast change in daily roadway link volumes was calculated. The overall growth was approximately 24%, or 1% per year. In order to develop cumulative conditions in the study area, this 1% per year average growth in traffic volumes was applied to estimate 2019, 2026, and 2042 conditions.

The model includes population and employment growth forecasts as well. Using a similar process, these forecasts were annualized to develop growth rates for jobs and population in order to develop estimates for 2019, 2026, and 2042 conditions. As discussed in the ridership estimated described in Section 3.17, Transportation, these growth rates were applied to population and job estimates from the United States Census in order to estimate neighborhood ridership potential that the Project could capture.

To validate that the City of Los Angeles Travel Demand Model includes sufficient growth in population and jobs within the study area to cover the known cumulative development projects, estimates of population and jobs for each of the proposed cumulative projects was made. Appendix N contains the analysis showing that the City of Los Angeles Model includes sufficient growth of population and jobs in the study area to cover the expected growth from the cumulative

[31] City of Los Angeles Department of City Planning, August 2020, available at: https://planning.lacity.org/development-services/eir/downtown-community-plan-updatenew-zoning-code-downtown-community-plan. Accessed May 2022.

projects. In addition, as the proposed Project would have a less than significant VMT impact, no cumulative VMT impacts would occur per the LADOT Transportation Assessment Guidelines. Therefore, cumulative impacts with respect to transportation would be less than significant.

5.2.18 Tribal Cultural Resources

The geographic area considered for the analysis of cumulative impacts pertaining to tribal cultural resources is the immediate Project vicinity. As discussed in Section 3.18, Tribal Cultural Resources, nine archaeological sites were found to be within the Area of Direct Impacts, and one of these sites has the potential to be a tribal cultural resource. The proposed Project would result in a less than significant impact to Resource 19-001575 with the implementation of Mitigation Measure CUL-D. Although no other tribal cultural resources with significance to a California Native American tribe were identified through Assembly Bill (AB) 52 consultation as of the writing of this Draft EIR, ground disturbing activities have the potential to reveal additional unidentified subsurface deposits of prehistoric and historic-age, and Native American burials. If previously unidentified archaeological resources, including tribal cultural resources, are encountered during construction, the possibility exists that those resources could be disturbed or damaged during construction, resulting in a potentially significant impact. With implementation of Mitigation Measure TCR-A, impacts related to causing a substantial adverse change in the significance of a tribal cultural resource of a California Native American tribe would be less than significant and would not contribute to a cumulative loss of tribal cultural resources.

Other related projects in the Project vicinity would involve ground disturbances that could reveal buried tribal cultural resources. However, related projects would also be required to comply with applicable State, federal, and local regulations concerning tribal cultural resources. Therefore, cumulative impacts with respect to tribal cultural resources would be less than significant.

5.2.19 Utilities

The geographic area considered for the analysis of cumulative impacts pertaining to utilities is the urbanized and developed City of Los Angeles. Related projects within the Project area include various mixed-use developments, residential developments, and open space/circulation projects as listed in Table 5-1 and mapped in Figure 5-1.

Water Supply

The geographic area considered for the analysis of cumulative water impacts pertaining to public services is the Los Angeles Department of Water and Power (LADWP) service area. Implementation of the proposed Project in conjunction with the related projects would increase the demand for water services provided by the LADWP. As shown in Table 5-3, Cumulative Water Demand, the related projects in combination with the proposed Project would increase water demand by approximately 1,247,164 gallons per day (GPD), with the proposed Project accounting for approximately 0.53 percent of that increase in water projected.[32] These estimates are based on the available existing details for the land use development projects in Table 5-1 related to the land use and size, and do not include water demand for the transportation projects or related projects for which there is no data available as of this writing. Demand factors by facility type were used to provide approximate totals for each land use in the related projects list, such as number of bedrooms per dwelling unit or seats in a restaurant, as specific design details for the related projects have not been confirmed. The most conservative demand factors were used to account

[32] (6,655 / 1,247,164)*(100) = 0.53%

for future design adjustments and ensure the most appropriate cumulative water demand is captured.

LADWP supplies an average of approximately 435 million GPD of water to its customers, and the related projects in combination with the proposed Project's required water usage is considered nominal (1.25 million GPD, or 0.2 percent). In terms of the City's overall water supply condition, the water requirement for any project that is consistent with the City's General Plan has been considered in the planned growth of the water system. Similar to the proposed Project, each related project would be required to comply with City and State water code and conservation programs for both water supply and infrastructure. In addition, all construction activities for each related project would be conducted through coordination with the appropriate agencies, including the LADPW, Los Angeles Sanitation & Environment (LASAN), and Los Angeles Bureau of Engineering (LABOE) in following their standard plans, specifications, policies, and practices. Therefore, no significant cumulative water supply impact is anticipated from development of the proposed Project combined with the related projects.

Table 5-3: Cumulative Water Demand

Land Use	Amount	Unit	Demand Rate (gpd/unit)[a]	Total (gpd)
Residential[b]	5,405	du	177/du	956,685
Hotel	334	rooms	153.6/room	51,302
Retail/Office[c]	812,340	sf	108.8/1000 sf	88,383
Restaurant [d]	226,323	sf	384/1000 gsf	86,908
Office	217,367	sf	154/1000 gsf	33,475
Data Center[e]	179,000	sf	64/1000 gsf	11,456
Retail	183,657	sf	64/1000 gsf	11,754
Community Center[e]	8,530	sf	64/1000 gsf	546
Commercial	4,660	sf	64/1000 gsf	298
			Subtotal Related Projects	*1,240,509*
			Proposed Project	*6,655*
			Net Cumulative Total	**1,247,164 (1.25 MGD)**

Notes:
gpd = gallons per day; sf = square feet; du = dwelling unit; gsf = gross square feet; MGD = million gallons per day
[a] Water consumption rates are assumed as 128 percent (nonresidential) and 118 percent (residential) of the wastewater generation rates.
[b] Assume 2-bedroom per dwelling unit, to account for some 1- and 3-bedroom units.
[c] Based on mean of retail rate (50/1000 gsf) and office rate (120/1000 gsf).
[d] As seat numbers are unknown; rate is based on take-out restaurants which is calculated from square footage.
[e] No corresponding facility type, Commercial rate.
Source: LASAN Sewage Generation Factors:
https://engpermitmanual.lacity.org/sites/default/files/documents/Sewage%20Generation%20Factors%20Chart.pdf

The potential need for the related projects to upgrade water line to accommodate their water needs is site-specific. Future development projects within the service area of LADWP would be subject to the locally mandated water conservation programs. Citywide water conservation efforts would also be expected to partially offset the cumulative demand for water. In addition, LADWP continues to expand its recycled water program to ensure a safe and reliable water supply for the City. LADWP undertakes expansion or modification of water service infrastructure to serve future growth in the City as required in the normal process of providing water service. Therefore, cumulative impacts with respect to water supply would be less than significant.

Wastewater Services

Implementation of the proposed Project in conjunction with the related projects would increase the demand for wastewater services provided by LASAN. As shown in Table 5-4, Cumulative Wastewater Generation, the related projects in conjunction with the proposed Project would generate approximately 1,032,652 GPD of wastewater, with the proposed Project accounting for approximately 0.36 percent of that projected increase in wastewater.[33] These estimates are based on the available existing details for the land use development projects in Table 5-1 related to the land use and size, and do not include wastewater generation for the transportation projects or related projects for which there is no data available as of this writing. Generation factors by facility type were used to provide approximate totals for each land use in the related projects list, such as number of bedrooms per dwelling unit or seats in a restaurant, as specific design details for the related projects have not been confirmed. The most conservative generation factors were used to account for future design adjustments and ensure most appropriate cumulative wastewater generation is captured.

Table 5-4: Cumulative Wastewater Generation

Land Use	Amount	Unit	Demand Rate (gpd/unit)	Total (gpd)
Residential [a]	5,405	du	150/du	810,750
Hotel	334	rooms	120/room	40,080
Retail/Office [b]	812,340	sf	85/1000 gsf	69,049
Restaurant [c]	226,323	sf	300/1000 gsf	67,897
Office	217,367	sf	120/1000 gsf	26,084
Data Center [d]	179,000	sf	50/1000 gsf	8,950
Retail	183,657	sf	50/1000 gsf	9,183
Community Center [d]	8,530	sf	50/1000 gsf	427
Commercial	4,660	sf		233
			Subtotal Related Projects	*1,032,652*
			Proposed Project	*3,800*
			Net Cumulative Total	**1,036,452 (1.03 MGD)**

Notes:
gpd = gallons per day; sf = square feet; du = dwelling unit; gsf = gross square feet; MGD = million gallons per day
[a] Assume 2-bedroom per dwelling unit, to account for some 1- and 3-bedroom units.
[b] Based on mean of retail rate (50/1000 gsf) and office rate (120/1000 gsf).
[c] As seat numbers are unknown; rate is based on take-out restaurants which is calculated from square footage.
[d] No corresponding facility type, Commercial rate used.
Source: LASAN Sewage Generation Factors:
https://engpermitmanual.lacity.org/sites/default/files/documents/Sewage%20Generation%20Factors%20Chart.pdf

The City of Los Angeles maintains a database to track flows, failed pipes, or required maintenances. The database also feeds into a hydraulic model to estimate potential future capacity constraints due to economic and population growth. For development projected to add no more than 10,000 GPD, a standard permit is issued if the model shows no capacity constraints. For additions larger than 10,000 GPD, the City of Los Angeles Planning Department works with LASAN to determine if additional capacity is needed. The sewer line capacity for each related project would be evaluated on a case-by-case basis and would be mitigated to the extent feasible in accordance with CEQA. Wastewater from the proposed Project and related projects would flow

[33] (3,800 / 1,032,652)*(100) = 0.36%

to the Hyperion Water Reclamation Plant, located approximately 15 miles southwest from the area, where approximately 260 million GPD is conveyed. The Hyperion Water Reclamation Plant can accommodate up to a maximum daily flow of 450 million GPD and a peak wet weather flow of 800 million GPD. The cumulative sewage generation would be well within the design capacity of Hyperion Water Reclamation Plant representing approximately 0.23 percent of the remaining capacity.[34] Therefore, cumulative impacts with respect to wastewater services would be less than significant.

Landfills

Implementation of the proposed Project in conjunction with the related projects would increase the demand for solid waste services. As shown in Table 5-5, Cumulative Solid Waste Generation, the related projects in conjunction with the proposed Project would generate approximately 37,120 pounds per day (18.6 tons per day) of waste, with the proposed Project accounting for approximately 0.17 percent of the projected increase.[35] These estimates are based on the available existing details for the land use development projects in Table 5-1 related to the land use and size, and do not include solid waste generation for the transportation projects or related projects for which there is no data available as of this writing. Generation factors by facility type were used to provide approximate totals for each land use in the related projects list, such as number of bedrooms per dwelling unit or seats in a restaurant, as specific design details for the related projects have not been confirmed. The most conservative generation factors were used in order to account for future design adjustments and ensure the most appropriate cumulative solid waste generation is captured.

Table 5-5: Cumulative Solid Waste Generation

Land Use	Amount	Unit	Demand Rate (pounds/unit per day)	Total (pounds/day)
Residential	5,405	du	5.31/du	28,701
Hotel	334	rooms	2/room	668
Retail/Office[a]	812,340	sf	4.25/1000 sf	3,452
Restaurant	226,323	sf	5/1000 sf	1,132
Office	217,367	sf	6/1000 sf	1,304
Data Center[b]	179,000	sf	7/1000 sf	1,253
Retail	183,657	sf	2.5/1000 sf	459
Community Center[c]	8,530	sf	3.12/1000 sf	27
Commercial	4,660	Sf	13/1000 sf	61
			Subtotal Related Projects	*37,056*
			Proposed Project	*64*
			Net Cumulative Total	**37,120 (18.6 tons)**

Notes: *sf = square feet; du = dwelling unit*
[a] Based on mean of retail rate (2.5lb/1000sf) and office rate (6lb/1000sf).
[b] Based on rate for public/institutional use.
[c] Based on rate for “Other” uses.
Source: CalRecycle, Estimated Solid Waste Generation Rates: https://www2.calrecycle.ca.gov/wastecharacterization/general/rates.

[34] (0.79 / 450)*(100) = 0.18%
[35] (64 / 37,120) (100) = 0.17%

In order to provide a conservative estimate, this analysis assumes that all solid waste generated by the related projects would be delivered to the Sunshine Canyon Landfill. The Sunshine Canyon Landfill can accept 12,100 tons per day (and currently receives approximately 8,300 tons of waste per day) and could therefore accommodate the additional approximately 18.6 tons per day increase in solid waste resulting from the cumulative projects. In accordance with the California Green Building Standards Code (CALGreen), 65 percent of the solid waste generated would be diverted from the landfill waste stream, resulting in a net generation of 9.3 tons of solid waste per day. The remaining combined daily intake of the Sunshine Canyon Landfill is 8,290 tons per day. As such, this landfill would have adequate capacity to accommodate the 9.3 tons per day disposal needs of the proposed Project in combination with the related projects. Therefore, near-term cumulative solid waste impacts would be less than significant.

The County has also supported State legislation (such as AB 1939 in 2000 and AB 2770 in 2002) that encourages the development of waste conversion technologies. Therefore, this ongoing process of improving solid waste facilities and advancing disposal techniques and strategies would further minimize the already less than significant impact on cumulative solid waste generation and disposal. With respect to regulatory consistency, it is anticipated that, similar to the Project, the related projects would not conflict with and, instead, would act to implement, applicable City and County waste diversion goals and polices, including the County's Countywide Integrated Waste Management Plan (CoIWMP), and the City's One Water LA 2040 Plan, Green New Deal Sustainable City pLAn, Solid Waste Integrated Resource Plan, Conservation Element and Infrastructure Systems Element, Framework Element, C & D Waste Recycling Ordinance, Stockpile Stewardship and Management Plan (SSMP), CALGreen, and the Los Angeles Municipal Code (LAMC). Furthermore, similar to the Project, the related projects would be subject to the source reduction and recycling requirements established by the local jurisdiction in accordance with AB 939 (i.e., divert 65 percent of the solid waste generated from landfills through waste reduction, recycling and composting). Also, future projects would be required to participate in recycling programs, thus reducing the amount of solid waste to be disposed of at the landfills described above. Future projects may also incorporate design features to promote conservation, similar to the proposed Project that would further reduce construction and operational related solid waste. Therefore, cumulative impacts with respect to landfill capacity would be less than significant.

Utilities

The geographic area considered for the analysis of cumulative impacts pertaining to public services is the urbanized and developed City of Los Angeles. Implementation of the proposed Project in conjunction with the related projects would increase the demand for electricity. For the City of Los Angeles, LADWP is the sole supplier of electricity to businesses and residents of the area. It is estimated that the ART system would require a total estimated power requirement of approximately 2.5 megawatts to operate the entire gondola system and other station functions such as elevators, escalators, and heating, ventilation, and air conditioning system. The electrical power for the operation of the proposed Project would be supplied by LADWP through the utility's Green Power Program. Accordingly, the primary electricity usage associated with the proposed Project would come from renewable resources, and it is anticipated that the existing power supply provided for the proposed Project would be sufficient for Project operation. It was determined in Section 3.6, Energy, and Section 3.19, Utilities and Service Systems, that implementation of the proposed Project would would not have a substantial effect on State-wide or regional energy resources.

As with the proposed Project, each of the related projects would be evaluated within its own context with consideration of project energy conservation features that could alleviate electrical demand. Further, each project would need to be consistent with the building energy efficiency requirements of Title 24 and, where applicable, CALGreen. The LADWP undertakes expansion or modification of electrical service infrastructure and distribution systems to serve future growth in the City as required in the normal process of providing electrical service. Any potential cumulative impacts related to electric power service would be addressed through this process. The growth is factored into LADWP's demand assumptions for the local area, and any impact to electricity infrastructure is then factored into LADWP's facilities improvement planning process. The LADWP may, however, postpone new power connections until power supply is adequate at any given location. Therefore, cumulative impacts with respect to utilities would be less than significant.

5.2.20 Wildfire

The geographic area considered for the analysis of cumulative impacts pertaining to wildfire is the local Project vicinity. Of the total related projects in the Project vicinity, as listed in Table 5-1 and mapped in Figure 5-1, two related projects (ID 21 and 40) are located in a Very High Fire Hazard Severity Zone. However, one of the related projects (ID 21) is located more than 1,000 feet away from the Project Site, and therefore is not likely to combine with the proposed Project to result in cumulative impacts with respect to wildfires. As noted in Section 3.20, Wildfire, there are four LAFD stations within a 1.6-mile radius around the Project Study Area (shown in Figure 3.20-4), which would allow for rapid response times. The proposed Project alignment is primarily above, and related projects primarily in, urban regions typically classified as non-burnable in wildland fire hazard assessments. Additionally, similar to the proposed Project, the related projects would be individually subject to LAFD review and would be required to comply with all applicable Los Angeles Fire Department, Department of Building and Safety, and other City fire safety requirements, including hydrant and access improvements, if necessary, to adequately mitigate impacts related to wildfires.

The Mixed-Use Redevelopment project at 1201 North Broadway (ID 40) would be located adjacent to the Broadway Junction. As discussed in Section 3.20, Wildfire, the Broadway Junction site is currently developed with an office building and ancillary uses, including a patio with ornamental vegetation, which would be vacated, cleared, and demolished prior to construction of the proposed Project. The site is developed, urban, and would not contain abundant vegetative fuel. It is not located on a slope or hillside, and is surrounded by low-rise residential and commercial uses to the north and east. Due to the developed nature of the site and adjacent areas surrounded by a network of fire hydrants and fire stations, as well as the lack of vegetative fuel immediately adjacent to the Broadway Junction site, construction activities associated with the Broadway Junction would not increase wildfire risks. As the related project site is located adjacent to the Broadway Junction site, it is also located in a developed and urban area that does not contain abundant vegetative fuel, is not located on a slope or hillside, and is surrounded by a network of fire hydrants and fire stations.

While road closures and roadway disruptions would be temporary and intermittent throughout construction of the proposed Project and related projects and would be coordinated with LADOT, construction of the proposed Project and related projects could be quickly halted, in the event of an emergency in coordination with LAFD and LAPD pursuant to their role in coordinating wildfire and evacuation responses under the City's Emergency Operations Plan and to allow the roads to operate as disaster routes pursuant to the mapped disaster routes within the Los Angeles County Operational Area. Accordingly, construction of the proposed Project and related projects would not inhibit access in the event of an emergency to the identified disaster routes within the Project area. The proposed Project and related projects would otherwise comply with any regulatory or statutory requirements pertaining to street closures and detours.

Overall, the proposed Project and other related projects would comply with all applicable local and State rules and regulations, as well as implementation of site-specific recommendations. Therefore, cumulative impacts with respect to wildfire would be less than significant.

5.3 IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(d) of the CEQA Guidelines indicates that an EIR should evaluate significant irreversible environmental changes that would be caused by implementation of a proposed project. As stated in CEQA Guidelines Section 15126.2(d):

> "Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."

The proposed Project would necessarily consume limited, slowly renewable, and non-renewable resources that could result in irreversible environmental changes. This consumption would occur during construction of the proposed Project and would continue throughout its operational lifetime. The development of the proposed Project would require a commitment of resources that would include: (1) building materials and associated solid waste disposal effects on landfills; (2) water; and (3) energy resources (e.g., fossil fuels) for electricity and transportation. Consumption of these resources would be considered a primary impact. Secondary impacts that were considered include potential irreversible changes to land utility and changes resulting from hazardous accidents. As discussed below, the proposed Project would not consume a large commitment of natural resources or result in significant irreversible environmental changes.

5.3.1 Building Materials and Solid Waste

Construction of the proposed Project would require consumption of resources that are limited and slowly renewable, and potentially which may renew slowly as to be considered non-renewable. These resources would include certain types of lumber, aggregate materials used in concrete and asphalt (e.g., sand, gravel, and stone), steel, and petrochemical construction materials (e.g., plastics). The commitment of resources required for the type and level of proposed development would limit the availability of these resources for future generations for other uses during the operation of the proposed Project. However, this resource consumption would be consistent with growth and anticipated change in the Los Angeles region. Materials for the stations, junction, and towers would be locally sourced where possible, and would include recycled content where possible. Additionally, these materials are not in short supply and usage would not result in a significant impact on continued availability of these resources. Labor would also be required to produce building materials; however, it is likely that the labor force from within the region would be sufficient to complete the majority of Project construction. Construction of more than one Project component would occur at the same time, with consideration of available materials, equipment, and workers.

As discussed in Section 3.19, Utilities and Service Systems, construction of the proposed Project would generate construction waste from building demolition (1201 North Broadway), site clearing, removal of asphalt, and excavation. It is estimated that approximately 78,500 cubic yards of demolition debris would be generated, of which approximately 62,600 cubic yards would be soil, which is anticipated to not go to landfills, but is instead anticipated to be sold and/or reused for backfill. For the remaining approximately 15,900 cubic yards of demolition debris that would be generated, 65 percent would be diverted from landfills in accordance with CALGreen. As such, it is estimated that approximately 5,565 cubic yards of demolition debris would be hauled to the Sunshine Canyon Landfill, which can adequately accommodate the anticipated amount of solid waste generated for the proposed Project. In addition, the proposed Project would be required to adhere to federal, State, and local regulations for solid waste disposal, including AB 939, which requires all counties and cities to prepare a comprehensive solid waste management program that includes a Source Reduction and Recycling Element, and those identified in the City's Solid Waste Integrated Resource Plan to divert materials prior to disposal for recycling or reuse, where appropriate. Therefore, the proposed Project would not conflict with the Solid Waste Integrated Resource Plan, AB 341, which sets forth the requirements of the Statewide mandatory commercial recycling program, and AB 939, CALGreen, and local management and reduction statutes related to solid waste. As such, solid waste would not be generated in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals

Regarding the operation of the proposed Project, it would be developed in a densely populated urban area and would provide additional connectivity to local amenities in the vicinity of commercial and residential uses, potentially reducing, rather than increasing the need for additional infrastructure that would require similar building materials and produce similar quantities of solid waste. As such, continued phases of the proposed Project would not result in a significant impact related to building materials and solid waste.

5.3.2 Water

Construction of the proposed Project would require short-term and intermittent consumption of water, a resource that is slowly renewable. During construction of the proposed Project, water from water trucks and gallon drums would be required for various activities, such as controlling dust, compacting soil, and mixing concrete. Project construction would require the use of locally available water supplies, distributed by LADWP. The proposed Project would seek to use reused or recycled water prior to the use of potable water, if feasible. LADWP supplies an average of approximately 466 million GPD of water to its customers. LADWP has the ability to meet local water supply goals under normal year, dry year, and multiple dry year conditions; however, a multi-year drought that started in 2012 has resulted in LADWP investing in drought-resilient sources of potable water including stormwater capture and groundwater augmentation. The existing water supply sources are adequate to meet the demands for LADWP's service area, and construction of the proposed Project would not increase water usage that would exceed the current supply.

Operational water usage for the proposed Project would include restrooms, concessions, landscaping, and washing down of facilities and other maintenance operations. This would require a total of approximately 6,655 GPD of water, of which approximately 3,072 GPD of water would be used by Park amenities operated by the Los Angeles State Historic Park. This required water usage is considered nominal compared to LADWP's average supply of 435 million GPD; therefore, operation of the proposed Project would not increase water usage that would exceed the current supply.

Thus, as evaluated in Section 3.19, Utilities and Service Systems, while Project construction and operation would result in some irreversible consumption of water, the proposed Project would not result in a significant impact related to water supply.

5.3.3 Energy Consumption

Construction of the proposed Project would require consumption of resources that are slowly renewable as well as non-renewable. These resources would include renewable electricity as well as the use of non-renewable fossil fuels, such as diesel, gasoline, and oil, and thus the existing supplies of these resources would be incrementally reduced. As discussed in Section 3.6, Energy, construction of the proposed Project would require limited and temporary electricity consumption for construction trailers, construction equipment, and lighting, and would be provided by LADWP and supplied by the grid. Construction of the proposed Project would result in a demand of approximately 864,544 kilowatt-hours (kWh) of electricity from the grid. This demand would be temporary, and in some cases would supplant electricity otherwise provided by another energy source, such as diesel generators. The proposed Project's anticipated electricity usage during construction is anticipated to be approximately 0.9 Gigawatt-hours (GWh) in total or 0.45 GWh/year, which would constitute approximately 0.00014 percent to 0.00016 percent of the projected State-wide demand from 2019 to 2026. The California Energy Commission (CEC) estimates that energy demand in the LADWP planning area will increase to approximately 27,000 to 28,000 GWh in the 2024 to 2026 timeframe, meaning that the proposed Project's contribution in that period would be approximately 0.002 percent of the projected demand.

Construction of the proposed Project would also require the limited and temporary usage of transportation fuel, including gasoline and diesel for off-road construction equipment, haul trucks, vendor trucks, construction worker vehicles, and worker shuttles. The estimated total fuel usage from on-road vehicle trips associated with the construction of the Project is 69,355 gallons of gasoline and 84,144 gallons of diesel. The estimated total fuel usage from off-road construction equipment associated with the construction of the Project is approximately 155,304 gallons of diesel fuel. According to these estimates, construction of the proposed Project would equate to approximately 0.15 percent of the annual amount of diesel and approximately 0.008 percent of the annual amount of gasoline that would be used citywide during Project construction. Construction of the proposed Project would equate to less than 0.004 percent of the annual amount of diesel and approximately 0.0002 percent of the annual amount of gasoline and that would be used State-wide during Project construction. Fuel use during construction would be considered negligible when evaluated on a local and regional scale and would not adversely impact local or regional energy supplies or not require additional capacity. In addition, the temporary energy consumption associated with construction would allow for a long-term reduction in energy consumption associated with Project operations related to reduced VMT, along with a decreased reliance on fossil fuels, as discussed below.

The electrical power for Project operations of the aerial gondola system and associated stations, junction, and towers would be supplied by LADWP through the utility's Green Power Program. Accordingly, the primary electricity usage associated with the proposed Project would come from renewable resources. When operating near capacity, normal operations are estimated to require approximately 2.5 megawatt (MW) of power. The peak demand in the LADWP planning area is expected to be 6,500 MW at Project build-out in 2026. As a result, the proposed Project would have a negligible effect on LADWP peak demands. Once fully operational, the Project would result in electricity demand of approximately 6.9 GWh/year, which would constitute approximately 0.002 percent of the projected State-wide demand in that year. The CEC estimates that energy demand in the LADWP planning area would increase to approximately 28,000 GWh in 2026, meaning that the proposed Project's contribution in that timeframe would be approximately 0.025 percent of the projected demand. Additionally, the proposed Project would include the installation of backup battery storage at each station, tower, and junction to provide backup power to allow unloading of the system in the event of a power grid failure. The total backup power required is 1,400 kilowatts.

Additionally, operation of the proposed Project would incorporate energy efficient features, such as open-air stations and high-efficiency lighting, which would lower the energy needs of the proposed Project by allowing for passive ventilation strategies and natural daylight, and use State-of-the-art gondola technologies, such as automated controls and contactless fare checking. The proposed Project would also be designed to comply with all applicable State and local codes, including conformance with the City of Los Angeles Green Building Ordinance. Furthermore, operation of the proposed Project would decrease the number of people traveling to Dodger Stadium and the surrounding area in passenger vehicles and increase the number of people using public transit. The overall shift is anticipated to reduce total VMT and vehicle idling time in and around Dodger Stadium associated with passenger vehicles, therefore reducing associated emissions and fuel use. When compared to existing conditions, the proposed Project would reduce fuel usage from on-road mobile sources by 89,367 gallons of gasoline and 539 gallons of diesel in 2026, respectively, and 170,026 gallons of gasoline and 1,026 gallons of diesel in 2042, respectively.

Based on the above, the proposed Project would not cause the wasteful, inefficient, and unnecessary consumption of energy. The proposed Project benefits would include improved mobility, transit accessibility, and energy consumption. The resources committed and consumed would be considered appropriate because regional and area residents and visitors would benefit from improved transit services, which, in turn, would result in an overall decrease in the irreversible and irretrievable commitment of nonrenewable resources. Refer to Section 3.6, Energy, for further analysis regarding the proposed Project's consumption of energy resources.

5.3.4 Environmental Hazards

Construction and operation of the proposed Project has the potential to cause irreversible damage as the result of an environmental accident associated with the release or spillage of hazardous materials as such materials are transported and used. The proposed Project's potential use of hazardous materials is addressed in Section 3.9, Hazards and Hazardous Materials. As discussed therein, it is anticipated that limited amounts of hazardous substances, such as solvents, paints, oils, hydraulic fluids, gasoline, diesel fuel, etc. would be transported to and used at the Project component sites throughout the construction duration. Construction activities would include the use of machinery and other equipment that may require fueling or maintenance/ servicing with other petroleum-based products (e.g., grease, oil). However, all potentially hazardous materials would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable federal, State, and local regulations. Thus, any associated risk would be adequately reduced to a less than significant level through compliance with these standards and regulations. As such, compliance with regulations and standards would serve to protect against significant and irreversible environmental change that could result from the accidental release of hazardous materials.

Additionally, during construction, ground-moving activities such as excavation for the foundations of the stations, junction, and towers as well as the demolition of the existing building at 1201 North Broadway, would include disturbance of soils. The proposed sites of the Alameda Station, Alpine Tower, Chinatown/State Park Station, and Broadway Junction were listed in hazardous materials database listings. The proposed Project would implement Mitigation Measure HAZ-A to prepare a soil and groundwater management plan, which shall include sampling and analyzing soils/groundwater and required methods and procedures for the proper handling and removal of impacted soils and/or groundwater for off-site disposal, to reduce impacts related to construction to less than significant. Additionally, Mitigation Measure HAZ-B, which would require hazardous materials abatement by a licensed abatement contractor prior to demolition of the existing building at 1201 North Broadway, would be implemented, which would reduce impacts to less than significant. With implementation of mitigation measures, it is not expected that the proposed Project would cause irreversible damage from environmental accidents associated with the use of typical, potentially hazardous materials during construction.

It is anticipated that operation and maintenance of the proposed Project would include use of limited quantities of hazardous materials, such as oils, paints, solvents, and cleaners, which are not acutely hazardous. No operational activities are proposed that would result in the use or discharge of unregulated hazardous materials. Operation of the proposed Project would transport, handle and store, and dispose of all materials in compliance with all codes, standards, and regulations, and it is not expected that the proposed Project would cause irreversible damage from environmental accidents associated with the use of typical, potentially hazardous materials during operations.

5.3.5 Land Utility

Land used to construct proposed Project components is considered an irreversible commitment during the period the land is used. After construction is completed, land used for construction staging would be available for other uses. Furthermore, in regard to Project components within the public ROW, and as discussed in Section 3.17, Transportation, development of a construction traffic management plan in coordination with LADOT is required as outlined in Mitigation Measure TRA-B. The construction management plan would include street closure information, detour plans, haul routes, and a staging plan with review and approval from the City. Implementation of Mitigation Measure TRA-B would minimize access interruptions within the Project Study Area and identify safe detour routes around the temporary closures for vehicles, bikes, and pedestrians. With implementation of Mitigation Measure TRA-B, temporary construction impacts related to disruption of access between communities would be less than significant.

Implementation of the proposed Project would commit land designated as public ROW, commercial, residential, and open space uses at the stations, junction, and towers to transit uses. The majority of the Project alignment and components would be constructed within or above the public ROW and/or publicly owned property. However, no housing or businesses would be displaced. As discussed in Chapter 2, Project Description, Subsection 2.11, Required Permits and Approvals, the Project Sponsor is seeking to amend LAMC Sections 12.32 and 11.5.7 to create an Overlay District or Specific Plan to provide for consistent application of Project design standards, limitations, and operational measures. With approval of the amendments to the zoning code to allow the proposed Project uses, development of these Project components would not conflict with the applicable LAMC requirements at the time of Project implementation, and the impact would be less than significant.

With approval of the amendments to the zoning code to allow the proposed Project uses, development of these Project components would not conflict with the applicable LAMC requirements or the General Plan land use designations at the time of Project implementation, and the impact would be less than significant.

Further, Plan Approvals under the existing Conditional Use Permit could be sought to allow for the Stadium Tower and Dodger Stadium Station sites, including an exception from the site's 1XL (Extra Limited Height) district designation. However, with the Plan Approvals, these Project components would be consistent with the provisions of the Conditional Use Permit applicable to the site, and no impact related to consistency with the LAMC would occur.

As such, the proposed Project would be consistent with the policies of the City of Los Angeles which promote transit use and would not create a substantial irreversible commitment to land use.

Additionally, The Los Angeles State Historic Park General Plan identifies four types of land uses in its Preferred Park Concept Elements: Cultural Activities, Recreation Open Space, Garden Open Space, and Natural Open Space. These land uses do not contemplate a transit station like the Chinatown/State Park Station, which would have a footprint of 2,195 square feet in the park, and the station canopy would have an overhang of 9,320 square feet over the park. The proposed Project's required aerial clearance width over the Los Angeles State Historic Park would be 53 feet 2 inches wide with an area of approximately 59,470 square feet, plus an Additional Separation Buffer.

Pursuant to Public Resources Code 5002.2, the proposed Project would require the Los Angeles State Historic Park General Plan Amendment to amend the Preferred Park Concept Elements to include a "Transit" land use to allow for the proposed Project's use, as well as to address the State historic park classification as defined in Public Resources Code 5019.59, which permits facilities for the comfort and enjoyment of the visitors, such as access. Given the large-scale events currently held at the Park (as discussed in Subsection 5.5.2, Special Events at the Los Angeles State Historic Park), additional transportation options to access the Park have the added benefit of reducing the detrimental impacts of those events to the Park and the neighboring communities. The General Plan Amendment is subject to the review and approval by the State Park Commission, which retains its independent authority related to the proposed Project per Public Resources Code 21174. The proposed Project is also anticipated to require easements and/or aerial easements, a lease or other agreement, a right of entry permit, and/or operational agreements related to the park.

Thus, with the General Plan Amendment, the construction and operation of the Chinatown/State Historic Park Station would be made consistent with the applicable goals and guidelines of Los Angeles State Historic Park General Plan as amended by the Los Angeles State Historic Park General Plan Amendment, and thus would not conflict with the goals, policies, and objectives of the Los Angeles State Historic Park General Plan adopted for the purpose of avoiding or mitigating an environmental effect. As such, impacts related to the Los Angeles State Historic Park would be less than significant. As such, the proposed Project would be consistent with the policies of State Parks, which establish land uses appropriate to the Park and associated elements, and therefore would not create a substantial irreversible commitment to land use.

5.3.6 Conclusion

Based on the above, Project construction and operation would require the irretrievable commitment of limited, slowly renewable, and non-renewable resources, which would limit the availability of these resources and the Project site for future generations or for other uses. However, the consumption of such resources would not be considered substantial and would be consistent with regional and local growth forecasts and development goals for the area. The loss of such resources would not be highly accelerated when compared to existing conditions and such resources would not be used in a wasteful manner. Therefore, although irreversible environmental changes would result from the proposed Project, such changes are concluded to be less than significant. Considering that the proposed Project would consume an immaterial amount of natural resources, and it is a transportation alternative to automobile travel that would reduce VMT and increase connectivity of people to the region's public transportation hub at Union Station and the Dodger Stadium property, and would increase connectivity in the Project area, providing direct linkages for existing residents and communities to parks and recreational facilities, the limited use of nonrenewable resources is justified.

5.4 GROWTH-INDUCING IMPACTS

Section 15125.2(d) of the CEQA Guidelines requires a discussion of the ways in which a project could induce growth. This includes ways in which a project would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Section 15126.2(d) of the CEQA Guidelines states that the EIR should:

> "Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

Induced growth is any growth that exceeds planned growth and results from new development that would not have taken place without the implementation of a proposed project. Generally, growth-inducing projects are located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure, such as water or sewer facilities, or roads. Typically, the growth-inducing potential of a project would be considered significant if it results in growth or population concentration that exceeds those assumptions included in pertinent master plans, land use plans, or projections made by regional planning authorities. However, the creation of growth-inducing potential does not automatically lead to growth, whether it would be below or in exceedance of a projected level. The environmental effects of induced growth are secondary or indirect impacts of the proposed Project. Secondary effects of growth could result in significant, adverse environmental impacts, which could include increased demand on community public services, increased traffic and noise, degradation of air and water quality, and conversion of agricultural land and open space to developed uses.

In order to characterize the existing population, housing, and employment conditions in the vicinity of the proposed Project, a 0.5-mile buffer around the proposed Project alignment was established as the Project Study Area, as discussed in detail in Section 3.14, Population and Housing. The total population for the Project Study Area in 2019, according to the U.S. Census Bureau, was approximately 33,108 residents compared to the total City population of 3,986,031 residents. (Table 3.14-2). In 2020, the County population was estimated to be 10,044,458 residents (Table 3.14-1). The average annual growth rate for the City from 2010 to 2020 was approximately 0.3 percent (Table 3.14-1), and more recently in 2020 the annual growth rate indicated negative growth at approximately -1.3 percent. The City's average annual growth rate is higher than the County's average annual growth rate from 2010 to 2020 (0.42 percent); however, the County's

2020 annual growth rate of -0.9 percent suggests that even though people were leaving the area, the rate of people leaving the City was greater than the County. The total number of housing units for the Project Study Area in 2019, according to the U.S. Census Bureau, was 11,846 (Table 3.14-4). In 2020, the number of housing units was 1,535,606 in the City with an anticipated 16.8 percent increase by 2045, and over 3.6 million in the County, with an anticipated 13.9 percent increase by 2045 (Table 3.14-3). The total number of people employed in the Project Study Area in 2019, according to the U.S. Census Bureau, was 30,695 (Table 3.14-7). In 2019, the number of people employed was 2,155,700 in the City and 5,313,215 in the County (Table 3.14-6). By 2045, the number of people employed in the City is projected to be 2,135,900 and the number employed in the County is project to be 5,382,000 (Table 3.14-6). This anticipates a 0.9 percent decrease in employment for the City and 1.3 increase in the County. Although private vehicles are the main means of commute for both residents in the Project Study Area and overall City of Los Angeles, residents in the Project Study Area utilize public transportation and walking (13.3 percent and 9.3 percent, respectively) more than the overall City of Los Angeles population (8.8 percent and 3.4 percent, respectively (Table 3.14-8).

Considering the above environmental setting, the following discussion considers whether or not the proposed Project would foster population or employment growth, or the construction of additional housing, either directly or indirectly, on both a regional and local scale.

The proposed Project alignment would be located within the urbanized and developed City of Los Angeles. The proposed Project would link the Dodger Stadium property to the region's rapidly growing regional transit system at LAUS, thereby increasing overall system efficiency. The proposed Project would improve the mobility and accessibility for people in the area by providing an ART to the regional transit system at LAUS and provide a first/last mile transit connection to Dodger Stadium, for existing residents, workers, park users, and visitors to Los Angeles. The proposed Project does not include any new housing. Instead, it would provide new connections to and between currently underserved neighborhoods and uses along the proposed alignment, including Chinatown, Mission Junction, the Los Angeles State Historic Park, Elysian Park, Echo Park, and Solano Canyon. These areas are being developed with various mixed-use developments, which include both residential units and commercial spaces. As such, the proposed Project is intended to accommodate existing and future transportation needs of the area's population and would not directly induce growth.

As discussed in Section 3.14, Population and Housing, the proposed Project would not induce substantial unplanned population growth indirectly. Construction employment generated by the proposed Project would not change population in the heavily populated Los Angeles region. Given the temporary nature of construction industry jobs, the relatively large regional construction industry, and the total number of construction workers needed during any construction phase, it is likely that the labor force from within the region would be sufficient to complete the majority of project construction without a substantial influx of new workers and their families. Any such relocation within the region would be minimal. Although specialized personnel including ART manufacturer and cable specialists would be on site during construction phases involving the installation of the ART system and cable pulling, they are expected to utilize existing seasonal accommodations and leave once construction is completed. Impacts related to induced population growth due to employment opportunities during construction of the proposed Project would be less than significant. Employees for operations, maintenance, and concessions (approximately 20) are expected to be drawn from the local labor force and would not induce substantial unplanned population growth.

As discussed in Section 3.15, Public Services, because the proposed Project would not include any new housing, and because it is likely that the labor force from within the region would be sufficient to complete construction and support operation of the proposed Project, it is not anticipated to cause a substantial demand for fire or police protection services such that it would require the provision of new or physical altered governmental facilities (i.e. fire and police stations). Proposed Project implementation would not impact population in the heavily populated Los Angeles region that would result in additional demand for schools such that it would result in the need for new or physically altered schools. Additionally, the proposed Project is not anticipated to cause a demand for other public facilities such that it would require the provision of new or physical altered governmental facilities (i.e., libraries, senior centers, homeless bridge housing facilities, or childcare services). Therefore, the proposed Project would not induce population growth that could affect service ratios, response times, or other performance objectives for public services.

The ART system would increase connectivity in downtown Los Angeles and provide direct linkages to major residential, employment, and tourist destinations, such as LAUS, El Pueblo/Olvera Street, Chinatown, Los Angeles State Historic Park, Dodger Stadium, and Elysian Park. The Project Study Area includes a population of which approximately 25 percent of the residents in the Project Study Area utilize either public transportation or walking for commuting to work. As discussed in Chapter 2, Project Description, Dodger Stadium is one of the region's most visited venues; however, there are no permanent transit connections to the venue. The vast majority of visitors drive their personal vehicles to access the venue. These vehicles create congestion on the surface streets, throughout the surrounding communities, and on the nearby freeways. As the region's population grows and resulting travel needs continue to increase, the local and regional roadway system is likely to experience greater congestion. When complete, the travel time from LAUS to Dodger Stadium would be approximately 7 minutes during peak operations (games/events at Dodger Stadium). Approximately 20 percent of visitors could take aerial transit connected to Metro's regional transit system. By creating a high-quality and high capacity rapid transit connection between LAUS and Dodger Stadium, the proposed Project would provide a more viable choice in making a trip to a Dodger game or event at the stadium.

With Metro's existing and planned expansion of its transit system, coupled with other providers such as Metrolink, Amtrak, and other municipal bus operators whose services all converge at LAUS, the proposed Project provides the opportunity for anyone in the Los Angeles County region to access Dodger Stadium via public transit. While other transit projects in general could induce growth at the regional scale by focusing on faster commute times, thus enticing more widespread residential options, the specific transit needs met by the proposed Project address the issue of regional accessibility and improved efficiency to visiting Dodger Stadium and provide a first/last mile transit connection to Dodger Stadium for existing residents, workers, and visitors to Los Angeles. It is unlikely that this benefit would result in construction of new housing in the region, and therefore indirectly induce growth.

On a local scale, the proposed Project would link residents to the Dodger Stadium property and enhance community connectivity. The ART system would increase connectivity in downtown Los Angeles and provide direct linkages to major residential, employment, and tourist destinations. By facilitating access to existing transit systems and increasing connectivity in downtown Los Angeles, the proposed Project may increase the attractiveness of the corridor for living and conducting business, resulting in increased activity near the proposed stations. However, such indirect impacts on adjacent communities would generally be positive. Given that the area in the City where the proposed Project alignment is located is a densely urbanized and there are existing planned developments for the area, this would be a benefit for existing and planned uses in the area.

The proposed Project would support the City's goals from the Housing Element, Central City Community Plan, and Downtown Los Angeles 2040 Draft Community Plan of providing transit near residential development. Nevertheless, the proposed Project is not anticipated to substantially generate new development beyond what is already planned within the area. As such, the proposed Project is not anticipated to stimulate development to a level inconsistent with applicable planned local land use designations. Should any future development occur in the surrounding proposed Project area, as discussed in Section 3.11, Land Use and Planning, such development would be subject to additional environmental analysis under CEQA, and would be required to comply with City of Los Angeles Community Plan policies encouraging development near transit stations and corridors. Operation of the proposed Project would not induce substantial population growth either directly or indirectly. Impacts related to induced population growth during operation of the proposed Project would be less than significant.

5.5 OTHER ADDITIONAL EVALUATIONS

In response to stakeholder feedback, Section 5.5 is prepared in accordance with Section 15123(b)(2) of the CEQA Guidelines to evaluate other areas of controversy known to the Lead Agency.

5.5.1 Kites

A comment in response to the NOP identified flying kites in Los Angeles Historic Park as a known recreational activity of park users. As the proposed Project alignment traverses over the southwestern corner of the Los Angeles State Historic Park, there could be potential to reduce the recreational area available for flying kites. However, the proposed Project alignment is adjacent to, and crosses over the existing Metro L Line (Gold), a light-rail train with an overhead catenary system, which is used to provide the trains with power. In addition, the proposed Project alignment also traverses above the western pedestrian walkway within the Los Angeles State Historic Park, which has existing trees along both the west and east side of the walkway. Both of these existing conditions limit the kite flying area along the western edge of the Los Angeles State Historic Park. Due to the location of the proposed Project alignment, which traverses over both of these uses, the proposed Project does not significantly reduce the safe kite flying area within the Los Angeles State Historic Park.

5.5.2 Special Events at the Los Angeles State Historic Park

The Los Angeles State Historic Park General Plan Interpretation Guideline 8 is to "[c]reate spaces throughout the park that foster personal reflection, civic engagement, and a variety of modes of public storytelling – from plays and poetry readings to musical performances and movies, as well as educational and interpretive programming, cooking, festivals and parades, demonstrations (music, dance, living history, theatre, etc.), cultural events, workshops, farmer's markets, contests, nature-viewing, and gardening." As described in Section 3.16, Parks and Recreational Facilities, Los Angeles State Historic Park can host large events with up to 25,000 people and smaller monthly events of 500 to 5,000 people,[36] including concerts, movie screenings, and festivals.

[36] California Department of Park and Recreation. 2012. Los Angeles State Historic Park Master Plan Development Plan Phase I Implementation.

The Chinatown/State Park Station would be located adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park. The southern portion of the station would be located on City ROW, while the northern portion of the station would be integrated into the southern boundary of the Los Angeles State Historic Park. The station would be approximately 200 feet long, 80 feet wide, and 98 feet tall at its tallest point, with the passenger boarding platform approximately 50 feet above-grade. Access to the boarding platform would be from the mezzanine via elevators and stairs. Comprised of three levels, elevators and stairs from the ground level would lead up to a mezzanine, 27 feet above-grade, and ramps for the queuing area would lead up to the boarding platform, which is 50 feet above ground. The station would have a footprint of 2,195 square feet in the park, and the station canopy would have an overhang of 9,320 square feet over the park. The proposed Project alignment crosses over the westernmost edge of the Los Angeles State Historic Park, adjacent to the existing Metro L Line (Gold) and the associated overhead catenary system. Figure 5-2 depicts the location of the Chinatown/State Station and the aerial rights over the park.

Figure 5-2: Aerial Rights over the Los Angeles State Historic Park

As described in Section 2, Project Description, the proposed Project would meet and anticipates exceeding the ANSI Standard B77.1 requirements for clearances. The proposed Project's required aerial clearance width over the Los Angeles State Historic Park would be 53 feet 2 inches wide with an area of approximately 59,470 square feet, plus an Additional Separation Buffer. As shown in Figure 5-2, more than 30 of the park's 32 acres are not beneath the proposed Project's alignment. Therefore, the ability to use the vast majority of the park for special events will not be affected.

ANSI B77.1 requires the following vertical clearances: vehicles – five feet; vegetation or terrain – five feet; at-grade where pedestrians are present – eight feet; buildings – five feet; and roadways or railways – to be determined with the authority having jurisdiction. The proposed Project's vertical clearance to the bottom of the cabins would range from 26 to 53 feet with an average of approximately 40 feet from ground level over the park. Given these required clearances and the height at which the cabins would travel over the Los Angeles State Historic Park, it will continue to be possible for most events to take place both under the majority of the alignment within the park and adjacent to the alignment. Aside from the tallest types of event uses (e.g., stages with tall screens), which could be sited directly adjacent to the alignment, all other event uses, such as food trucks, production areas, and seating areas, can occur directly beneath the alignment. In addition, as as depicted on Figure 5-3, according the Los Angeles State Historic Park Bike and Pedestrian Bridge Feasibility Study, the Project alignment is located outside of typical locations for event stages. Moreover, Figure 5-4 depicts potential temporary special event stage, structures, and use locations that the Los Angeles State Historic Park has made available for special events within the park. However, the proposed Project could affect the ability to use those areas for specific special event structures. Coordination as to operation of special events at the Los Angeles State Historic Park and the proposed Project are anticipated to be be addressed in operational agreements related to the park.

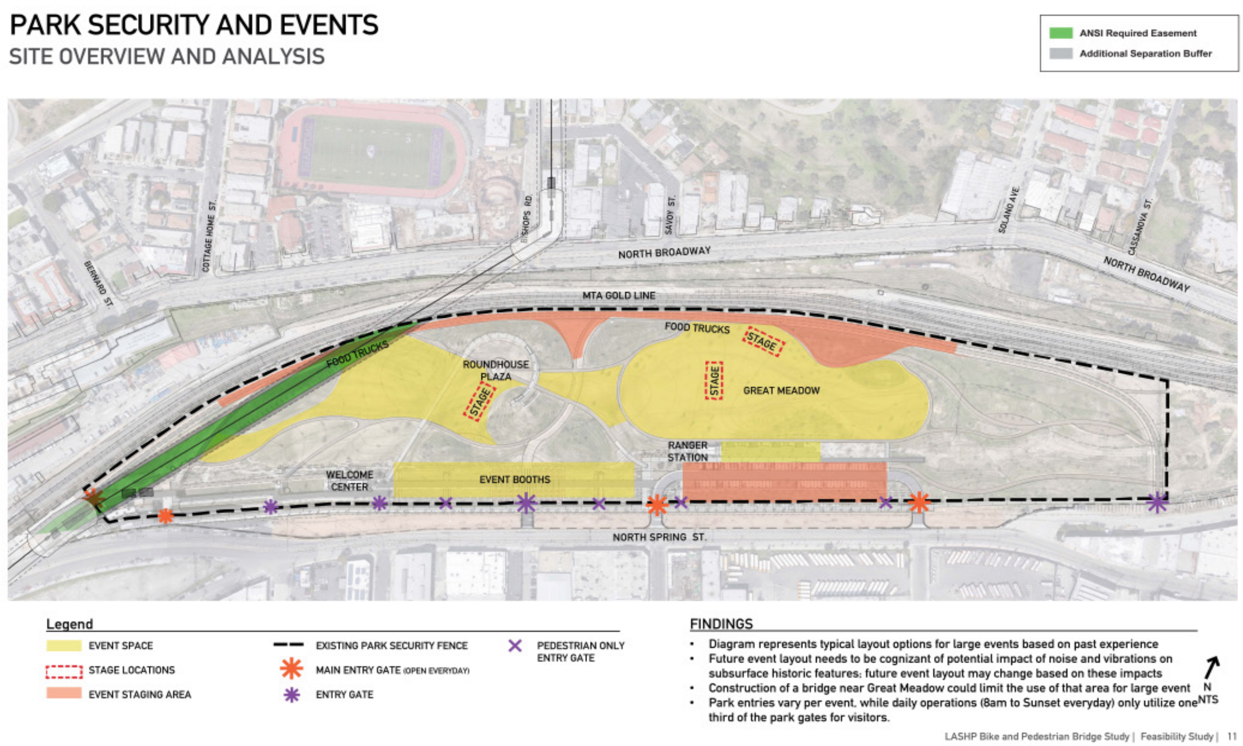


Figure 5-3: Typical Locations for Event Stages and Screens at the Los Angeles State Historic Park with Proposed Project Alignment

Figure 5-4: Diagram of Potential Temporary Special Event Stage and Use Locations within the Los Angeles State Historic Park with Proposed Project Alignment

Due to the location of the proposed Project alignment, which crosses over a small portion of the park not typically used for screens and stages, and because events can still take place under the majority of the proposed Project alignment, the proposed Project does not significantly reduce the event space area within the Los Angeles State Historic Park.

5.5.3 Location of Alameda Station

The Project Sponsor considered several locations for the station at or near LAUS, including on sites Metro had identified in 2017 at or near Union Station as opportunities for private transit-oriented development on Metro-owned property. Three general locations for the station were considered, including in the vicinity of Union Station's East Portal, to the west of Union Station's Amtrak and Metrolink tracks at Union Station's terminal, and within the area where Alameda Station is currently proposed, over Alameda Street ROW.

After studying numerous configurations within these three areas, the Alameda Street location was chosen for further examination and consideration because it maximized the proposed alignment over public ROW and publicly owned properties compared to the other studied areas, creating a convenient transit system that will serve a large spectrum of local and potential regional passengers with minimum intrusion to surrounding private properties.

After choosing the Alameda Street area for a potential station location to begin the proposed alignment, a total of five locations along Alameda Street for a potential station were also considered and evaluated based on their connectivity and accessibility, public safety, proximity to public, pedestrian plazas and open space, as well as potential for impacts to historic and cultural resources. The five total potential station locations are shown in Figure 5-5.

The precise location of the proposed Project's Alameda Station was selected because it offers a safe and convenient pedestrian connection to and from the Union Station passenger terminal and adjacent uses, minimal street crossings to avoid vehicular and pedestrian conflicts, direct access to public space at El Pueblo's Placita de Dolores and the planned Union Station Forecourt, as well as other public, pedestrian plazas, and open space for passenger gathering, and clear visibility to and from both El Pueblo and Union Station to facilitate wayfinding. The location would also minimize potential impacts to historic and archaeological resources. The Alameda Station location also is compatible with Metro's existing plans for the LAUS Forecourt and Esplanade Improvements Project.

The other four potential station locations were not selected due to key constraints related to connectivity and accessibility, public safety, proximity to public, pedestrian plazas and open space, potential for impacts to historic and cultural resources, compatibility with surrounding buildings and uses, and ease of transit connections.

Additional information regarding locations for the station at or near LAUS and the resulting alignment are discussed in greater detail in Section 4, Alternatives.

5.5.4 Location of Chinatown/State Park Station

Several locations along Spring Street for a station or junction at the Los Angeles State Historic Park were considered and not carried forward for further examination. These locations were not carried forward for further examination because they required either a larger footprint within the Los Angeles State Historic Park, would potentially require the acquisition of private properties and aerial rights for properties along Spring Street, would potentially conflict with the proximity to Metro's L Line (Gold), or would eliminate transit access to the Park, Mission Junction, Los Angeles River, and North Broadway, among other technical and engineering considerations that may render the locations technically infeasible. Ultimately, the proposed Project's Chinatown/State Park Station location was chosen over the other potential locations because it minimized the proposed Project's potential footprint within the Los Angeles State Historic Park and impacts to neighboring properties while maintaining transit access to the Park and surrounding communities.

5.5.5 Heliports

For purposes of this Draft EIR, the checklist questions contained in Appendix G of the CEQA Guidelines have been utilized as the thresholds of significance. In accordance with Appendix G of the CEQA Guidelines, the consideration of impacts for projects located within the vicinity of a private airstrip or an airport land use plan, or within two miles of a public airport or public use airport, are discussed in Section 3.9, Hazards and Hazardous Materials, and Section 3.13, Noise. As discussed in these sections, the proposed Project alignment is not located within an area covered by an airport land use plan, nor within two miles of a public airport.

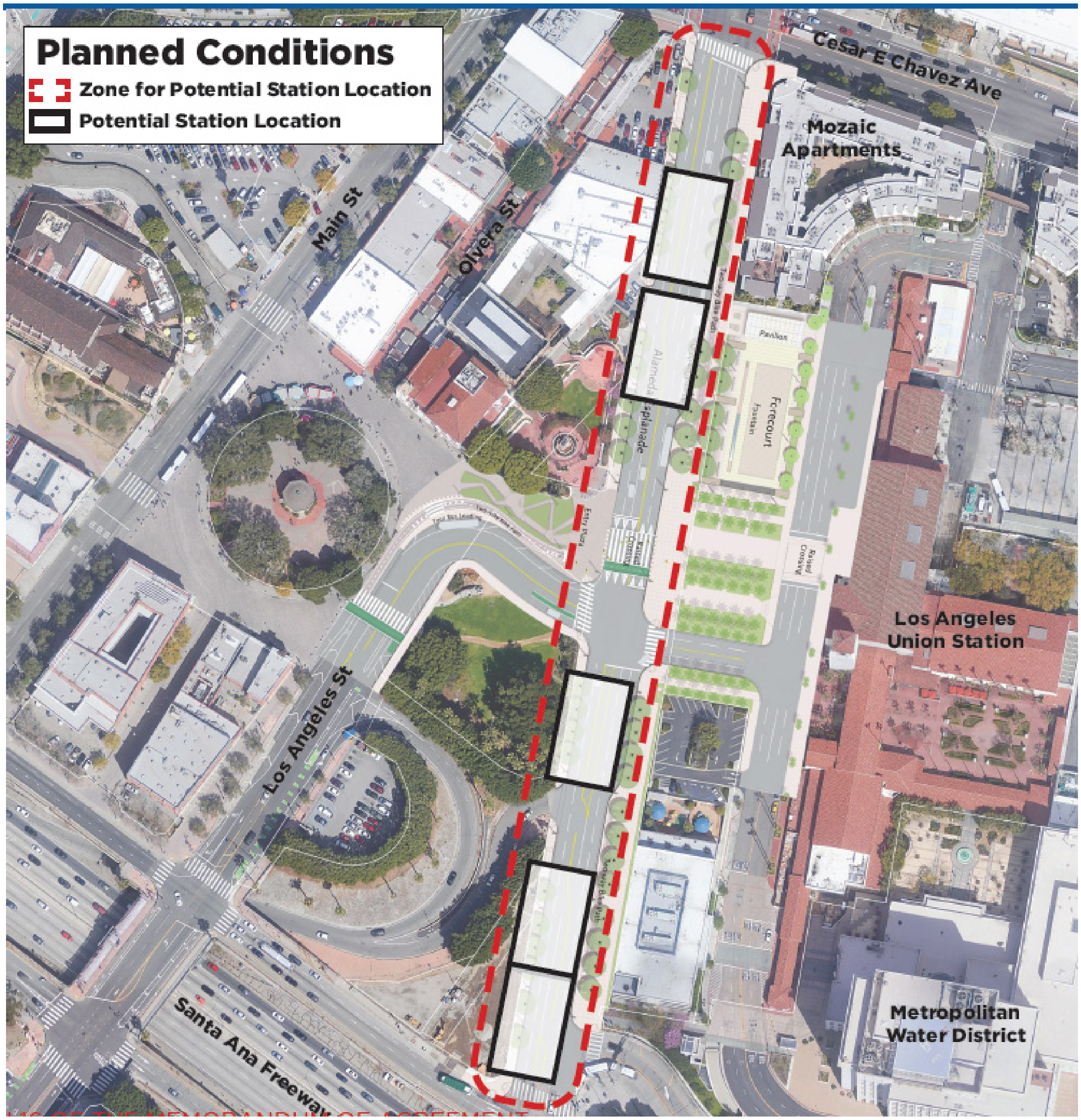


Figure 5-5: Potential Alameda Station Locations

However, there are 23 heliports within two miles of the Project area, as listed in Table 5-6. Of the 23 heliports, seven are publicly-owned and 16 are privately-owned. Except for the LADWP heliport, all of the publicly-owned heliports are located within 0.5-miles of the Project alignment. One emergency response heliport, the LAPD Hooper Heliport, is located approximately 0.45 miles east of the proposed Alameda Station, at the Los Angeles Police Air Support Division office at 555 Ramirez Street Space 475.

Table 5-6: Heliports Within Two Miles of The Proposed Project Alignment

Heliport	Location	Ownership	Distance to Project Alignment
Jay Stephen Hooper Memorial Heliport	555 Ramirez Street	Publicly-owned City of Los Angeles	0.45 miles east of the proposed Alameda Station
LAPD Hooper Heliport	555 Ramirez Street	Publicly-owned City of Los Angeles	0.45 miles east of the proposed Alameda Station
Metro Water District Heliport	700 Alameda Street	Privately-owned Metro Water District of So CA	0.15 miles south of the proposed Alameda Station
LA County Men's Sheriff's Center Jail Heliport	498 Bauchet Street	Publicly-owned Los Angeles County	0.43 miles east of the proposed Alpine Tower
Department of Water & Power Los Angeles Heliport	111 North Hope Street	Publicly-owned Los Angeles Dept of Water & Power	0.69 miles west of the proposed alignment between Alameda Station and Alameda Tower
Edward Roybal Federal Building Heliport	300 North Los Angeles Street	Publicly-owned US Government (GSA)	0.27 miles south of the proposed Alameda Station
Bank of America Data Center Heliport	1000 West Temple Street	Privately-owned Bank of America	0.88 miles west of the proposed alignment between Alameda Tower and Alpine Tower
Los Angeles City Hall East Heliport	200 North Main Street	Publicly-owned Los Angeles City Fire Dept	0.35 miles southwest of the proposed Alameda Station
Caltrans District 7 Heliport	100 South Main Street	Publicly-owned California Dept of Transportation	0.48 miles southwest of the proposed Alameda Station
Hotel New Otani Los Angeles Heliport	120 South Los Angeles Street	Privately-owned East West Development Corp	0.42 miles southwest of the proposed Alameda Station
The Westin Bonaventure Hotel Heliport	404 South Figueroa Street	Privately-owned Los Angeles Bonaventure Co	1.08 miles southwest of the proposed Alameda Station

Table 5-6: Heliports Within Two Miles of The Proposed Project Alignment

Heliport	Location	Ownership	Distance to Project Alignment
Biltmore Hotel Heliport	506 South Grand Avenue	Privately-owned The Millenium Biltmore Hotel	1.05 miles southwest of the proposed Alameda Station
City National Plaza Heliport	515 South Flower Street	Privately-owned FSP-South Flower Associates LLC	1.15 miles southwest of the proposed Alameda Station
City National Bank Heliport	606 South Olive Street	Privately-owned 606 Olive, LLC	1.13 miles southwest of the proposed Alameda Station
K & T 660 Figueroa Partners Heliport	660 South Figueroa Street	Privately-owned K & T 660 Figueroa Partners	1.34 miles southwest of the proposed Alameda Station
Los Angeles County/USC Medical Center Heliport	1200 North State Street	Privately-owned Los Angeles County/Medical Center	1.64 miles east of alignment between Alameda Station and Alameda Tower
Sunset-Glendale Heliport	1910 West Sunset Blvd	Privately-owned Intl Church Foursquare Gospel	1.35 miles northwest of Dodger Stadium Station
Good Samaritan Hospital Heliport	1225 Wilshire Blvd.	Privately-owned Good Samaritan Hospital	1.57 miles west of Alameda Station
Chase Plaza Heliport	801 South Grand Avenue	Privately-owned Shuwa Invest. Corp.	1.43 southwest of Alameda Station
Garland Center Heliport	1200 West 7th Street	Privately-owned HRRP Garland, LLC	1.65 miles southwest of Alameda Station
International Tower Heliport	888 South Figueroa	Privately-owned South Park Associates	1.55 miles southwest of Alameda Station
California Mart Heliport	110 East 9th Street	Privately-owned California Mart	1.52 miles southwest of Alameda Station
South Park Center Heliport	1150 South Olive Street	Privately-owned Olive/Hill Street Partners LLC	1.82 miles southwest of Alameda Station

Source: AirNav.com

The Caltrans Office of Airports is responsible for heliport permitting and inspection, and other matters related to heliports and aviation in the State of California.[37] The Office of Airports works with federal, State, and local agencies on facility, airspace, and other aviation matters; assists and guides current and prospective heliport owners, managers, and consultants with permitting,

[37] Caltrans. 2022. Helicopter Permits. Website https://dot.ca.gov/programs/aeronautics/heliport-permits. Accessed May 2022.

regulatory, and other aviation issues; and responds to State aeronautics-related requests and questions from the public.

The heights throughout the proposed Project alignment would vary. The tallest component of the proposed Project would be the Alameda Tower and Alpine Tower at 195 feet (see Chapter 2, Project Description), and the Alameda Tower under Design Use Option B at 245 feet (see Chapter 6.0, Design Use Options). Additionally, the Project Sponsor is seeking approvals from the City of Los Angeles for the proposed Project including, but not limited to, building permits and any applicable permits or clearances related to emergency access.

During the public scoping period for the Draft EIR, members of the public commented on the potential interference with heliports located in the proposed Project alignment's vicinity. While CEQA does not require the preparation of such an analysis, VMC LLC completed an airspace evaluation in response to these comments in order to determine if the proposed Project would impact helicopter operations in the area, resulting in potential air navigation hazards. This evaluation is included as Appendix O for informational purposes. The airspace evaluation concluded that the construction and operation of the proposed Project will be clear of the airspace associated with the existing heliports in the proposed Project's vicinity, resulting in no potential for air navigation hazards and, therefore, no impacts to aeronautical activity, including to heliports in the proposed Project's vicinity. Accordingly, notification to the Federal Aviation Administration (FAA) is not required for the proposed construction unless the FAA makes a specific request to the Project Sponsor. The evaluation further concluded that if the FAA requests notice of the proposed construction, a Determination of No Hazard would result because most of the heliports are higher than the proposed construction, and there is no adverse effect on the protective airspace surrounding them.

6.0 DESIGN AND USE OPTIONS

6.1 INTRODUCTION

While not proposed as part of the proposed Project, design and use options to the proposed Project have been considered in this Draft EIR to explore potential options to various Project components. Each design and use option offers a variation to the proposed Project.

Pursuant to Section 15126.6(a) of the CEQA Guidelines, an EIR shall describe a range of reasonable alternatives. This Draft EIR provides that analysis in Chapter 4.0. This Chapter 6.0 considers minor variations to the proposed Project, which qualify as design and use options instead of project alternatives.

For the proposed Project, five design and use options are considered for analysis in this chapter:

- Design Option A: Broadway Junction Shift to Avoid 451 E. Savoy
- Design Option B: Single Tower along Alameda Street
- Design Option C: Chinatown/State Park Station with Increased Height
- Use Option D: Chinatown/State Park Station as a Non-passenger Junction
- Design and Use Option E: Pedestrian Bridge at the Los Angeles State Historic Park

The five design and use options are described below, along with an analysis of their potential environmental impacts. The impact analysis is performed relative to the respective Project component of the proposed Project. For reference, the proposed Project is described in detail in Section 2.5 of the Project Description. Specifically, stations and junctions are described in Section 2.5.3, while towers are described in Section 2.5.4.

6.2 DESIGN OPTION A

6.2.1 Description

Design Option A includes a shift in the overall Project alignment between the Broadway Junction and Dodger Stadium Station to avoid aerial rights requirements over 451 E. Savoy Street. Figure 6-1 shows the proposed Project alignment. As shown in Figure 6-2 below, under Design Option A, while headed north from the Broadway Junction, the alignment would shift to be further west from 451 E. Savoy Street. This shift would result in the alignment crossing over a small portion of Cathedral High School. This Design Option includes changes to the Project components of Broadway Junction, Stadium Tower, and Dodger Stadium Station. These changes are described below.

The locations of the Stadium Tower and Dodger Stadium Station in the proposed Project were determined because they minimized construction impacts and duration, including utility relocations. In addition, the proposed location of the Dodger Stadium Station was chosen based on its proximity to Dodger Stadium.

As discussed above, the shift in the overall Project alignment between the Broadway Junction and Dodger Stadium Station was considered to minimize aerial rights requirements over 451 E. Savoy Street; however, this potential shift would result in utility relocations and additional construction durations at both the Stadium Tower and Dodger Stadium Station. To accommodate the shift at Broadway Junction, the location of Stadium Tower would be shifted north, which would result in the construction of Stadium Tower on a steeper slope than originally proposed for the proposed Project. In addition, the shift at Stadium Tower would result in utility relocations, including the relocation of a water valve and encroachment into the City's water easement in this location, as well as the potential addition of a retaining wall on the upslope. The shift at Dodger Stadium Station would also result in, the realignment of the Dodger Stadium perimeter roadway. In addition, construction of the Dodger Stadium Station at this location would require utility relocations, including relocation of a 36-inch storm drain and telecom line and encroachment into the City's water easement at this location. Moreover, construction of the Dodger Stadium Station at this location requires construction on steeper slopes and the potential addition of a retaining wall to accommodate the steeper approach to the station. The Dodger Stadium Station at this location would also require removal of additional parking spaces at the Dodger Stadium property and requires a longer walk for proposed Project passengers to travel between the Dodger Stadium Station Dodger Stadium.

Broadway Junction

The Broadway Junction would be approximately 227 feet long, 60 feet wide, and 98 feet high at its tallest point, with the platform approximately 50 feet above the ground. Figure 6-3 shows the proposed Project's location of the Broadway Junction.

Broadway Junction under Design Option A would have similar dimensions but would shift approximately four degrees to avoid aerial rights over 451 E. Savoy Street (Figure 6-4). During construction, associated roadway or sidewalk closures would be similar to the proposed Project. There would be no other construction related changes from those of the proposed Project under Design Option A at Broadway Junction.

Stadium Tower

As a result of the alignment shift mentioned above, the location of Stadium Tower would shift slightly. Compared to the proposed Project, Design Option A shifts the Stadium Tower 115 feet to the west/northwest. The tower would remain on the hillside private property north of Stadium Way between the Downtown Gate and SR-110. The proposed Project Stadium Tower location is shown in Figure 6-5, and the Stadium Tower of Design Option A is shown in Figure 6-6.

Similar to the proposed Project, the shift at Broadway Junction under Design Option A would not result in any roadway detours at Stadium Tower during construction. There would be no changes in construction equipment or quantity; however, due to additional utility relocations and shoring and pilaster at the tower, construction duration would increase. This includes up to six to eight additional weeks of utility relocations and up to four weeks of additional preparation time for shoring and pilaster. In addition, the Stadium Tower under Design Option A includes six additional three-foot diameter, 120-feet-deep piles, and an interconnecting pile cap with an associated retaining wall on the upslope. In addition, 1,090 additional cubic yards (CY) of excavation would be required, which would result in 463 additional CY of materials to be exported. This information is shown in Table 6-1.

Figure 6-1: Proposed Project Alignment

Figure 6-2: Design Option A

Figure 6-3: Proposed Project Broadway Junction Location

Figure 6-4: Design Option A Broadway Junction Location

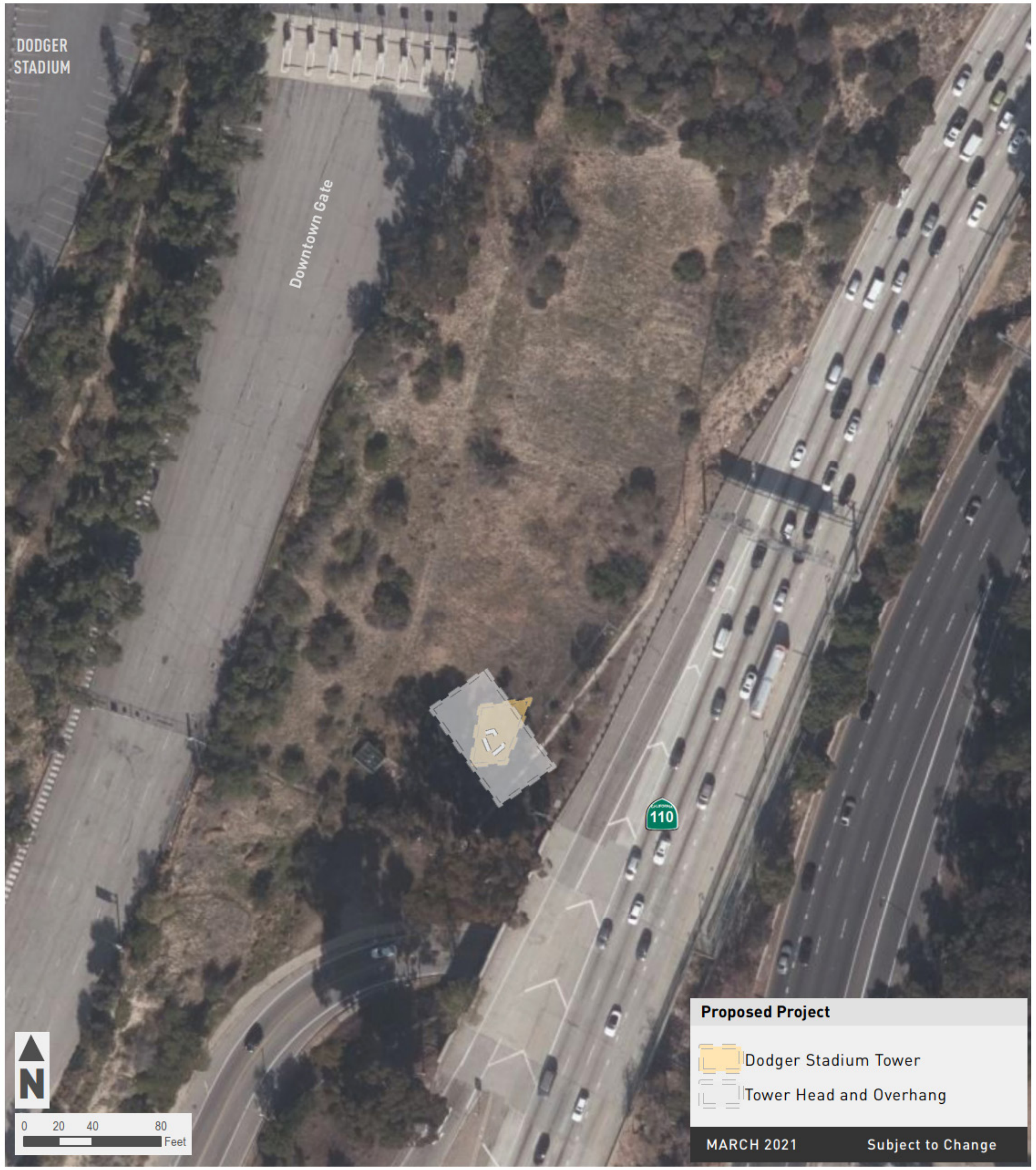


Figure 6-5: Proposed Project Stadium Tower Location

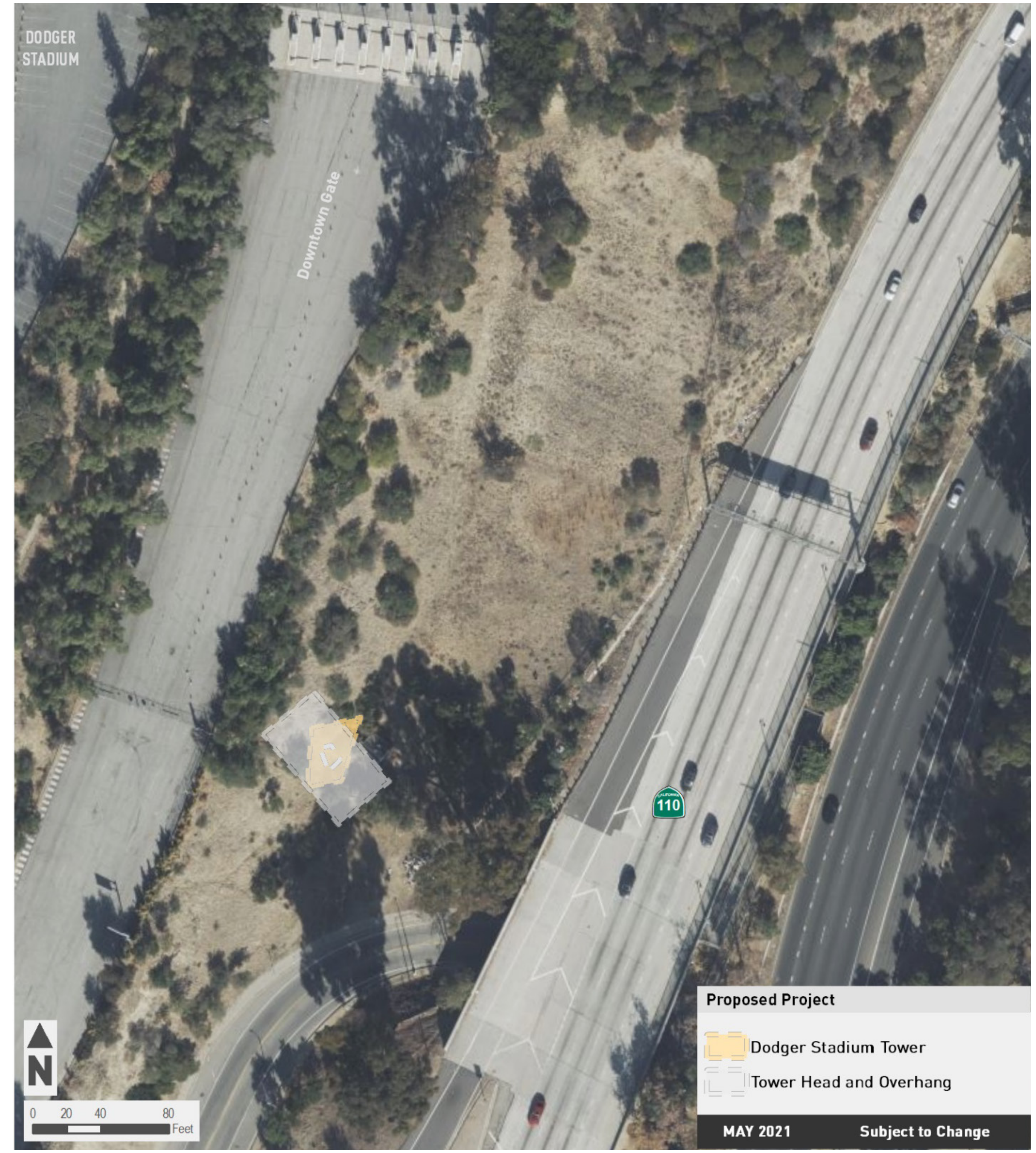


Figure 6-6: Design Option A Stadium Tower Location

This page intentionally left blank.

Table 6-1: Component Detail Comparison – Design Option A (Stadium Tower) to the Proposed Project

Component Detail	Proposed Project	Design Option A
Total Height	179 feet	174 feet
Number of Piles	22 piles	28 piles
Depth of Piles	120 feet	No change
CY of Excavation	1,286 CY	2,376 CY
CY of Export Materials	1,202 CY	1,665 CY

Under this Design Option, Stadium Tower shifts uphill, and to reflect the grade change, the height of the Stadium Tower would decrease by five feet in comparison to the proposed Project. There is no net change to the tower height above sea level, as the shift uphill would be neutralized by the decreased height of the tower. Additionally, as a result of the shift, the tower would be located on an area of 15 percent slope, would require the relocation of a water valve, and would require encroachment into a City of Los Angeles Water easement.

Dodger Stadium Station

At Dodger Stadium Station, Design Option A would require that the station be located further south than the proposed Project station design location. Figure 6-7 shows the location of Dodger Stadium Station per the proposed Project, and Figure 6-8 shows the location under Design Option A.

Under Design Option A, access to the cabin maintenance area may require the addition of a switchback and steeper approach than the proposed Project due to the steeper landscaped berm's slope at this location. The construction zone would include an increased area compared to the proposed Project due to the possible addition of the switchback; however, similar to the proposed Project, the additional construction would not result in any road closures, sidewalk closures, or detours. There would be no changes to the staging area, equipment, or equipment quantity; however, the construction duration would be extended by approximately four weeks compared to the proposed Project. While the maximum depth of drilled piles would remain the same as the proposed Project, Design Option A at Dodger Stadium would add eight three-foot diameter, 50-foot deep piles on the east-west basement walls, and the basement would be deeper below grade to accommodate the steeper slope location. As a result, during construction the depth of the site work would increase by approximately 38 feet, and the amount of excavation and materials to be exported would increase by approximately 27,492 CY. This information is shown in Table 6-2. Various utility relocations would be required, as discussed further in Section 6.2.2 below, including the relocation of a 36-inch storm drain and a telecommunications line, which would result in encroachment into a City of Los Angeles water easement.

Table 6-2: Component Detail Comparison - Design Option A (Dodger Stadium Station) to the Proposed Project

Component Detail	Proposed Project	Design Option A
Total Height	74 feet	No change
Number of Piles	64 piles	70 piles
Depth of Piles	55 feet	93 feet
CY of Excavation	44,313 CY	70,805 CY
CY of Export Materials	44,001 CY	71,493 CY

6.2.2 Impact Analysis

Design Option A does not materially differ in overall dimension, location, building material, or construction technique as compared to the proposed Project. Design Option A would have similar impacts to the proposed Project in the following CEQA impact areas: Agriculture and Forestry Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Noise; Population and Housing; Public Services; Recreation; Transportation; Tribal Cultural Resources; and Wildfire. Any mitigation measures required for the respective proposed Project components would also be required for those of Design Option A.

As noted, while Design Option A does not materially differ in overall dimension, location, building material, or construction technique as compared to the proposed Project, Design Option A would have similar impacts to the proposed Project. That said, the CEQA impact areas that may differ from the proposed Project are analyzed below.

Aesthetics, Shade/Shadow

Under Design Option A, the Broadway Junction and Dodger Stadium Station would result in similar impacts related to aesthetics as the proposed Project. Therefore, no additional analysis is required for these Project components. Stadium Tower is the only component of Design Option A that would result in impacts that differ from the proposed Project. Therefore, an additional analysis of aesthetic impacts from Stadium Tower is provided below. In addition, under Design Option A, all operational impacts would be less than significant and similar to the proposed Project. As such, additional analysis of operational impacts is not required.

Stadium Tower

Design Option A would include a slight uphill shift of the Stadium Tower, which would decrease the height of the tower by five feet compared to the proposed Project due to the placement of the tower on the higher slope. The aesthetic impacts of the Stadium Tower under Design Option A would remain similar to the proposed Project. The proposed Stadium Tower, as well as cables and cabins, would be visible to motorists on Arroyo Seco Parkway/SR-110 both on the northbound and southbound sides. As discussed in Section 3.1, Aesthetics, there are no designated scenic vistas present in the API or state- or county-designated scenic highways or eligible state scenic highways located in the Project area. However, views of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San

Figure 6-7: Proposed Project Dodger Stadium Station Location

Figure 6-8: Design Option A Dodger Stadium Station Location

This page intentionally left blank.

Bernardino Mountains are taken into consideration, which could be considered scenic to certain viewers although not officially designated as such. While the Project would include tall visual elements, views of other scenic or panoramic views would continue to be visible from more prominent view locations, such as park areas, or other sections along local streets. Overall, the proposed Project would not significantly block scenic or panoramic views. As such, the proposed height increase at the Stadium Tower would not impact scenic vistas, or scenic resources within a state scenic highway.

As with the proposed Project, construction activities would require equipment such as construction barriers and sound walls, cranes, and other appurtenances that would be visible during much of the construction period. However, due to the limited and temporary nature of view impacts during construction, the proposed Project would not have a substantial impact on prominent views.

In addition, under both the proposed Project and Design Option A, the Stadium Tower would be located in an urban area where the existing visual quality is moderate. As such, the shift of the tower location under Design Option A would represent a visual change, but would not substantially diminish the broad scenic view or views of prominent visual features, and would not conflict with applicable zoning or other regulations governing scenic quality. Further, the shift of the tower location of the Stadium Tower under Design Option A would not introduce new sources or light and glare, and no impacts with respect to light and glare would occur.

However, the uphill shift of the Stadium Tower under Design Option A could result in slightly different shading impacts compared to the Stadium Tower of the proposed Project. Shadow diagrams are provided in Appendix C. As shown in Appendix C, no shade-sensitive uses would be shaded by the proposed Stadium Tower in Winter under Design Option A. Stadium Tower would shade a small portion of the Radio Hill Gardens park located directly east of the SR-110 ROW for up to two hours at 4:00 p.m. and 5:00 p.m. in the Fall. No other shade sensitive uses would be shaded by the proposed Stadium Tower in Spring, Summer, and Fall under Design Option A. Overall, Stadium Tower would not result in the shading of shade-sensitive uses for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). As such, shadow impacts from the Stadium Tower under Design Option A would be less than significant. Therefore, similar to the proposed Project, impacts with respect to aesthetics under Design Option A would be less than significant.

Air Quality

Under Design Option A, the Broadway Junction would result in similar impacts related to air quality as the proposed Project. Therefore, no additional analysis is required for this Project component. Stadium Tower and Dodger Stadium are the only components of Design Option A that would result in impacts that differ from the proposed Project. Therefore, an additional analysis of air quality impacts from Stadium Tower and Dodger Stadium Station is provided below. In addition, under Design Option A, all operational impacts would be less than significant and similar to the proposed Project. As such, additional analysis of operational impacts is not required.

Stadium Tower and Dodger Stadium Station

Design Option A would result in an increase in the duration of construction at Stadium Tower and Dodger Stadium Station due to the proposed utility relocation and increase in concrete work at the base of Stadium Tower (six-eight weeks additional time for utility relocation and four additional weeks for shoring wall and pilaster during the Foundations and Columns phase), as well as the increased excavation at Dodger Stadium Station (additional three weeks of shoring and excavation, followed by one week of additional concrete work for the retaining wall). As such, Design Option A would generate increased criteria pollutant emissions during construction compared to the proposed Project. Similar to the proposed Project, Design Option A has the potential to generate emissions that would exceed SCAQMD air quality standards through the use of heavy-duty construction equipment, construction traffic, fugitive dust emissions, paving operation, and the application of architectural coatings and other building materials. As stated above, due to the proposed utility relocations at both Stadium Tower and Dodger Stadium Station, and the increase in concrete work at the base of the Stadium Tower, as well as the increased excavation area at Dodger Stadium Station, Design Option A could result in an increase in construction emissions.

To quantify construction emissions for the proposed Project, construction was broken down into major construction phases that are largely attributable to fuel use from off-road construction equipment and on-road vehicle trips, fugitive dust emissions from earth working activities, and VOC emissions from the application of architectural coatings and installation of asphalt pavement. Construction emissions for the proposed Project were analyzed using an estimate of the construction schedule and number of working days, as discussed in the *Los Angeles Aerial Rapid Transit Air Quality/Health Risk Assessment Technical Report* (Appendix D of this Draft EIR). It was estimated that construction of Stadium Tower would result in approximately 50 weeks of construction for the proposed Project. In addition, it was estimated that construction of Dodger Stadium Station would result in approximately 97 weeks of construction for the proposed Project.

As discussed above, Design Option A does not materially differ in overall dimension, location, building material, or construction technique as compared to the proposed Project, but Design Option A would add approximately 12 additional weeks of construction at the Stadium Tower for a total of 62 weeks of construction, as compared to 50 weeks of construction for the proposed Project. Design Option A would add an additional four weeks of construction at Dodger Stadium Station, for a total of 101 weeks of construction, as compared to 97 weeks of construction for the proposed Project. While the construction duration of the Stadium Tower and Dodger Stadium Station would increase under Design Option A, daily construction activities would be similar to the proposed Project. Construction emissions of the proposed Project, as covered in Section 3.1, Air Quality, would be well below applicable South Coast Air Quality Management District (SCAQMD) mass daily significance thresholds and localized significant thresholds (LSTs) for all criteria pollutants. The additional construction under Design Option A would result in an increase in construction emissions; however, the increase would be minimal, as Design Option A would only add an additional 12 weeks of construction at Stadium Tower and an additional four weeks of construction at Dodger Stadium Station. As such, the additional construction duration of Stadium Tower and Dodger Stadium Station under Design Option A would not contribute to an increase in construction emissions to a level that would exceed SCAQMD mass daily significance thresholds and LSTs for all criteria pollutants, as the construction emissions calculated for the proposed Project are well below significance thresholds. While Design Option A would result in increased construction emissions when compared to the proposed Project, impacts would remain less than significant overall.

All operational impacts would remain the same as the proposed Project. Therefore, similar to the proposed Project, impacts with respect to air quality under Design Option A would be less than significant.

Biological Resources

Under Design Option A, the Broadway Junction and Dodger Stadium Station would result in similar impacts related to biological resources as the proposed Project. Therefore, no additional analysis is required for these Project components. Stadium Tower is the only component of Design Option A that would result in impacts that differ from the proposed Project. Therefore, an additional analysis of biological resources impacts from Stadium Tower is provided below. In addition, under Design Option A, all operational impacts would be less than significant and similar to the proposed Project. As such, additional analysis of operational impacts is not required.

Stadium Tower

A tree inventory report was prepared (attached to Appendix C of this Draft EIR), and trees occurring along the Project alignment were inventoried for species, size, and location. The City of Los Angeles Planning Department considers all trees with trunk diameters of eight inches or greater as 'significant'. Based upon the tree inventory report, 31 significant trees[1] at the Stadium Tower location, including the fire buffer zone (as described in Section 3.20, Wildfire), for construction would be removed under the proposed Project. Using this same tree inventory report, up to approximately 85 significant trees would be removed at the Stadium Tower location under Design Option A, including the fire buffer zone. This would result in up to 54 additional significant trees being removed for construction and operation of the Stadium Tower under Design Option A. None of these inventoried trees were identified as City-ordinance protected trees.

As with the proposed Project, under Design Option A, the trees that are non-protected but are significant, would be replaced at a replacement ratio of 1:1.

Additionally, as with the proposed Project, these tree removals have the potential to impact bat roosts and nesting birds. Design Option A would implement proposed Project Mitigation Measures BIO-A (avoid and minimize project related impacts to special-status and/or rooster bat species) and BIO-B (avoid and minimize project related impacts to nesting birds).

Upon implementation of Mitigation Measures BIO-A and BIO-B listed in Section 3.4, Biological Resources, potential impacts associated with biological resources during construction of the Stadium Tower under Design Option A would be reduced to a level that is less than significant. Therefore, similar to the proposed Project, impacts with respect to biological resources under Design Option A would be less than significant with mitigation.

Cultural Resources

Under Design Option A, the Stadium Tower and Dodger Stadium Station would result in similar impacts related to cultural resources as the proposed Project, and the components of this Design Option are included within the Area of Potential Impacts (API) studied. Therefore, no additional analysis is required for these Project components. Broadway Junction is the only component of Design Option A that would result in impacts that differ from the proposed Project. Therefore, an additional analysis of cultural resources impacts from Broadway Junction is provided below. In addition, under Design Option A, all operational impacts would be less than significant and similar to the proposed Project. As such, additional analysis of operational impacts is not required.

[1] All trees considered 'significant' by the City of Los Angeles Planning Department occur on private property.

Broadway Junction

The proposed shift at the Broadway Junction under Design Option A would avoid aerial rights requirements to 451 E. Savoy Street. However, the shift at the Broadway Junction under Design Option A would cross over a portion of Cathedral High School property. As described in Section 3.5, Cultural Resources, 451 E. Savoy Street, the Charles B. Wellman Residence, and Cathedral High School, are historical resources. As such, similar to the proposed Project, Design Option A would introduce new visual features to the historical resource's setting. These additional modern features in the form of cables, cabins, and the junction would result in a change to the existing setting in the vicinity of the historical resource. However, as determined in the *Historical Resource Technical Report for the Los Angeles Aerial Rapid Transit Project* (Appendix G), the change would not constitute a significant impact on the historical resource as the existing character of the built environment in the immediate vicinity is not cohesive and the setting outside of the campus grounds does not contribute to its historical significance. Furthermore, views from within the campus boundary already include modern buildings and structures. The location of the components of Design Option A would not directly interrupt the views from the campus, nor would they impact any other important features of the historical resource's larger setting.

The proposed Project alignment is defined as the length and width of suspended above-grade cables and cabins following the position of the proposed Project components. Even though the alignment shift of Design Option A would require aerial rights over Cathedral High School, the resource would continue to convey its individual significance within the context of an institutional development, and its existing physical integrity and character-defining features would remain intact. While introducing modern features in the form of cable and cabins would result in new visual features to the historical resource's setting, the change would not constitute a significant impact. Therefore, similar to the proposed Project, impacts with respect to cultural resources for the Broadway Junction under Design Option A would be less than significant.

Energy

Under Design Option A, the Broadway Junction would result in similar impacts related to energy as the proposed Project. Therefore, no additional analysis is required for this Project component. Stadium Tower and Dodger Stadium are the only components of Design Option A that would result in impacts that differ from the proposed Project. Therefore, an additional analysis of energy impacts from Stadium Tower and Dodger Stadium Station is provided below. In addition, under Design Option A, all operational impacts would be less than significant and similar to the proposed Project. As such, additional analysis of operational impacts is not required.

Stadium Tower and Dodger Stadium Station

As discussed previously, Design Option A would result in an increase in the duration of construction due to the proposed utility relocation and increase in concrete work at the base of Stadium Tower (six-eight weeks additional time for utility relocation and four additional weeks for shoring wall and pilaster during the Foundations and Columns phase), as well as the increased excavation at Dodger Stadium Station (additional three weeks of shoring and excavation, followed by one week of additional concrete work for the retaining wall). Design Option A would add approximately 12 additional weeks of construction at the Stadium Tower for a total of 62 weeks of construction, as compared to 50 weeks of construction for the proposed Project. Design Option A would add an additional four weeks of construction at Dodger Stadium Station, for a total of 101 weeks of construction, as compared to 97 weeks of construction for the proposed Project.

As such, the demand for electricity, fuel, and natural gas would increase during construction activities in comparison to the proposed Project. However, similar to the proposed Project, the demand for energy during construction would be temporary, and in some cases would supplant electricity otherwise provided by another energy source, such as diesel generators. Construction activities would also comply with State requirements designed to minimize idling and associated emissions, which also minimizes the use of fuel. In addition, while Design Option A would result in a minimal increase in natural gas during construction when compared to the proposed Project, natural gas use during construction would be considered negligible when evaluated on a local and regional scale and would not adversely impact local or regional energy supplies or not require additional capacity.

Overall, all operational impacts under Design Option A would remain the same as the proposed Project. As discussed in Section 3.4, Energy, the temporary energy consumption associated with construction ultimately would allow for a long-term reduction in energy consumption associated with operations because the proposed Project would incorporate energy efficient features and would be designed to comply with all applicable state and local codes, including conformance with the City of Los Angeles Green Building and Low-Impact Development (LID) Ordinances.

While Design Option A would result in increased energy consumption during construction when compared to the proposed Project, impacts would remain less than significant overall. Therefore, similar to the proposed Project, impacts with respect to energy resources under Design Option A would be less than significant.

Geology and Soils

Under Design Option A, the Broadway Junction would result in similar impacts related to geology and soils as the proposed Project. Therefore, no additional analysis is required for this Project component. In addition, under Design Option A, all operational impacts would be less than significant and similar to the proposed Project. As such, additional analysis of operational impacts is not required.

Stadium Tower

As described above, under Design Option A, Stadium Tower would shift uphill and would add six additional three foot diameter, 120 feet deep piles, and an interconnecting pile cap with an associated retaining wall.

As with the proposed Project, the Stadium Tower of Design Option A would have the potential to impact geology and soils, including impacts related to earthquake-induced slope failure, lateral spreading, subsidence, liquefaction, collapse during grading and construction, expansive soils and soil corrosivity, differential settlement, other potential ground failures induced by the tower, and paleontological resources. However, similar to the proposed Project, Design Option A would be constructed in accordance with applicable standards, requirements, and building codes, which would ensure structural integrity and safe construction. Specifically, Design Option A would also be required to comply with all applicable federal, state, regional, and local regulations including the National Pollutant Discharge Elimination System (NPDES) General Construction Permit, City of Los Angeles LID Ordinance, the City of Los Angeles Municipal Code, and all other applicable regulations for construction activities that would be in place prior to the start of construction activities and during construction. Mitigation Measures GEO-A (prepared a site-specific final geotechnical report) and GEO-B (prepare a paleontological resource monitoring and mitigation plan (PRMMP)) would also be implemented.

Upon implementation of Mitigation Measures GEO-A and GEO-B listed in Section 3.7, Geology and Soils, potential impacts associated with geology and soils during construction of the Stadium Tower under Design Option A would be reduced to a level that is less than significant. Therefore, similar to the proposed Project, impacts with respect to geology and soils under Design Option A would be less than significant with mitigation.

Dodger Stadium Station

As described above, under Design Option A, the depth of the site work at Dodger Stadium Station would increase by approximately 38 feet, and the amount of excavation and materials to be exported would increase by approximately 27,492 CY.

As with the proposed Project, the Dodger Stadium Station of Design Option A would have the potential to impact geology and soils, including impacts related to earthquake-induced slope failure, lateral spreading, subsidence, liquefaction, collapse during grading and construction, expansive soils and soil corrosivity, differential settlement, other potential ground failures induced by the station, and paleontological resources. However, similar to the proposed Project, Design Option A would be constructed in accordance with applicable standards, requirements, and building codes, which would ensure structural integrity and safe construction. Design Option A would also be required to comply with all applicable federal, state, regional, and local regulations including the National Pollutant Discharge Elimination System (NPDES) General Construction Permit, City of Los Angeles LID Ordinance, the City of Los Angeles Municipal Code, and all other applicable regulations for construction activities that would be in place prior to the start of construction activities and during construction. Mitigation Measures GEO-A (prepared a site-specific final geotechnical report) and GEO-B (prepare a paleontological resource monitoring and mitigation plan (PRMMP)) would be implemented.

Upon implementation of Mitigation Measures GEO-A and GEO-B listed in Section 3.7, Geology and Soils, potential impacts associated with geology and soils during construction of the Dodger Stadium Station under Design Option A would be reduced to a level that is less than significant. Therefore, similar to the proposed Project, impacts with respect to geology and soils under Design Option A would be less than significant with mitigation.

Greenhouse Gas Emissions

Under Design Option A, the Broadway Junction would result in similar impacts related to greenhouse gas emissions as the proposed Project. Therefore, no additional analysis is required for this Project component. In addition, under Design Option A, all operational impacts would be less than significant and similar to the proposed Project. As such, additional analysis of operational impacts is not required.

Stadium Tower and Dodger Stadium Station

As discussed previously, Design Option A would result in an increase in the duration of construction due to the proposed utility relocation and increase in concrete work at the base of Stadium Tower (six-eight weeks additional time for utility relocation and four additional weeks for shoring wall and pilaster during the Foundations and Columns phase), as well as the increased excavation at Dodger Stadium Station (additional three weeks of shoring and excavation, followed by one week of additional concrete work for the retaining wall). Design Option A would add approximately 12 additional weeks of construction at the Stadium Tower for a total of 62 weeks of construction, as compared to 50 weeks of construction for the proposed Project. Design Option A would add an additional four weeks of construction at Dodger Stadium Station, for a total of 101 weeks of construction, as compared to 97 weeks of construction for the proposed Project. As such, construction of Design Option A would increase GHG emissions.

As discussed in Section 3.6, Greenhouse Gas Emissions, the proposed Project would result in an overall decrease from existing conditions by 6,375 MT CO2e/yr. The additional construction under Design Option A would result in an increase in GHG emissions during construction; however, the increase would be minimal, as Design Option A would only add an additional 12 weeks of construction at Stadium Tower and an additional four weeks of construction at Dodger Stadium Station. As such, the additional construction duration Stadium Tower and Dodger Stadium Station under Design Option A would not contribute to a significant increase in GHG emissions because, as the net GHG emissions calculated for the proposed Project would still represent a reduction compared to existing conditions. Therefore, GHG emissions during construction under Design Option A would still remain less than existing conditions and be less than significant.

In addition, as with the proposed Project, Design Option A is proposed to provide safe, zero emission, environmentally friendly, and high-capacity transit connectivity in the Project area. All operational impacts would remain the same as the proposed Project. Design Option A would also be consistent with all applicable GHG reduction plans, policies, and regulations, and would result in a net decrease of GHG emissions as an innovative transportation alternative that would reduce VMT and emissions compared to existing conditions.

While Design Option A would result in an increase in GHG emissions during construction as compared to the proposed Project, impacts would remain less than significant. Therefore, similar to the proposed Project, impacts with respect to GHG emissions under Design Option A would be less than significant.

Utilities and Service Systems

Under Design Option A, the Broadway Junction would result in similar impacts related to utilities and service systems as the proposed Project. Therefore, no additional analysis is required for this Project component. In addition, under Design Option A, all operational impacts would be less than significant and similar to the proposed Project. As such, additional analysis of operational impacts is not required.

Stadium Tower

As described above, Design Option A would require various utilities relocations and encroachment into a City of Los Angeles water easement at Stadium Tower. As with the proposed Project, construction activities to relocate utilities for Design Option A would adhere to the applicable state and local codes and regulations and would be conducted in coordination with the appropriate agencies, such as LADPW, LASAN, and LABOE.

As with the proposed Project, the relocation of utilities may cause an impact related to the interruption of services for the surrounding areas, and would require implementation of a Utility Relocation Plan to determine the existing utilities that will need to be relocated; plans that identify the utility infrastructure elements, including access for utility providers and easements; safety measures; measures to minimize any loss of service during utility relocations; community notification of planned outages; and preparation and approval by a licensed civil engineer. Final project designs and the Utility Relocation Plan would be coordinated with the utility providers to finalize which utilities would be relocated. The same Mitigation Measure of the proposed Project, USS-A (development of a Utility Relocation Plan) would be implemented.

Upon implementation of Mitigation Measure USS-A listed in Section 3.19, Utilities and Service Systems, potential impacts associated with utilities and service systems of the Stadium Tower under Design Option A would be reduced to a level that is less than significant. Therefore, similar to the proposed Project, impacts with respect to utilities and service systems under Design Option A would be less than significant with mitigation.

Dodger Stadium Station

As described above, Design Option A would require various utilities relocations at Dodger Stadium Station. Design Option A at Dodger Stadium Station would require the relocation of a 36-inch storm drain and a telecommunications line. It would also result in encroachment into a City of Los Angeles water easement. As with the proposed Project, construction activities to relocate utilities for Design Option A would adhere to the applicable state and local codes and regulations and would be conducted in coordination with the appropriate agencies, such as LADPW, LASAN, and LABOE.

Additionally, and as with the proposed Project, the relocation of utilities may cause an impact related to the interruption of services for the surrounding areas, and would require implementation of a Utility Relocation Plan to determine the existing utilities that will need to be relocated; plans that identify the utility infrastructure elements, including access for utility providers and easements; safety measures; measures to minimize any loss of service during utility relocations; community notification of planned outages; and preparation and approval by a licensed civil engineer. Final project designs and the Utility Relocation Plan would be coordinated with the utility providers to finalize which utilities would be relocated. The same Mitigation Measure of the proposed Project, USS-A (development of a Utility Relocation Plan) would be implemented.

Upon implementation of Mitigation Measure USS-A listed in Section 3.19, Utilities and Service Systems, potential impacts associated with utilities and services systems of the Dodger Stadium Station under Design Option A would be reduced to a level that is less than significant. Therefore, similar to the proposed Project, impacts with respect to utilities and service systems under Design Option A would be less than significant with mitigation.

6.3 DESIGN OPTION B

6.3.1 Description

In the process of selecting tower locations, the proposed Project prioritizes the use of public property and minimizes private land acquisition, and also considers the proposed Project's relationship to existing adjacent and potential future land uses. Technical considerations of tower locations also include optimizing the height of the towers and minimizing the number of towers. Additionally, the proposed Project limits the bend on the towers to less than 1.5 degrees.

In response to stakeholder feedback, who asked the Project Sponsor to assess the potential to reduce the number of towers along Alameda Street from two to one, Design Option B consists of a 50-foot overall height increase at the Alameda Tower, and the removal of Alpine Tower from the proposed Project between the Alameda Station and the Chinatown/State Park Station, as shown in Figure 6-9 below. As discussed in Chapter 2, Project Description, the proposed Project towers would be designed as monopoles, and would support the steel cables and mechanical equipment required for the proposed Project. Figure 6-10 shows the location of Alameda Tower per the proposed Project, and Figure 6-11 shows the location under Design Option B.

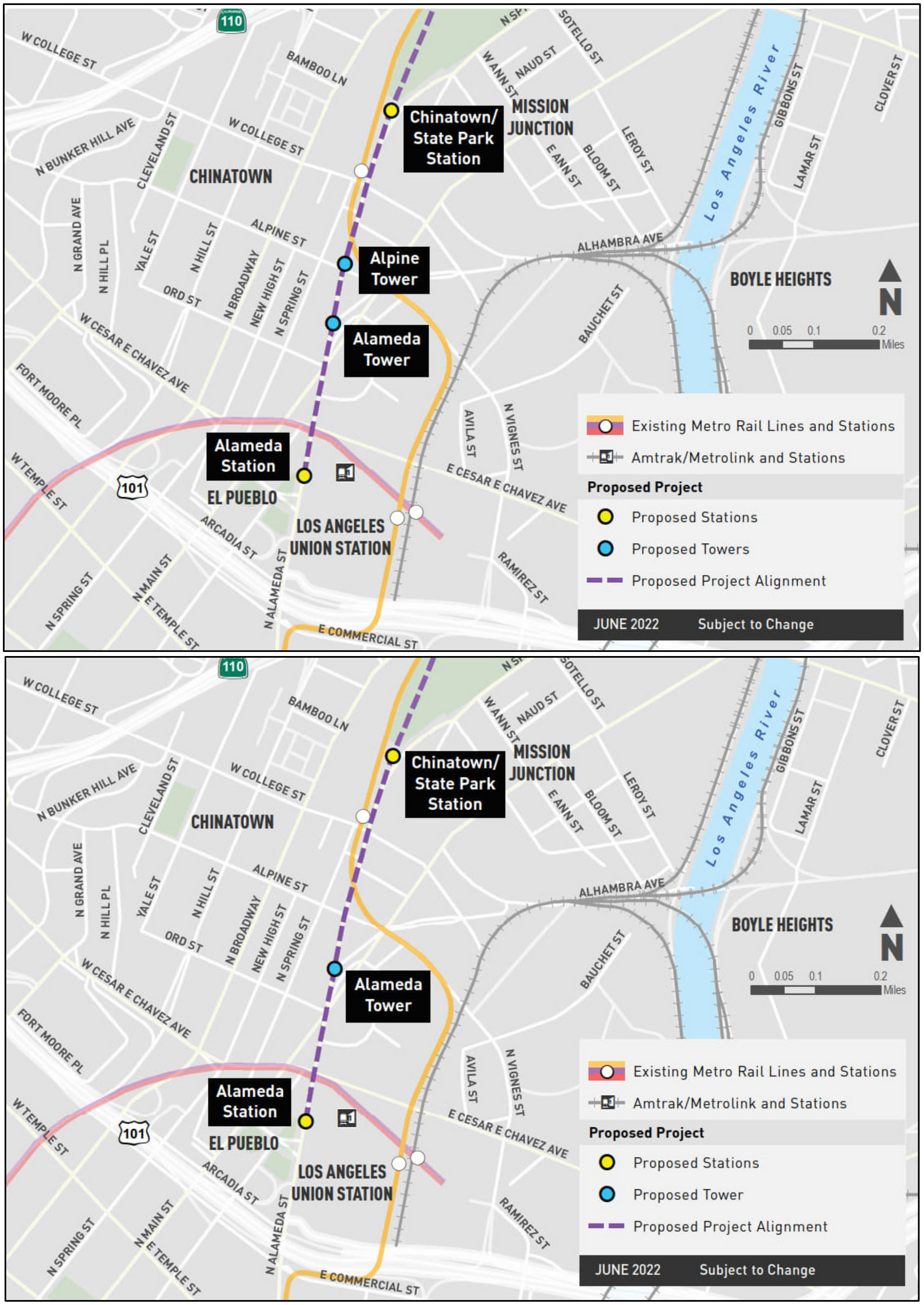


Figure 6-9: Proposed Project (top) and Design Option B (bottom)

The increased tower height coincides with an additional 30 drilled piles and an increased pile cap thickness from five feet to eight feet, as well as an additional 1,260 CY of excavation and materials to be exported. This information is shown in Table 6-3, below. Design Option B would result in an increased duration of construction in the Structural Steel/Tower Erection phase (approximately seven additional weeks), as well as an additional week of construction added to construct foundations and columns, for a total of eight additional weeks of construction activities.

Compared to the proposed Project, Design Option B would result in potential technical constraints due to the taller tower that approaches the limits of technical feasibility due to increased angle of bend at the Alameda Tower.

Additionally, Design Option B results in the need for additional private aerial rights requirements. Design Option B includes an increased bend on the Alameda Tower resulting in cables and gondola cabins in closer proximity to private property between Alameda Station to the Chinatown/State Park Station. The proposed Project aerial rights requirements are shown on Figure 6-12 and the proposed Design Option B shift and associated aerial rights requirements are shown on Figure 6-13.

As discussed above, Alpine Tower would be removed completely from the proposed Project. All other construction and operational features would remain the same as the proposed Project.

Table 6-3: Component Detail Comparison - Design Option B (Alameda Tower) to the Proposed Project

Component Detail	Proposed Project	Design Option B
Total Height	195 feet	245 feet
Number of Piles	36 piles	66 piles
Pile Cap Thickness	5 feet	8 feet
CY of Excavation	2,850 CY	4,110 CY
CY of Export Materials	2,292 CY	3,552 CY

6.3.2 Impact Analysis

Per the description above, Design Option B Project components do not materially differ in location, building material, or construction technique. Therefore, Design Option B would have similar impacts or reduced impacts to the proposed Project in the following CEQA impact areas: Agriculture and Forestry Resources; Air Quality; Biological Resources; Cultural Resources; Energy; Greenhouse Gas Emissions; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Noise; Population and Housing; Public Services; Recreation; Tribal Cultural Resources; Utilities and Service Systems; and Wildfire. Any mitigation measures required for the Alameda Tower of the proposed Project would also be required for those of Design Option B.

While the increased height of the Alameda Tower would result in an increase in the duration of construction at Alameda Tower; with removal of Alpine Tower from the proposed Project, there would be an overall net decrease in construction impacts related to air quality, energy, and GHG under Design Option B.

Figure 6-10: Proposed Project Alameda Tower Location

Figure 6-11: Design Option B Alameda Tower Location

This page intentionally left blank.

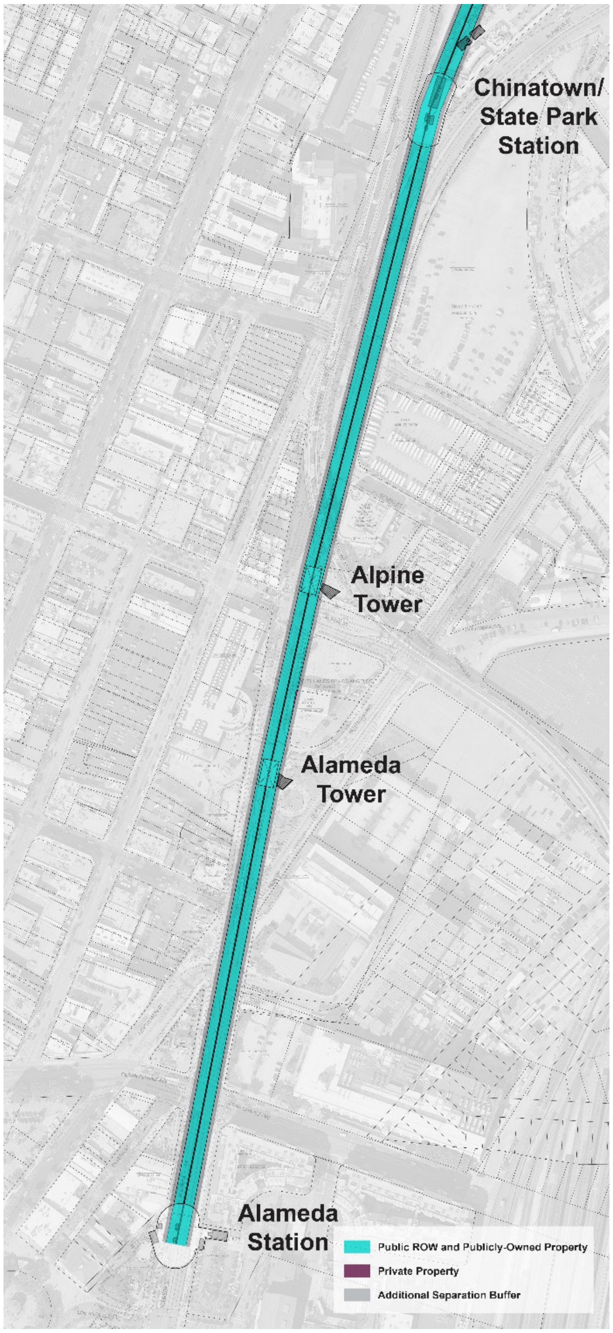


Figure 6-12: Proposed Project Aerial Easement Requirements

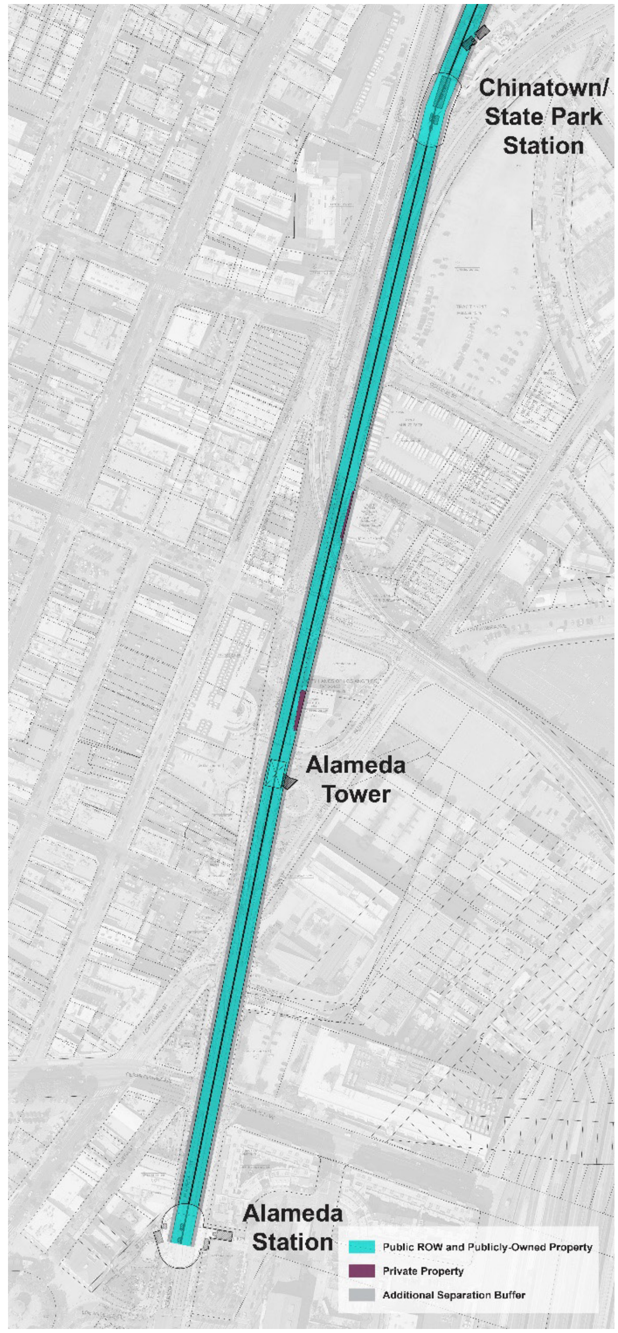


Figure 6-13: Design Option B Aerial Easement Requirements

In addition, the removal of the Alpine Tower under Design Option B would reduce construction impacts associated with noise compared to the proposed Project. As Design Option B only results in minimal changes when compared to the proposed Project, only the CEQA topic areas that may differ from the proposed Project were analyzed below.

Aesthetics

Design Option B would include a 50-foot overall height increase at the Alameda Tower and the removal of Alpine Tower from the proposed Project. Compared to the proposed Project, the removal of the Alpine Tower would reduce visual impacts at Alameda and Alpine Streets during project construction and operation, as the tower would not be constructed. Therefore, visual impacts related to Alpine Tower would not occur under Design Option B and would be reduced compared to the less than significant impacts of the proposed Project.

Similar to the proposed Project, Key Observation Points (KOPs) (also known as key views) critical or representative of the visual character of the area were prepared for Design Option B. Figure 6-14 below shows the proposed (or simulated) views of the proposed Project and Design Option B. The figure shows a pedestrian view looking north along Alameda Street from the southwest corner of Alameda Street and Main Street with the visual simulation of the proposed Project and Design Option B. In the simulated view for Design Option B, the proposed Alameda Tower, cabin, and cables in the center are the prominent features within the view. The proposed Chinatown/State Park Station is visible in the distance in the center of the view, beyond the Metro L Line (Gold) elevated ROW. The proposed Alameda Tower would be 245 feet tall under Design Option B. The Alameda Tower under Design Option B would not block any unique or scenic views, including views of the San Gabriel Mountains, to the north.

Figure 6-15 shows a pedestrian or motorist view looking south along Spring Street from just north of the northern pedestrian crosswalk at College Street with the visual simulation of the proposed Project and Design Option B. In the simulated view, the proposed aerial gondola cables and cabins are visible in the center of the view. As with the proposed Project, due to the presence of the existing elevated Metro L Line (Gold) Chinatown/State Park Station, elevated light rail guideway, and overhead catenary system, Design Option B from this view would not introduce a visual feature that contrasts substantially with existing conditions. In addition, no unique or scenic views would be blocked.

Similar to the proposed Project, construction of Alameda Tower under Design Option B would represent a change in views compared to existing conditions. However, as discussed in Section 3.1, Aesthetics, there are no designated scenic vistas present in the API or state- or county-designated scenic highways or eligible state scenic highways located in the Project area. However, views of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains are taken into consideration, which could be considered scenic to certain viewers although not officially designated as such.

Figure 6-14: Simulation Views of the Alameda Tower under the proposed Project (top) and Design Option B (bottom) – Looking North on Alameda Street from Main Street

Figure 6-15: Simulation Views of the Alameda Tower under the proposed Project (top) and Design Option B (bottom) – Looking South on Spring Street/Alameda Street from just North of College Street

As with the proposed Project, construction activities at Alameda Tower under Design Option B would require equipment such as construction barriers and sound walls, cranes, and other appurtenances that would be visible during much of the construction period. Changes to views during the construction phase would be noticeable by motorists, pedestrians, and recreationalists in the Project area. These may include views of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains, which could be considered scenic to certain viewers although not officially designated as such. However, because of the continuous movement of traffic, views from public roadways are not considered an important view location for scenic views across the urban environment. In addition, public and panoramic views of broader visual resources, such as the Transverse Ranges, including the San Gabriel and San Bernardino Mountains and downtown Los Angeles skyline, would continue to be available to pedestrians and recreationalists through street corridors and would not be impacted by construction activities. Further, because construction activities are temporary in nature, construction activities would not result in a substantial adverse effect on a scenic vista. As such, the proposed height increase at the Alameda Tower under Design Option B would not impact scenic vistas, or scenic resources within a state scenic highway.

In addition, the proposed Alameda Tower under Design Option B would be located in an urban environment where the existing visual quality is moderately low. As such, while the height increase at the Alameda Tower could present new view impacts compared to the proposed Project, the tower would be situated within an existing urban setting and would be consistent with the built environment in the area. Overall, the height increase would represent a visual change, but would not substantially diminish the broad scenic view or views of prominent visual features, and would not conflict with applicable zoning or other regulations governing scenic quality.

The increased height of the Alameda Tower would not introduce new sources or light and glare, and no impacts with respect to light and glare would occur due to the increased height. In addition, the removal of Alpine Tower would result in fewer sources of light and glare because the tower would not be developed.

The increased height of the Alameda Tower could result in additional shading. Shadow diagrams are provided in Appendix C. A small portion of the Alameda Triangle directly below the proposed tower in the northwest corner and northern portion of the property would be shaded all day in each season of the year. As with the proposed Project, a majority of the Alameda Triangle would not be shaded throughout the day in each season. Moreover, the Alameda Triangle is public right-of-way and is not considered to be a shade-sensitive use.

As shown in Appendix C, a small portion of the parcel directly below the tower in the northwest corner and northern portion of the parcel would be shaded from 9:00 a.m. to 3:00 p.m. in the Winter and also from 9:00 a.m. to 5:00 p.m. in the Spring. However, the Alameda Triangle is public right-of-way and is not considered to be a shade-sensitive use. Shadow impacts during Summer and Fall would be the same as those discussed for the Spring above. As such, Alameda Tower under Design Option B would not result in the shading of shade-sensitive uses for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). As such, shadow impacts from Alameda Tower would be less than significant. Therefore, similar to the proposed Project, impacts with respect to aesthetics for the Alameda Tower under Design Option B would be less than significant.

Geology and Soils

During construction, grading and development that would occur from implementation of Design Option B could result in additional impacts to geology and soils due to the increase in the number of drilled piles, an increased pile cap thickness from five feet to eight feet, as well as additional excavation. Although on-site seismic conditions and potential hazards would not change relative to the proposed Project, the increase in construction activity compared to the proposed Project could result in an increase of potential impacts.

As with the proposed Project, the Alameda Tower of Design Option B would have the potential to impact geology and soils, including impacts related to lateral spreading, subsidence, liquefaction, collapse during grading and construction, expansive soils and soil corrosivity, differential settlement, other potential ground failures induced by the tower, and paleontological resources. However, similar to the proposed Project, Design Option B would be constructed in accordance with applicable standards, requirements, and building codes, which would ensure structural integrity and safe construction. Specifically, Design Option B would also be required to comply with all applicable federal, state, regional, and local regulations including the National Pollutant Discharge Elimination System (NPDES) General Construction Permit, City of Los Angeles LID Ordinance, the City of Los Angeles Municipal Code, and all other applicable regulations for construction activities that would be in place prior to the start of construction activities and during construction. Mitigation Measures GEO-A (prepared a site-specific final geotechnical report) and GEO-B (prepare a paleontological resource monitoring and mitigation plan (PRMMP)) would also be implemented.

Upon implementation of Mitigation Measures GEO-A and GEO-B listed in Section 3.7, Geology and Soils, potential impacts associated with geology and soils during construction of the Alameda Tower under Design Option B would be reduced to a level that is less than significant. Therefore, similar to the proposed Project, impacts with respect to geology and soils for the Alameda Tower under Design Option B would be less than significant with mitigation.

Transportation

As with the proposed Project, Design Option B would support multimodal transportation options and a reduction in VMT. Design Option B, as with the proposed Project, would not conflict with policies of Mobility Plan 2035, the SCAG's RTP/SCS, or the Citywide Design Guidelines adopted to protect the environment and reduce VMT.

Construction of the Alameda Tower under Design Option B would increase the duration of construction. Due to the temporary nature of construction traffic associated with Design Option B (an additional eight weeks), a substantial increase in VMT would not be anticipated to result from construction. In addition, construction of the Alameda Tower under Design Option B would not result in any additional road or sidewalk closures. As with the proposed Project, construction worksites would be fenced, and lane closures and associated lane tapers, temporary advance warning signs, detour signs, etc., would be implemented in accordance with the California MUTCD and LADOT requirements to ensure that no significant temporary geometric design hazards are introduced during the construction period. Design Option B would also implement Mitigation Measure TRA-B, which would require implementation of a Construction Traffic Management Plan to ensure adequate emergency access is maintained throughout all construction activities to reduce potential impacts during construction.

In addition, similar to the proposed Project, operation of Design Option B would provide additional transit and pedestrian connections, and would result in an overall reduction in VMT, resulting in a beneficial effect on the environment. Therefore, similar to the proposed Project, impacts with respect to transportation under Design Option B would be less than significant with mitigation.

6.4 DESIGN OPTION C

6.4.1 Description

In response to stakeholder feedback, who asked the Project Sponsor to consider a taller Chinatown/State Park Station to increase the height of cabins entering and existing the station along Spring Street, Design Option C consists of a 35-foot overall height increase at the Chinatown/State Park Station. The taller station would require drill piles that are 100 feet deep, which is 20 feet deeper than the drill piles for the proposed Project. In addition, the pile cap thickness would increase from six feet to eight feet, and the maximum depth of excavation would increase by two feet. This would result in an additional 717 CY increase in the amount of excavation and a 1,396 CY increase in the amount of materials exported. Due to these changes, construction would be extended by approximately eight weeks, which would extend the closure of the small portion of the State Park that would be closed during construction. All other construction and operational features remain the same as the proposed Project. This information is shown on Table 6-4, below.

Table 6-4
Component Detail Comparison - Design Option C to the Proposed Project

Component Detail	Proposed Project	Design Option C
Total Height	98 feet	133 feet
Number of Piles	154 piles	184 piles
Depth of Drilled Piles	80 feet	100 feet
CY of Excavation	6,267 CY	6,984 CY
CY of Export Materials	4,567 CY	5,963 CY

Compared to the proposed Project, Design Option C has the potential to reduce passenger experience due to the height increase of the Chinatown/State Park Station under Design Option C, which also results in the boarding platform being raised, requiring additional vertical circulation to access and ascend the platform.

6.4.2 Impact Analysis

Per the description above, Design Option C Project components do not materially differ in location, building material, or construction technique. Therefore, Design Option C would have similar impacts to the proposed Project in the following CEQA impact areas: Agriculture and Forestry Resources; Biological Resources; Cultural Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Noise; Population and Housing; Public Services; Transportation; Tribal Cultural Resources; Utilities and Service Systems; and Wildfire. Any mitigation measures required for the respective proposed Project component would also be required for those of Design Option C.

As Design Option C only results in minimal changes when compared to the proposed Project, only the CEQA topic areas that may differ from the proposed Project were analyzed below.

Aesthetics

Design Option C would include a 35-foot overall height increase at the Chinatown/State Park Station. Similar to the proposed Project, KOPs (also known as key views) critical or representative of the visual character of the area were prepared for Design Option C. Figure 6-16 below shows a pedestrian or motorist view looking north along Alameda Street from just south of College Street with the visual simulation of the proposed Project and Design Option C.

Figure 6-17 shows a pedestrian or park patron view looking southwest towards Chinatown and downtown Los Angeles from the southwestern portion within the Los Angeles State Historic Park with the visual simulation of the proposed Project and Design Option C. In the simulated views, the proposed Chinatown/State Park Station is partially visible on the left and middleground of the view. The height of the new station under Design Option C appears slightly higher than the heights of other existing development in Chinatown from this view and the mass of the new station appears larger than other nearby structures.

Figure 6-18 shows a pedestrian or recreationalist view looking southwest towards Chinatown and downtown Los Angeles from within the park with the visual simulation of the proposed Project and Design Option C. In the simulated views, the proposed Chinatown/State Park Station is visible towards the center of the view. The associated cables and cabins are visible in the center and right of the view above Los Angeles State Historic Park. The height of the new station under Design Option C makes it more noticeable in the skyline compared to the proposed Project and existing development of other nearby structures. In addition, the proposed cables and cabins would also be raised in this area due to the increased height of the Chinatown/State Park Station under Design Option C.

The Chinatown/State Park Station would be located adjacent to Spring Street in the southernmost portion of the Los Angeles State Historic Park. The southern portion of the station would be located on a City ROW, while the northern portion of the station would be located within the southern boundary of the Los Angeles State Historic Park. The Chinatown/State Park Station under Design Option C would be approximately 133 feet tall at its tallest point. As with the proposed Project, the proposed Chinatown/State Park Station under Design Option C represents a new element to the visual environment, and its height and mass would contrast with some existing area uses, including the Metro L Line (Gold) Chinatown/State Park Station. However, as discussed in Section 3.1, Aesthetics, there are no designated scenic vistas present in the API or state- or county-designated scenic highways or eligible state scenic highways located in the Project area.

Construction activities at Chinatown/State Park Station under Design Option C would require equipment such as construction barriers and sound walls, cranes, and other appurtenances that would be visible during much of the construction period. Changes to views during the construction phase would be noticeable by motorists, pedestrians, and recreationalists in the Project area. These may include views of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains, which could be considered scenic to certain viewers although not officially designated as such. However, because of the continuous movement of traffic, views from public roadways are not considered an important view location for scenic views across the urban environment. In addition, public and panoramic views of broader visual resources, such as the Transverse Ranges, including the San Gabriel and San Bernardino Mountains and downtown Los Angeles skyline, would continue to be

Figure 6-16: Simulation Views of the proposed Project (top) and Design Option C (bottom) – Looking North on Alameda Street/Spring Street from South of College Street

Figure 6-17: Simulation Views of the proposed Project (top) and Design Option C (bottom) – Looking Southwest from Southwestern Portion of Los Angeles State Historic Park

Figure 6-18: Simulation Views of the proposed Project (top) and Design Option C (bottom) – Looking Southwest from Roundhouse within Los Angeles State Historic Park

available to pedestrians and recreationalists through street corridors and would not be impacted by construction activities. Further, because construction activities are temporary in nature, construction activities would not result in a substantial adverse effect on a scenic vista. As such, the proposed height increase at the Chinatown/State Park Station under Design Option C would not impact scenic vistas, or scenic resources within a state scenic highway.

As with the proposed Project, construction of the proposed Chinatown/State Park Station, cables, and cabins would represent new visual elements for recreationalists who seek to enjoy the large open space area and views of the downtown Los Angeles skyline. However, the cables have similar characteristics to the overhead power lines that are prevalent in views in this area. As such, the proposed cables would not significantly impact views in this area.

In addition, the Chinatown/State Park Station would be located in an urban environment where the existing visual quality is moderately low. As such, while the height increase at the Chinatown/State Park Station would present new view impacts compared to the proposed Project, the station would be situated within an existing urban setting and would be consistent with the built environment in the area. Overall, the height increase under Design Option C would represent a visual change, but would not substantially diminish the broad scenic view or views of prominent visual features, and would not conflict with applicable zoning or other regulations governing scenic quality.

Further, the increased height of the Chinatown/State Park Station under Design Option C would not introduce new sources or light and glare as compared to the proposed Project, and no impacts with respect to light and glare would occur due to the increased height.

However, the increased height of the Chinatown/State Park Station under Design Option C could result in additional shading. Shadow diagrams are provided in Appendix C. Similar to the proposed Project, the Chinatown/State Park Station under Design Option C would result in the shading of shade-sensitive uses for more than three hours between the hours of 9:00 a.m. and 4:00 p.m. Pacific Standard Time (between late October and early April) in the Winter. Small portions of the eastern and western walkways and park green space near the southern entrance of the park would be shaded by the proposed Chinatown/State Park Station in the Winter. These park-related areas would be directly adjacent to the proposed station and are also considered to be a part of the station site.

The Los Angeles State Historic Park is an urban park in a highly developed area and includes a total of approximately 32 acres of passive recreation including expansive additional areas of walkways and open green space for patrons to use. The relatively small areas of park walkways and green spaces that would receive shading from the proposed station are considered to be elements of the southern entrance to the park, but not routinely useable outdoor spaces. In addition, the outdoor seating area associated with the Cargo Snack Shack, which would receive shading for only two hours, currently includes an overhead shade canopy, so the Chinatown/State Park Station under Design Option C would not shade an uncovered outdoor seating area. As such, these impacts are not considered to be significant for these reasons. Also, the proposed Chinatown/State Park Station under Design Option C would not result in the shading of shade-sensitive uses for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). As such, shadow impacts from the Chinatown/State Park Station under Design Option C would be less than significant. Therefore, similar to the proposed Project, impacts with respect to aesthetics for the Chinatown/State Park Station under Design Option C would be less than significant.

Air Quality

As discussed above, Design Option C does not materially differ in overall location, building material, or construction technique as compared to the proposed Project, but Design Option C would result in an eight week increase in the duration of construction at Chinatown/State Park Station in the Foundations and Columns phase, due to the increase in pile depth and pile cap thickness described above. As discussed above, Design Option C would add approximately eight additional weeks of construction at Chinatown/State Park Station for a total of 97 weeks of construction, as compared to the 89 weeks of construction for the proposed Project. As such, Design Option C would generate increased criteria pollutant emissions during construction compared to the proposed Project. Similar to the proposed Project, Design Option C has the potential to generate emissions that would exceed SCAQMD air quality standards through the use of heavy-duty construction equipment, construction traffic, fugitive dust emissions, paving operation, and the application of architectural coatings and other building materials. Due to the increased excavation at the station, Design Option C could result in an increase in construction emissions.

To quantify construction emissions for the proposed Project, construction was broken down into major construction phases that are largely attributable to fuel use from off-road construction equipment and on-road vehicle trips, fugitive dust emissions from earth working activities, and VOC emissions from the application of architectural coatings and installation of asphalt pavement. Construction emissions for the proposed Project were analyzed using an estimate of the construction schedule and number of working days, as discussed in the *Los Angeles Aerial Rapid Transit Air Quality/Health Risk Assessment Technical Report* (Appendix D of this Draft EIR). It was estimated that construction of Chinatown/State Park Station would result in approximately 89 weeks of construction for the proposed Project.

As discussed above, Design Option C would add approximately eight additional weeks of construction at Chinatown/State Park Station for a total of 97 weeks of construction, as compared to the 89 weeks of construction for the proposed Project. While the construction duration of the Chinatown/State Park Station would increase under Design Option C, daily construction activities would be similar to the proposed Project. Construction emissions of the proposed Project, as covered in Section 3.1, Air Quality, would be well below applicable South Coast Air Quality Management District (SCAQMD) mass daily significance thresholds and localized significant thresholds (LSTs) for all criteria pollutants. The additional construction under Design Option C would result in an increase in construction emissions; however, the increase would be minimal, as Design Option C would only add an additional eight weeks of construction at Chinatown/State Park Station. As such, the additional construction duration of Chinatown/State Park Station under Design Option C would not contribute to an increase in construction emissions to a level that would exceed SCAQMD mass daily significance thresholds and LSTs for all criteria pollutants, as the construction emissions calculated for the proposed Project are well below significance thresholds. Therefore, construction emissions under Design Option C would still remain below significance thresholds.

Similar to the proposed Project, operation of Design Option C would not create any overall population growth; therefore, it would have no effect on the growth assumptions used in the 2016 AQMP and 2016-2040 RTP/SCS, as well as the newer 2020-2045 RTP/SCS, Connect SoCal. In addition, operation of Design Option C would not impair the region’s ability to achieve the SCAQMD’s goals for attainment of air quality standards. All operational impacts would remain the same as the proposed Project. Therefore, similar to the proposed Project, impacts with respect to air quality for the Chinatown/State Park Station under Design Option C would be less than significant.

Energy

As discussed above, Design Option C would result in an increase in the duration of construction due to the increased excavation at Chinatown/State Park Station. As discussed above, Design Option C would add approximately eight additional weeks of construction at Chinatown/State Park Station for a total of 97 weeks of construction, as compared to the 89 weeks of construction for the proposed Project. As such, the demand for electricity, fuel, and natural gas would increase during construction activities in comparison to the proposed Project. However, similar to the proposed Project, the demand for energy during construction would be temporary, and in some cases would supplant electricity otherwise provided by another energy source, such as diesel generators. Construction activities would also comply with State requirements designed to minimize idling and associated emissions, which also minimizes the use of fuel. In addition, while Design Option C would result in a minimal increase in natural gas during construction when compared to the proposed Project, natural gas use during construction would be considered negligible when evaluated on a local and regional scale and would not adversely impact local or regional energy supplies or not require additional capacity.

Overall, as discussed in Section 3.4, Energy, the temporary energy consumption associated with construction would ultimately allow for a long-term reduction in energy consumption associated with operations. All operational impacts would remain the same as the proposed Project. Therefore, similar to the proposed Project, impacts with respect to energy resources for the Chinatown/State Park Station under Design Option C would be less than significant

Geology and Soils

As discussed above, Design Option C includes drill piles that are 100 feet deep, 20-feet deeper than the drill piles for the proposed Project.

For the proposed Project, construction includes foundations and concrete work, with piles to be installed at depths between 55 feet and 125 feet below pile depth throughout the Project alignment. Bedrock in the vicinity of the proposed Project alignment lies beneath the alluvium at a depth of approximately 25 to 50 feet below the ground surface. Design Option C would have a maximum drilled pile depth of 100 feet, which would be deeper than the Chinatown/State Park Station under the proposed Project; however, it would not exceed the deepest of the drilled pile depths analyzed across the Project alignment.

The Chinatown/State Park Station is located in an area mapped as potentially subject to liquefaction (as shown in Figure 3.7-2 in Section 3.7, Geology and Soils). Liquefaction may result in ground failures such as lateral spreading, ground lurching, or seismically induced settlement. In addition, as with the proposed Project, the Chinatown/State Park Station of Design Option C would have the potential to impact geology and soils, including impacts related to lateral spreading, subsidence, liquefaction, collapse during grading and construction, expansive soils and soil corrosivity, differential settlement, other potential ground failures induced by the station, and paleontological resources. However, Design Option C would be constructed in accordance with applicable standards, requirements, and building codes, which would ensure structural integrity and safe construction. Design Option C would also be required to comply with all applicable federal, state, regional, and local regulations including the National Pollutant Discharge Elimination System (NPDES) General Construction Permit, City of Los Angeles LID Ordinance, the City of Los Angeles Municipal Code, and all other applicable regulations for construction activities that would be in place prior to the start of construction activities and during construction. Mitigation Measures GEO-A (prepared a site-specific final geotechnical report) and GEO-B (prepare a paleontological resource monitoring and mitigation plan (PRMMP)) would also be implemented.

Upon implementation of Mitigation Measures GEO-A and GEO-B listed in Section 3.7, Geology and Soils, potential impacts associated with geology and soils during construction of the Chinatown/State Park Station under Design Option C would be reduced to a level that is less than significant. Therefore, similar to the proposed Project, impacts with respect to geology and soils for the Chinatown/State Park Station under Design Option C would be less than significant with mitigation.

Greenhouse Gas Emissions

As discussed previously, Design Option C would result in an increase in the duration of construction due to increased excavation at Chinatown/State Park Station. Design Option C would add approximately eight additional weeks of construction at Chinatown/State Park Station for a total of 97 weeks of construction, as compared to the 89 weeks of construction for the proposed Project. As such, construction of Design Option C would increase GHG emissions compared to the proposed Project.

However, as discussed in Section 3.6, Greenhouse Gas Emissions, the proposed Project would result in an overall decrease from existing conditions by 6,375 MT CO^2e/yr. The additional construction under Design Option C would result in an increase in GHG emissions during construction; however, the increase would be minimal, as Design Option C would only add an additional eight weeks of construction at Chinatown/State Park Station. As such, the additional construction duration at Chinatown/State Park Station under Design Option C would not contribute to an increase in GHG emissions to a level that would exceed existing conditions, as the net GHG emissions calculated for the proposed Project are well below significance thresholds. As such, GHG emissions during construction under Design Option C would still result in a decrease from existing conditions and below significance thresholds.

In addition, as with the proposed Project, Design Option C is proposed to provide safe, zero emission, environmentally friendly, and high-capacity transit connectivity in the Project area. All operational impacts would remain the same as the proposed Project. Design Option C would also be consistent with all applicable GHG reduction plans, policies, and regulations, and would result in a net decrease of GHG emissions as an innovative transportation alternative that would reduce VMT and emissions compared to existing conditions. Therefore, similar to the proposed Project, impacts with respect to GHG emissions for the Chinatown/State Park Station under Design Option C would be less than significant.

Recreation

During construction, the proposed Project would require the closure of approximately 1.59 acres of the southern entrance to Los Angeles State Historic Park and the southernmost corner and western edge during cable installation. Design Option C would extend the duration of construction at this location by eight weeks, therefore resulting in a longer closure of this small portion of the park. However, as with the proposed Project, construction of the Chinatown/State Park Station under Design Option C would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment and would not result in adverse physical impacts associated with physically altering a government facility (i.e., parks). Therefore, similar to the proposed Project, impacts with respect to parks and recreational facilities for the Chinatown/State Park Station under Design Option C would be less than significant.

6.5 USE OPTION D

6.5.1 Description

In response to stakeholder feedback, who asked the Project Sponsor to consider no passenger access at the Chinatown/State Park Station, Use Option D includes substituting a non-passenger junction for the Chinatown/State Park Station. No other project changes are proposed under this Use Option, and all other construction and operational features would be the same, or similar to, the proposed Project.

This Use Option would have the same location, height, width, length, and architectural finish as the proposed Project. This information is shown on Table 6-5, below.

Table 6-5: Component Detail Comparison – Use Option D to the Proposed Project

Component Detail	Proposed Project	Use Option D
Total Height	98 feet	No change
Number of Piles	154 piles	No change
Depth of Drilled Piles	80 feet	No change
CY of Excavation	6,267 CY	No change
CY of Export Materials	4,567 CY	No change

As the station would be substituted with a junction, features that would be applicable to passengers would not be included in this Use Option. Use Option D would not include a mezzanine for passengers, and in addition would not include vertical circulation elements for passengers. Stairs and other elements required for the service and maintenance of the junction would remain the same as the proposed Project. All other construction and operational features remain the same as the proposed Project.

As Use Option D would not include passenger access, it would not meet a majority of the Project's objectives associated with the Chinatown/State Park Station. For example, Use Option D would not enhance community connectivity to the Los Angeles State Historic Park; or provide comparable, affordable, and accessible fare opportunities for the community and Los Angeles State Historic Park, as the Chinatown/State Park Station is the closest in proximity to Los Angeles State Historic Park.

Several comments on the Notice of Preparation requested an intermediate station closer to Chinatown to be located at the current Metro L Line (Gold) station to bring business into the commercial area and to offer another travel mode choice so as to alleviate parking problems in the area. It is also anticipated that approximately 15 percent of passengers would access the Chinatown/State Park Station under the proposed Project on game days or during events at the Los Angeles State Historic Park. However, under this Use Option, no station access would be provided to the core of Chinatown, the Mission Junction neighborhood, or the Los Angeles State Historic Park. Further, the Chinatown/State Park Station as a non-passenger junction under Use Option D would not enhance transit access to surrounding communities, including the Park, Chinatown, Mission Junction including William Mead Homes, Los Angeles River, and North

Broadway. As such, if the Chinatown/State Park Station were to operate as a non-passenger junction under Use Option D, it would not provide transit benefits to the public.

6.5.2 Impact Analysis

The Use Option D Project component does not materially differ in location, building material, construction duration, or construction technique. Use Option D would have less than or similar impacts to the proposed Project in the following CEQA impact areas: Aesthetics; Agriculture and Forestry Resources; Air Quality; Biological Resources; Cultural Resources; Energy; Geology and Soils; Greenhouse Gas Emissions; Hazards and Hazardous Materials; Hydrology and Water Quality; Mineral Resources; Population and Housing; Public Services; Recreation; Transportation; Tribal Cultural Resources; Utilities and Service Systems; and Wildfire. Any mitigation measures required for the respective proposed Project component would also be required for those of Use Option D.

Additionally, while Use Option D would include the park amenities associated with the proposed Project, it would no longer serve passengers. As a result, it would not have the added benefit of increasing transit accessibility to park and recreational facilities.

As Use Option D only results in minimal changes when compared to the proposed Project, only the CEQA topic areas that may differ from the proposed Project were analyzed below.

Land Use and Planning

As described in Section 3.16, Land Use and Planning, the proposed Project would improve the mobility and accessibility to the park for existing residents and communities in the area by providing direct linkages to the space.

Use Option D would be subject to the policies, regulations, goals, and/or objectives of the Los Angeles State Historic Park General Plan and Los Angeles State Historic Park Interpretive Master Plan at the State level, SCAG's RTP/SCS at the regional level, and the City of Los Angeles General Plan, including the Community Plans, Alameda District Specific Plan, Cornfield Arroyo Seco Specific Plan, City of Los Angeles Municipal Code and RIO District Ordinance at the local level. The goals and objectives of local plans include the use of public transportation to provide access to open space and recreation areas.

As discussed above, Use Option D would not provide passenger access. As such, Use Option D would not provide transit access to the Los Angeles State Historic Park and to nearby neighborhoods and land uses, including Chinatown, Solano Canyon, and the Mission Junction neighborhood. In addition, Use Option D would not provide expanded transit access to parks, including the Los Angeles State Historic Park and the Los Angeles River, or provide additional opportunities for recreational use for visitors and the surrounding neighborhoods. Therefore, Use Option D would not provide the added benefit of direct transit access to the Los Angeles State Historic Park and surrounding communities, and would not provide the same consistency with the Los Angeles State Historic Park General Plan as the proposed Project.

Overall, Use Option D does differ from the proposed Project, with the change from a passenger station to a junction at the Chinatown/State Park location resulting in less land use consistency compared to the proposed Project. While this Use Option would be less consistent, similar to the proposed Project, impacts with respect to Land Use and Planning under Use Option D would be less than significant with implementation of Mitigation Measure LUP-A.

Noise

As discussed previously, Use Option D includes substituting the proposed Chinatown/State Park Station for a non-passenger junction. Construction of Use Option D would generate the same type and volume of construction noise as the proposed Project, and the noise generated would affect the same sensitive receptors. Mitigation Measure NOI-A would continue to be required for Use Option D to reduce construction noise impacts from stationary equipment, and to reduce impacts to the local community related to disturbances from construction noise.

Operational noise associated with the proposed junction, cabins, and mechanical equipment would remain under Use Option D. However, compared to the proposed Project, Use Option D would generate less noise impacts during operation than the proposed Project, as Use Option D would not include passenger access. As such, operational noise impacts would be reduced under Use Option D when compared to the proposed Project. Therefore, similar to the proposed Project, impacts with respect to operation noise under Design and Use Option D would be less than significant. In addition, mitigation related to construction noise would still be required under Use Option D. Therefore, similar to the proposed Project, impacts with respect to noise under Use Option D would be significant and unavoidable, even with mitigation.

6.6 DESIGN AND USE OPTION E (THE LOS ANGELES STATE HISTORIC PARK PEDESTRIAN BRIDGE)

6.6.1 Description

The Los Angeles State Historic Park has proposed an ADA accessible pedestrian bridge that would gently slope from the central portion of the Los Angeles State Historic Park, an area known as the overlook, over the Metro L Line (Gold), and up to North Broadway (Figures 6-19, 6-20, and 6-21). While the pedestrian bridge is not proposed as part of the proposed Project, this Draft EIR includes an analysis of the pedestrian bridge for the Los Angeles State Historic Park. However, the proposed pedestrian bridge remains a standalone Design and Use Option.

The entrance to the pedestrian bridge would be located on the south side of Broadway, east of the intersection of North Broadway and Bishops Road. This pedestrian connection would provide pedestrian access to neighborhoods and land uses north of Broadway, including this portion of Chinatown, Cathedral High School, the Savoy neighborhood, Elysian Park, and the Solano Canyon neighborhood.

The Los Angeles State Historic Park General Plan and Final EIR[2], developed by the State Park and Recreation Commission, analyzed a potential bridge at this location, noting that “[a] bridge across the site connecting to North Broadway could be constructed.” The potential bridge could provide much needed access to the Park for neighborhoods at the Park’s northern boundary. As the Park’s General Plan explains, “[t]he entire northern edge of the Park, adjacent to Chinatown and the Solano Canyon neighborhoods, is bordered by the Gold Line MTA rail tracks, forming a barrier and restricting direct visitor access to the Park site along North Broadway. Planning should consider innovative solutions and partnerships with the MTA and City of Los Angeles to provide more direct and convenient park access from these adjacent neighborhoods.”

2 California State Department of Parks and Recreation, Los Angeles State Historic Park General Plan and Final Environmental Impact Report, June 2005.

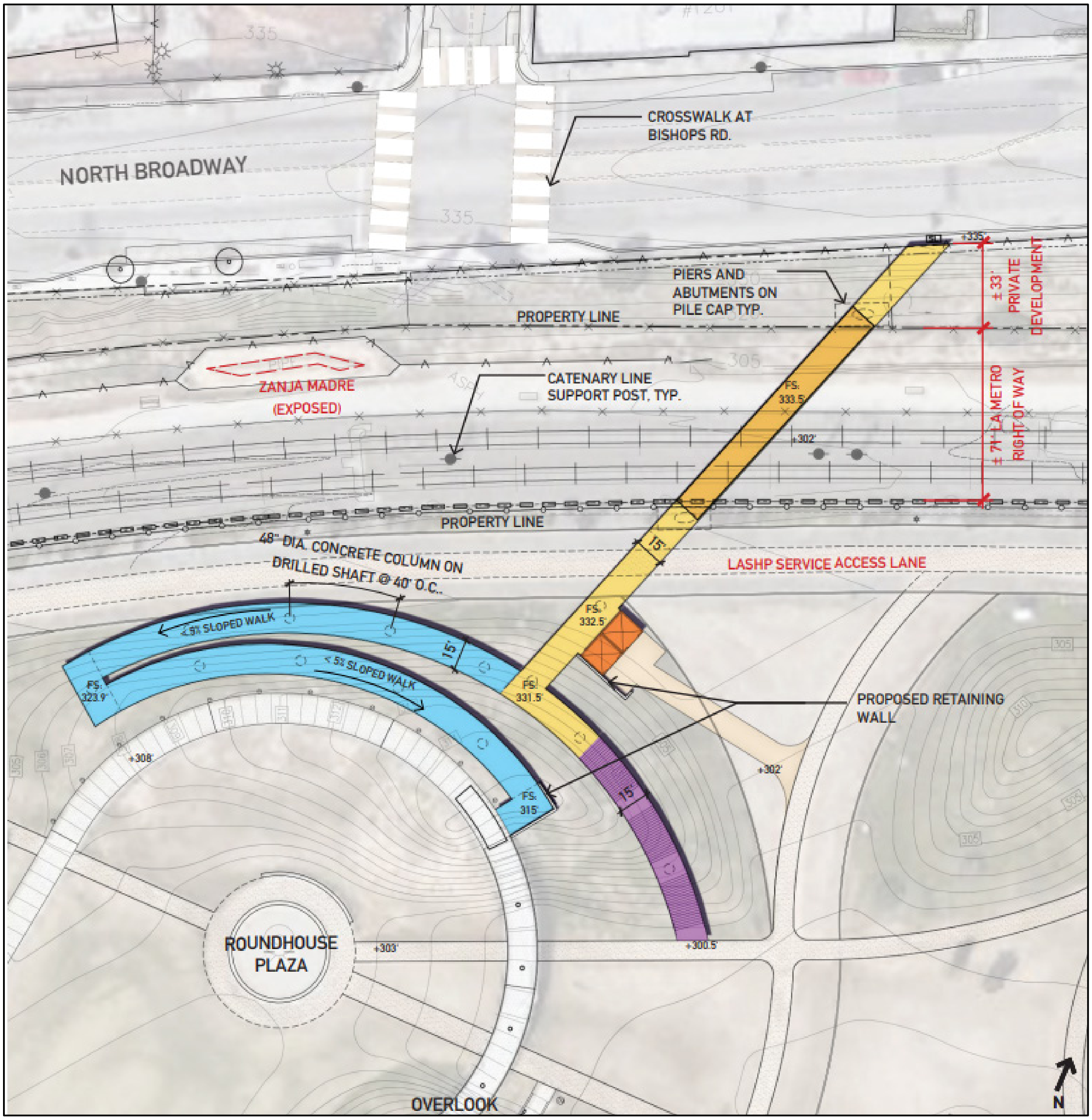


Figure 6-19: Design and Use Option E Plan View (Bridge Feasibility Study Option 1)

Figure 6-20: Design and Use Option E Birds Eye View (Bridge Feasibility Study Option 1)

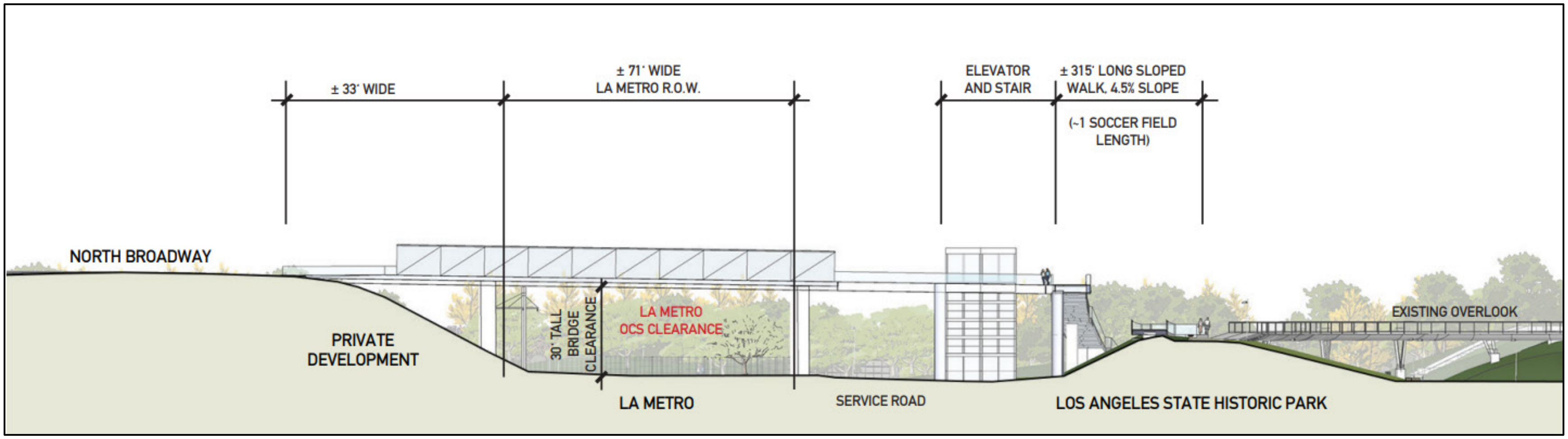


Figure 6-21: Design and Use Option E Section View (Bridge Feasibility Study Option 1)

In the California Budget Act of 2018, the Department of Parks and Recreation received $500,000 for "development of pedestrian and bicycle access from North Broadway to Los Angeles State Historic Park." Using these funds, the Department conducted the "Bike and Pedestrian Bridge Study," a feasibility study of various bridge design alternatives and locations to explore and evaluate the feasibility of providing safe pedestrian and bike access from the Chinatown and Solano Canyon Communities into the Los Angeles State Historic Park ("Bridge Feasibility Study").[3] The Bridge Feasibility Study, released on January 15, 2020, sought to articulate the issues and benefits of each location to identify preferred bridge design concepts.

Design and Use Option E analyzes a bridge design consistent with "Option 1" discussed in the Department's Bridge Feasibility Study.[4]

It is estimated that the construction of the pedestrian bridge would require approximately 60 weeks of construction, and could be constructed simultaneously with other Project components. Approximately 700 CY of excavation and 400 CY of material to be exported. Design and Use Option E would include approximately 40 two- to three-foot diameter by 70-feet deep piles. The pedestrian bridge would require the closure of approximately 100,000 sq. ft. (2.3 acres) of the park for construction. In addition, during construction, sidewalk closures would be required along North Broadway for asphalt and re-striping. A new curb extension would also be introduced along the southern edge of North Broadway and parallel parking spaces would also be removed along the roadway.

6.6.2 Impact Analysis

All CEQA impact areas are discussed below.

Aesthetics

Figure 6-20 depicts the development of a pedestrian bridge within Los Angeles Historic State Park. The pedestrian bridge would represent a change in views compared to existing conditions. However, as discussed in Section 3.1, Aesthetics, there are no designated scenic vistas present in the API or state- or county-designated scenic highways or eligible state scenic highways located in the Project area.

As with the proposed Project, construction activities would require equipment such as construction barriers and sound walls, cranes, and other appurtenances that would be visible during much of the construction period of Design and Use Option E. Changes to views during the construction phase would be noticeable by motorists, pedestrians, and recreationalists in the Project area. These may include views of the downtown Los Angeles skyline, LAUS, El Pueblo, Los Angeles State Historic Park, Arroyo Seco Parkway, Dodger Stadium, and the mountains that make up the Transverse Ranges, including the San Gabriel and San Bernardino Mountains, which could be considered scenic to certain viewers although not officially designated as such. However, because of the continuous movement of traffic, views from public roadways are not considered an important view location for scenic views across the urban environment. In addition, public and panoramic views of broader visual resources, such as the Transverse Ranges, including the San Gabriel and San Bernardino Mountains and downtown Los Angeles skyline, would continue to be available to pedestrians and recreationalists through street corridors and would not be impacted by construction activities. Further, because construction activities are temporary in nature,

3 California State Department of Parks and Recreation, Los Angeles State Historic Park Bike and Pedestrian Bridge Study, Feasibility Study, 2019.
4 Ibid.

construction activities would not result in a substantial adverse effect on a scenic vista. As such, Design and Use Option E would not impact scenic vistas, or scenic resources within a state scenic highway. As such, Design and Use Option E would not impact scenic vistas, or scenic resources within a state scenic highway.

Design and Use Option E would be consistent with Los Angeles State Historic Park General Plan, as the design of the pedestrian bridge would be consistent with the overall design guidelines and with the Park's vision and educational, recreational, and environmental objectives. The pedestrian bridge would be designed to complement the existing pedestrian pathways in this area, as well as not distract from visually distinct areas of the park. As such, Design and Use Option E would not conflict with applicable zoning or other regulations governing scenic quality.

Further, Design and Use Option E would not introduce new sources of light or glare, and no impacts with respect to light and glare would occur due the design aesthetic and build materials of the pedestrian bridge.

Design and Use Option E would result in creating new shadows, as this design option consists of an elevated pedestrian structure to connect the park over the Metro L Line (Gold) to North Broadway. Small portions of the walkways and park green space near the northwestern entrance to the Los Angeles State Historic Park would be shaded. These park-related areas would be directly adjacent to the proposed pedestrian bridge and are also considered to be a part of the pedestrian bridge site. However, the relatively small areas of park walkways and green spaces that would receive shading from the pedestrian bridge are considered to be elements of the park. Shadows would be similar in nature to those from the existing elevated walkway in this area known as the overlook. As such, these impacts are not considered to be significant for these reasons. Therefore, similar to the proposed Project, impacts with respect to aesthetics for the proposed pedestrian bridge under Design and Use Option E would be less than significant.

Agriculture and Forestry Resources

Design and Use Option E would include the development of a pedestrian bridge within Los Angeles Historic State Park. As with the proposed Project, Design and Use Option E would not conflict with or cause rezoning of forest land or timberland, result in the loss or conversion of forest land, or result in the conversion of Farmland or forest land to non-agricultural or non-forest uses, as the proposed location of the pedestrian bridge under Design and Use Option E is not in land zoned as agricultural or forest land. Therefore, similar to the proposed Project, impacts with respect to agriculture and forestry resources for the proposed pedestrian bridge under Design and Use Option E would be less than significant.

Air Quality

Design and Use Option E would result in construction of an additional Project component in comparison to the proposed Project. As such, Design and Use Option E would generate increased criteria pollutant emissions during construction. However, similar to the proposed Project, Design and Use Option E would not create any overall population growth; therefore, it has no effect on the growth assumptions used in the 2016 AQMP and 2016-2040 RTP/SCS, as well as the newer 2020-2045 RTP/SCS, Connect SoCal. In addition, Design and Use Option E would not impair the region's ability to achieve the SCAQMD's goals for attainment of air quality standards.

To quantify construction emissions for the proposed Project, construction was broken down into major construction phases that are largely attributable to fuel use from off-road construction equipment and on-road vehicle trips, fugitive dust emissions from earth working activities, and

VOC emissions from the application of architectural coatings and installation of asphalt pavement. Construction emissions for the proposed Project were analyzed using an estimate of the construction schedule and number of working days, as discussed in the *Los Angeles Aerial Rapid Transit Air Quality/Health Risk Assessment Technical Report* (Appendix D of this Draft EIR). It was estimated that construction of the proposed Project would result in a total of 25 months for construction.

As discussed above, the proposed pedestrian bridge under Design and Use Option E would take approximately 60 weeks (15 months) to construct, and could be constructed simultaneously with other Project components. While the proposed pedestrian bridge under Design and Use Option E would increase construction activities on the Project site, daily construction activities would be similar to the proposed Project. Construction emissions of the proposed Project, as covered in Section 3.1, Air Quality, would be well below applicable South Coast Air Quality Management District (SCAQMD) mass daily significance thresholds and localized significant thresholds (LSTs) for all criteria pollutants. The additional construction footprint and construction equipment under Design and Use Option E would result in an increase in construction emissions. However, the additional construction of the proposed pedestrian bridge under Design and Use Option E would not contribute to an increase in construction emissions to a level that would exceed SCAQMD mass daily significance thresholds and LSTs for all criteria pollutants, as the construction emissions calculated for the proposed Project are well below significance thresholds. Therefore, construction emissions under Design and Use Option E would still remain below significance thresholds.

Operational impacts would remain the same as the proposed Project. As such, similar to the proposed Project, operation of Design and Use Option E would have no effect on the growth assumptions used in the 2016 AQMP and 2016-2040 RTP/SCS, as well as the newer 2020-2045 RTP/SCS, Connect SoCal. In addition, operation of Design and Use Option E would not impair the region's ability to achieve the SCAQMD's goals for attainment of air quality standards.

Therefore, similar to the proposed Project, impacts with respect to air quality for the proposed pedestrian bridge under Design and Use Option E would be less than significant.

Biological Resources

Design and Use Option E would result in additional construction and disturbance in Los Angeles State Historic Park. As discussed in Section 3.4, Biological Resources, the Los Angeles State Historic Park contains ornamental shrubs, herbaceous vegetation, and various trees, which may need to be removed as part of Design and Use Option E. The section of the Park where the proposed pedestrian bridge would be constructed was not included in the tree inventory report (Appendix E) prepared for the proposed Project. This section of the Park is mainly comprised of lawn, paved and stone walking paths, and ornamental landscaping of trees and shrubs. Similar to the proposed Project, any trees removed during construction would be required to be replaced in accordance with the City's Native Tree Protection Ordinance and the City's Street Tree Policy. Additionally, and as described in Sections 3.4.1 and 3.4.4, the removal of trees located on State Park property would require special permit approval of the California Department of Parks and Recreation.

Further, during field surveys for the proposed Project, no active raptor nests or songbird nests were detected, and no natural plant communities exist within the area. However, there is potentially suitable tree roosting habitat within the vicinity of the proposed pedestrian bridge. Similar to the Project, Design and Use Option E would implement Mitigation Measure BIO-A, which would require a field survey be conducted by a qualified bat biologist to determine the presence of colonial bat roosts within 100 feet of the Project component sites prior to construction. In addition, ornamental vegetation could be removed during construction of Design and Use Option E. As such, Mitigation Measure BIO-B would be required if construction activities would occur during the nesting season, which requires that a pre-construction nesting survey be conducted. Therefore, similar to the proposed Project, impacts with respect to biological resources for the proposed pedestrian bridge under Design and Use Option E would be less than significant with mitigation.

Cultural Resources

As discussed previously, Design and Use Option E would result in additional construction and disturbance in Los Angeles State Historic Park. Grading and development that would occur from implementation of Design and Use Option E would have the potential to result in additional impacts to cultural resources due to additional excavation for the proposed pedestrian bridge.

Compared to the proposed Project, construction of the proposed pedestrian bridge under Design and Use Option E would not impact designated and non-designated eligible historical resources either through direct physical effects or through indirect affects to the area surrounding a resource, as the proposed pedestrian bridge would not be located in the proximity of any historical resources.

Construction-related ground disturbing activities associated with Design and Use Option E could lead to the discovery of previously unknown archaeological resources and human remains. The proposed pedestrian bridge (including the staging area) would be located within Los Angeles State Historic Park, which is considered an archaeological site due to the presence of sub-surface remnants from over 100 years of use as a railroad facility.[5] As such, impacts related to construction of Design and Use Option E could be potentially significant if an unknown archaeological resource is identified during construction.

Similar to the proposed Project, to mitigate the impacts of an inadvertent discovery of the resources known to exist in the resource boundary, Mitigation Measure CUL-E would be required, which would require an archaeological testing plan be prepared and implemented, and a data recovery plan be prepared and implemented if significant archaeological remains are encountered during test excavations in consultation with California State Parks.

In addition, Mitigation Measures CUL-A and CUL-B would also be implemented following the testing plan. Mitigation Measure CUL-A would require preparation of a CRMMP that would define pre-construction coordination, construction monitoring for the excavations based on activities and depth of disturbance planned for each Project component, data recovery, artifact and feature treatment, procurement (including a curation plan), and reporting. Mitigation Measure CUL-B would require a worker training program be developed for the proposed Project, which would provide information to construction workers that describe and illustrate resources likely to be encountered by Project construction and outline the protocol to be followed in the event of a find.

Mitigation Measures CUL-A, CUL-B, and CUL-E would be implemented in order to reduce any potential impacts to archaeological resources and human remains. Further, compliance with existing regulations, including California Health and Safety Code Section 7050.5 and PRC Section 5097.98, would also protect human remains. As such, impacts related to cultural resources under

---

5 California Department of Parks and Recreation. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf, accessed June 2022.

Design and Use Option E would be less than significant with mitigation. Therefore, similar to the proposed Project, impacts with respect to cultural resources for the proposed pedestrian bridge under Design and Use Option E would be less than significant with mitigation.

Energy

As discussed previously, Design and Use Option E would result in construction of an additional Project component in comparison to the proposed Project. As such, the demand for electricity, fuel, and natural gas would increase to construct this Project component. However, similar to the proposed Project, the demand for energy during construction would be temporary, and in some cases would supplant electricity otherwise provided by another energy source, such as diesel generators. Construction activities would also comply with state requirements designed to minimize idling and associated emissions, which also minimizes the use of fuel. In addition, while Design and Use Option E would result in a minimal increase in natural gas during construction when compared to the proposed Project, natural gas use during construction would be considered negligible when evaluated on a local and regional scale and would not adversely impact local or regional energy supplies or not require additional capacity.

Overall, as discussed in Section 3.4, Energy, the temporary energy consumption associated with construction would allow for a long-term reduction in energy consumption associated with operations of the proposed Project. Design and Use Option E would not result in operational impacts. Therefore, similar to the proposed Project, impacts with respect to energy resources for the proposed pedestrian bridge under Design and Use Option E would be less than significant.

Geology and Soils

Grading and development that would occur from implementation of Design and Use Option E would result in additional impacts to geology and soils due to additional excavation for the proposed pedestrian bridge. Although on-site seismic conditions and potential hazards would not change relative to the existing conditions, the increase in people and structures that could be subject to such risks would increase due to the addition of the pedestrian bridge, thereby increasing potential impacts.

Under Design and Use Option E, Mitigation Measure GEO-A, which includes development of a site-specific geotechnical investigation and report, would still be required. The geotechnical investigation and report would include geotechnical recommendations for Project design and construction, including an evaluation of risk of settlement in the fill, subsidence, hydroconsolidation, and liquefaction. Additionally, the geotechnical report would include recommended measures to reduce potential impacts related to expansive soils and soil corrosivity, subsidence, liquefaction, differential settlement, or other potential ground failures induced by Design and Use Option E. Furthermore, Design and Use Option E would comply with existing laws and regulations, which would be ensured through the City's permitting process. Therefore, similar to the proposed Project, impacts with respect to geology and soils for the proposed pedestrian bridge under Design and Use Option E would be less than significant with mitigation.

Greenhouse Gas Emissions

As discussed previously, Design and Use Option E would result in construction of an additional Project component in comparison to the proposed Project. As such, construction of Design and Use Option E would increase GHG emissions.

However, as discussed in Section 3.6, Greenhouse Gas Emissions, the proposed Project would result in an overall decrease from existing conditions by 6,375 MT CO_2e/yr. The additional construction under Design and Use Option E would result in an increase in GHG emissions as Design and Use Option E would add additional construction activities to construct the proposed pedestrian bridge; however, the construction activities would be minimal, as Design and Use Option E only includes construction of a pedestrian bridge, and would not utilize heavy construction equipment that would generate a significant increase in GHG emissions compared to the proposed Project. As such, the additional construction duration for the proposed pedestrian bridge under Design and Use Option E would not contribute to an increase in GHG emissions to a level that would exceed existing conditions, as the net GHG emissions calculated for the proposed Project are well below significance thresholds. As such, GHG emissions during construction under Design and Use Option E would still result in a decrease from existing conditions and below significance thresholds.

In addition, Design and Use Option E would provide additional pedestrian connectivity that would be consistent with local, regional, and statewide policies to reduce traffic, air pollution, and GHGs by reducing VMT. Further, Design and Use Option E would remain consistent with all applicable GHG reduction plans, policies, and regulations. Therefore, similar to the proposed Project, impacts with respect to GHG emissions for the proposed pedestrian bridge under Design and Use Option E would be less than significant.

Hazards and Hazardous Materials

As described in Section 3.9, Hazards, The Los Angeles State Historic Park property is listed in multiple hazardous materials database listings as the site was formerly used as the Southern Pacific (now Union Pacific) Company's freight yards, which included transfer station and storage yard activities. The site is subject to soil removal action under DTSC and groundwater monitoring at the request of the Regional Water Quality Control Board. Concentrations of benzene and ethylbenzene were detected above their respective California maximum contaminant levels in well BMW-4, which is located upgradient of the proposed pedestrian bridge location. Although not anticipated, residual contamination may be encountered during excavation and construction activities.

Under Design and Use Option E, Mitigation Measure HAZ-A, which requires preparation of a soil and Groundwater Management Plan prior to any re-grading, decommissioning, or construction activities, would still be required. Implementation of HAZ-A will specify methods for handling and disposal in the event contaminated groundwater is encountered during construction of Design and Use Option E, to reduce impacts to less than significant. Therefore, similar to the proposed Project, impacts with respect to hazards and hazardous materials for the proposed pedestrian bridge under Design and Use Option E would be less than significant with mitigation.

Hydrology and Water Quality

Groundwater levels range from 27 to 35 feet below ground surface in the vicinity of the Los Angeles State Historic Park. It is estimated that the foundations for Design and Use Option E would be located at a depth of approximately 10 feet, with piles drilled to approximately 70 feet. Based on these anticipated depths to groundwater, it is considered unlikely groundwater will be encountered during construction of Design and Use Option E, however, removal of nuisance water that seeps into boreholes during construction may be required for the pile installations.

Construction activities such as excavation for foundations would temporarily expose bare soil, which would be at increased risk for erosion. Exposed or stockpiled soils would also be at increased risk for erosion. Sediments resulting from erosion might accumulate, blocking storm drain inlets and causing downstream sedimentation. Erosional sediments might be carried by stormwater runoff into storm drain inlets which ultimately empty into the Los Angeles River, including approved total maximum daily loads of ammonia, copper, indicator bacteria (fecal), lead, nutrients (causing algae), oil, and trash.

In addition to sediments, trash, concrete waste, and petroleum products including equipment fuels, solvents, and lubricants, and landscape fertilizers and pesticides could degrade water quality and contribute to water pollution. The use of construction equipment and other vehicles during construction could result in spills of oil, brake fluid, grease, antifreeze, or other vehicle-related fluids which could contribute to water pollution. Improper handling, storage, or disposal or fuels and vehicle-related fluids or improper cleaning and maintenance of equipment could result in accidental spills and discharges which could contribute to water pollution.

Uncontrolled erosion and discharge of sediments and other potential pollutants could result in adverse effects to water quality in the Los Angeles River, violating water quality standards and waste discharge requirements, if not appropriately managed.

As with the proposed Project, Design and Use Option E would be required to comply with all applicable federal, state, regional and local agency water quality protection laws and regulations, as well as commonly utilized industry standards. These would include: Clean Water Act of 1972 (Including 1977 and 1987 Amendments); Antidegradation Policy of 1968; Porter-Cologne Water Quality Control Act of 1969; State of California Antidegradation Polices – State Water Resources Control Board Resolution 68-16; 3.2.540 CFR 131.38 – California Toxics Rule; NPDES General Construction Permit regulations; MS4 Permit regulations; Los Angeles Regional Water Quality Control Board Basin Plan; City of Los Angeles General Plan; the City of Los Angeles LID Ordinance; the City of Los Angeles Municipal Code; the City of Los Angeles Water Quality Compliance Master Plan; the California Ocean Plan; and all other applicable regulations for all construction activities.

As with the proposed Project, Design and Use Option E would comply with the Construction General Permit in effect at the time of construction. Additionally, Design and Use Option E would be incorporated into the construction Stormwater Pollution Prevention Plan (SWPPP) which would be required as part of the proposed Project. The construction SWPPP would identify the best management practices (BMPs) that would be in place prior to the start of construction activities and during construction, including for Design and Use Option E. This would include BMPs related to erosion control, sediment control, non-stormwater management, and materials management.

Additionally, Design and Use Option E would increase the amount of impervious surface at the site (Table 6-6). As discussed in Section 3.10, Hydrology and Water Quality, the proposed Project would create 27,861 square feet of new impervious surface. The 6,617 square feet of Design and Use Option E shown in the table below would be in addition to this. The total impervious area created by Design and Use Option E consists of the pedestrian bridge walkway. However, the actual footprint of Design and Use Option E at the ground level would be less than the total amount of impervious surface area created. The footprint of Design and Use Option E is nominal when compared to the area of the groundwater basin.

Table 6-6: New Impervious Surface Area – Design and Use Option E

Component	Total Impervious Area Created by Component	Total Footprint of Project at Ground Level	Existing Impervious Surface Area at Component Site	Amount of New Impervious Surface Area Added
Design and Use Option E Pedestrian Bridge	11,660 sf	135 sf	1,272 sf	10,388 sf

Similar to the proposed Project, Design and Use Option E would be designed in compliance with the Low Impact Development (LID) Handbook. It would also comply with all applicable federal, state, regional and local agency water quality protection laws and regulations, water quality control and/or sustainable groundwater management plans including the Basin Plan and City of Los Angeles General Plan, as well as commonly utilized industry standards. Design and Use Option E would comply with the City of Los Angeles Municipal Code and all other applicable regulations for all operational activities, including adherence to an approved LID Plan which would identify the BMPs for operations.

Since Design and Use Option E is located immediately adjacent to the proposed Project, the analysis in Section 3.10, Hydrology and Water Quality, regarding flood hazards, tsunamis, or seiche zones is applicable to the pedestrian bridge.

With adherence to applicable federal state, regional, and local laws and regulations, including compliance with applicable stormwater permits, wastewater permits, and other water quality regulations, construction and operation of Design and Use Option E would result in less than significant impacts to hydrology and water quality.

Land Use and Planning

As described in Section 3.11, Land Use and Planning, goals and objectives of local plans include the use of public transportation to provide access to open space and recreation areas. The proposed Project would improve the mobility and accessibility to the Park for existing residents and communities in the area by providing direct linkages to the Park. Similarly, Design and Use Option E would provide a direct pedestrian connection to the Park from the communities north of North Broadway, including Elysian Park and Solano Canyon, which have historically been separated from the Park due to the location of the Metro L Line (Gold) tracks and the steep grade changes between North Broadway and Spring Street. As such, Design and Use Option E would serve to enhance community connectivity and would not physically divide an established community.

Additionally, the following guidelines are provided under the Access and Circulation Goal of the Los Angeles State Historic Park General Plan:

- Guideline 3: Explore opportunities to link pedestrian and cycling trails within the Park with neighborhood and regional transportation systems, including regional trails.

- Guideline 4: Explore opportunities to provide convenient and safe pedestrian and cycling access throughout the Park, with connections from communities along North Broadway. Coordinate with [Metro] to consider pedestrian bridge possibilities over the Gold Line right of way.[6]

Design and Use Option E would implement these guidelines with the provision of a pedestrian bridge from the Park, over the Metro L Line (Gold) tracks, connecting to North Broadway and the neighborhoods north of the Park. Therefore, construction of the Los Angeles State Historic Park pedestrian bridge would be consistent with the Los Angeles State Historic Park General Plan.

Although the pedestrian bridge would be consistent with the Los Angeles State Historic Park General Plan, State Parks has determined that the proposed Project would be inconsistent with the Los Angeles State Historic Park General Plan because the identified land uses in the General Plan's Preferred Park Concept Elements did not contemplate a transit station like the proposed Project's Chinatown/State Park Station. State Parks considers this inconsistency a potentially significant impact. Mitigation Measure LUP-A would be implemented to require the proposed Project to obtain a LASHP General Plan Amendment, which would reduce this impact to less than significant.

Similar to construction of the Broadway Junction component of the proposed Project, construction of Design and Use Option E would require both partial and full closures of North Broadway. These closures would temporarily disrupt access within the Chinatown community, as well as access to and between the Elysian Park community to the north and the Solano Canyon community to the northeast. Although established communities would not be physically divided during construction, these closures would temporarily disrupt vehicular, bicycle, and pedestrian access to through traffic and cross streets at these locations.

As noted in the transportation discussion below, the closures would be temporary and would only occur during the construction phase. Additionally, as available, closures would only occur during construction hours and some travel lanes would be restored during non-construction hours. Though these temporary closures during construction would disrupt vehicular, pedestrian, and bicycle access within and between communities, there would be a variety of options available for connections and access within the Project area, with Alameda Street, Alhambra Avenue, Alpine Street, Spring Street, and Broadway remaining partially open during different phases of construction. In addition, as discussed in Section 3.11, Land Use and Planning, the provision of pedestrian detours during certain phases of construction would allow for continued pedestrian access within the Project area. These communities will remain accessible from other surrounding streets and these closures would not physically divide these communities. Therefore, similar to the proposed Project, impacts with respect to land use and planning for the proposed pedestrian bridge under Design and Use Option E would be less than significant.

Mineral Resources

The additional grading and development that would occur from implementation of Design and Use Option E would have the potential to uncover mineral resources due to additional excavation for the proposed pedestrian bridge. However, similar to the proposed Project, the proposed pedestrian bridge under Design and Use Option E would also be located within an area designated as MRZ-3, which includes areas containing mineral deposits, the significance of which cannot be evaluated from available data. As such, the proposed pedestrian bridge under Design

[6] California State Department of Parks and Recreation, Los Angeles State Historic Park General Plan and Final Environmental Impact Report, June 2005.

and Use Option E would not result in a loss of availability of known mineral resources; result in the extraction of these resources; or further preclude the extraction of such resources. Therefore, similar to the proposed Project, impacts with respect to mineral resources for the proposed pedestrian bridge under Design and Use Option E would not occur.

Noise

As discussed previously, Design and Use Option E would result in construction of an additional Project component in comparison to the proposed Project. As such, construction noise would increase in the area of the proposed pedestrian bridge within Los Angeles State Historic Park. Construction of the proposed pedestrian bridge would generate the same type and volume of construction noise as the proposed Project, and the noise generated would affect the same sensitive receptors in the vicinity of the Los Angeles State Historic Park and Broadway Junction. Mitigation Measure NOI-A would continue to be required for Design and Use Option E to reduce construction noise impacts from stationary equipment, and to reduce impacts to the local community related to disturbances from construction noise. Similar to the proposed Project, impacts with respect to noise under Design and Use Option E would be significant and unavoidable, even with mitigation.

The proposed pedestrian bridge would not generate noise impacts during operation except for those similar to existing Park users such as pedestrian and bicyclists. Therefore, similar to the Project, impacts with respect to operational noise under Design and Use Option E would be less than significant.

Population and Housing

Design and Use Option E does not introduce new housing units. As such, it would not result in a direct population increase from construction of new homes. Additionally, construction workers needed during any construction phase would likely come from the labor force within the region and no substantial influx of new workers would be needed. Therefore, construction employment generated by Design and Use Option E would not impact population in the heavily populated Los Angeles region. Similarly, workers needed for the operation and maintenance of the pedestrian bridge would likely come from the labor force within the region and no substantial influx of new workers would be needed. As such, operation employment generated by Design and Use Option E would not impact populate in the heavily populated Los Angeles region. Therefore, similar to the Project, impacts with respect to population and housing under Design and Use Option E would be less than significant.

Recreation

The proposed Project would require the closure of approximately 1.59 acres of the southern entrance to Los Angeles State Historic Park and the southernmost corner and western edge during cable installation. Design and Use Option E would require the closure of approximately 2.3 acres of the Park, in an area known as the overlook, which would be temporarily fenced off for approximately 60 weeks for construction of the pedestrian bridge. As such, Design and Use Option E would add additional construction within the park and would result in closures to additional areas of the park, which has the potential to discourage patrons from using the park, disrupt events occurring at the park, or increase the use of the open portions of the park.

However, similar to the proposed Project, patrons would still be able to access approximately 28 acres of the 32-acre Los Angeles State Historic Park during construction activities within the park, and it is not anticipated that construction activities in one area of the park would increase the use in other areas of the park such that substantial physical deterioration of the facility could occur. In addition, coordination with the California Department of Parks and Recreation during construction of Design and Use Option E regarding construction schedule and activities would ensure that park programming and use of the facility could still occur in other parts of the park while minimizing physical deterioration of the Los Angeles State Historic Park. Therefore, impacts related to the substantial increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated would be less than significant for construction of the pedestrian bridge.

Furthermore, Design and Use Option E would be consistent with Guidelines Access 3 and Access 4 of the Los Angeles State Historic Park General Plan. Guideline Access 3 directs the California Department of Parks and Recreation to “Explore opportunities to link pedestrian and cycling trails within the Park with neighborhood and regional transportation systems, including regional trails”. In addition, Guideline Access 4 of the General Plan directs the California Department of Parks and Recreation to “Explore opportunities to provide convenient and safe pedestrian and cycling access throughout the Park, with connections from communities along North Broadway. Coordinate with the Metropolitan Transit Authority (MTA) to consider pedestrian bridge possibilities over the Gold Line right of way”.[7] By providing a pedestrian bridge from the Park, over the Metro L Line (Gold) tracks, connecting to North Broadway, Design and Use Option E is consistent with these Guidelines. Therefore, similar to the proposed Project, impacts with respect to parks and recreational facilities for the proposed pedestrian bridge under Design and Use Option E would be less than significant.

Public Services

Construction of Design and Use Option E would result in similar temporary lane closures as the proposed Project. Emergency response times to both Police and Fire services could be impacted. However, a Construction Traffic Management Plan, as outlined in Mitigation Measure TRA-B in Section 3.17, Transportation, would also be required to ensure adequate emergency access is maintained in and around the Project alignment and component sites throughout all construction activities. In addition, compliance with the City’s Emergency Operations Plan and the Los Angeles Fire Code, as well as coordination with LAFD prior to construction, would ensure that LAFD would have adequate access to fire response facilities, including hydrants, fire lanes, etc. during construction. Similarly, coordination with LAPD prior to construction would ensure that LAPD would have adequate access to areas requiring access during emergencies to maintain orderly flow of traffic in, out, and around all areas affected by a disaster with priority given to provide ingress/egress for emergency vehicles responding to any disaster.

As discussed in Section 3.15, Public Services, there are four schools located within the Project Study Area. Both the Chinese Consolidated School and Castelar Elementary School are located approximately 0.50-miles west of the proposed pedestrian bridge. The two schools are adjacent to one another. The Ann Street Elementary School is located approximately 0.30-miles south of the proposed pedestrian bridge. Cathedral High School is the closest school to Design and Use Option E, located as close as 150 feet to where the pedestrian bridge would connect with North Broadway.

Construction of Design and Use Option E could result in temporary impacts related to dust, noise, and lane closures, that may indirectly impact Cathedral High School. However, given the

7 California Department of Parks and Recreation. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf, accessed June 2022.

temporary impacts associated with construction of the pedestrian bridge, Design and Use Option E would not require the provision of new or physical altered governmental facilities in order to maintain acceptable performance objectives for schools. It is not anticipated that the other three schools within the Project Study Area would be substantially impacted by construction of Design and Use Option E due to the distance of the schools from the pedestrian bridge.

Regarding other public facilities, while temporary lane closures during construction would increase traffic volumes on detour routes, which could increase traffic congestion on those routes, Design and Use Option E, like the Project alignment, is located in an established urban area that is well-served by the surrounding roadway network. As mentioned above, Mitigation Measure TRA-B in Section 3.17, Transportation, would be required to ensure adequate emergency access is maintained in and around the Project alignment and component sites throughout all construction activities. In addition, it is not anticipated that the labor force for construction of Design and Use Option E would result in an increase in demand for libraries, senior centers, homeless bridge housing facilities, or childcare services.

Therefore, similar to the Project, impacts with respect to public services under Design and Use Option E would be less than significant with mitigation.

Transportation

As with the proposed Project, the pedestrian bridge under Design and Use Option E would support multimodal transportation options and a reduction in VMT. Design and Use Option E, as with the proposed Project, would not conflict with policies of Mobility Plan 2035, the SCAG's RTP/SCS, or the Citywide Design Guidelines adopted to protect the environment and reduce VMT.

Construction of the pedestrian bridge under Design and Use Option E would result in construction of an additional Project component in comparison to the proposed Project. However, due to the temporary nature of construction traffic associated with Design and Use Option E, which could be constructed simultaneously with other Project components, a substantial increase in VMT would not be anticipated to result from construction. In addition, similar to the proposed Project, Design and Use Option E would provide additional pedestrian connections, and would result in an overall reduction in VMT, resulting in a beneficial effect on the environment.

Construction of Design and Use Option E would require partial and full lane and sidewalk closures on North Broadway near its intersection with Bishops Road. As with the proposed Project, construction worksites would be fenced, and lane closures and associated lane tapers, temporary advance warning signs, detour signs, etc., would be implemented in accordance with the California MUTCD and LADOT requirements to ensure that no significant temporary geometric design hazards are introduced during the construction period. Design and Use Option E would also implement Mitigation Measure TRA-B, which would require implementation of a Construction Traffic Management Plan to ensure adequate emergency access is maintained throughout all construction activities to reduce impacts from partial road and sidewalk closures. Therefore, similar to the proposed Project, impacts with respect to transportation under Design and Use Option E would be less than significant with mitigation.

Tribal Cultural Resources

As described in Section 3.18, Tribal Cultural Resources, archival research for the Area of Direct Impacts resulted in the identification of one multi-component (prehistoric and historic) site, Resource 19-001575. However, this resource is located near the Los Angeles Union Station and not near the pedestrian bridge under Design and Use Option E. No other tribal cultural resources with significance to a California Native American tribe have been identified through archival research or AB 52 consultation as of the writing of this Draft EIR. However, ground disturbing activities have the potential to reveal additional unidentified subsurface deposits of prehistoric and historic-age, and Native American burials. A Kizh Nation letter dated September 21, 2022, also alludes to the potential for resources to be within the project area, although no specifics were provided. If previously unidentified archaeological resources, including tribal cultural resources, are encountered during construction of Design and Use Option E, the possibility exists that those resources could be disturbed or damaged during construction, resulting in a potentially significant impact.

Mitigation Measure TCR-A from Section 3.18, Tribal Cultural Resources, would require a Native American monitor, to be identified in the Cultural Resources Monitoring and Mitigation Plan (CRMMP) from Mitigation Measure CUL-A, to be present during ground disturbing activities and would include procedures in the event of unanticipated discovery. With implementation of Mitigation Measure TCR-A, impacts would be less than significant. Therefore, similar to the proposed Project, impacts with respect to tribal cultural resources under Design and Use Option E would be less than significant with mitigation.

Utilities and Service Systems

An existing utilities survey by the Mollenhauer Group in 2020 identified the area of the pedestrian bridge under Design and Use Option E to consist of irrigation valves and lines, and low voltage electrical pull boxes. Therefore, minimal utility relocation may be required for the construction of Design and Use Option E.

Construction of Design and Use Option E would have sufficient water supply, and would comply with Metro's Sustainability Strategic Plan, which includes targets for water quality and conservation. During construction, water from water trucks and gallon drums would be required for various activities, such as controlling dust, compacting soil, and mixing concrete. Construction would require the use of locally available water supplies, which are distributed by LADWP. As discussed in Section 3.19, Utilities and Service Systems, LADWP supplies an average of approximately 435 million GPD of water to its customers. LADWP has the ability to meet local water supply goals under normal year, dry year, and multiple dry year conditions; however, a multi-year drought that started in 2012 has resulted in LADWP investing in drought-resilient sources of potable water including stormwater capture and groundwater augmentation. The existing water supply sources are adequate to meet the demands for LADWP's service area and construction of Design and Use Option E would not increase water usage that would exceed the current supply. Little to no water would be needed for operation of Design and Use Option E.

Construction activities associated with Design and Use Option E would not result in substantial discharges of wastewater to the City's sewer collection system. As with the proposed Project, construction personnel working on Design and Use Option E would utilize portable restrooms for the duration of the construction period.

Although construction activities would generate potential sources of wastewater such as nuisance water that may seep into boreholes during construction, the water removed from the boreholes would be containerized and analyzed consistent with existing applicable regulations to determine the proper disposal method. Adherence to existing regulations would require treatment of water prior to discharge. Little to no wastewater would be generated for operation of Design and Use Option E.

Excavated soil and land clearing debris would be sold and/or reused or recycled for backfill, as the majority of the soil is anticipated to be uncontaminated. However, as described in Section 3.9, Hazards and Hazardous Materials, there is the potential to encounter contaminated soils during construction activities. Therefore, Design and Use Option E would implement Mitigation Measure HAZ-A, as described in Section 3.9, Hazards and Hazardous Materials, of this Draft EIR, which would include sampling and analyzing soils and required methods and procedures for the proper handling and removal of impacted soils for off-site disposal.

It is estimated that approximately 78,500 CY of demolition debris would be generated for the proposed Project, of which approximately 62,600 CY would be soil, which is anticipated to not go to landfills. For the remaining approximately 15,900 cubic yards of demolition debris that would be generated, an anticipated 65 percent would be diverted from landfills in accordance with California's Green Building Code. As such, it is estimated that approximately 5,565 cubic yards of demolition debris would be hauled to a landfill. The Sunshine Canyon Landfill receives approximately 8,300 tons of waste per day with a maximum of 12,100 tons per day permitted. There is a remaining capacity of 77,900,000 cubic yards at the Sunshine Canyon Landfill. Design and Use Option E, in combination with the proposed Project, would generate less than one percent of the capacity of the landfill; as such, the Sunshine Canyon Landfill would adequately accommodate the anticipated amount of solid waste generated for the Design and Use Option E.

Design and Use Option E would result in an additional approximately 700 CY of excavation, with approximately 400 CY of material to be exported. It is anticipated that the material to be exported would be comprised of soil, which is not anticipated to go to landfills. Overall, when combined with the proposed Project, Design and Use Option E would still generate less than one percent of the capacity of the landfill; as such, the Sunshine Canyon Landfill would adequately accommodate the anticipated amount of solid waste generated by Design and Use Option E.

In addition, Design and Use Option E would be required to adhere to federal, state, and local regulations for solid waste disposal, including AB 939 and those identified in the City's Solid Waste Integrated Resource Plan to divert materials prior to disposal for recycling or reuse, where appropriate. Therefore, Design and Use Option E would not conflict with the Solid Waste Integrated Resource Plan, AB 341, and AB 939 and local management and reduction statutes related to solid waste.

As such, solid waste would not be generated in excess of state or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Design and Use Option E would comply with federal, state, and local reduction strategies and regulations related to solid waste. Little to no solid waste would be generated for operation of Design and Use Option E.

Therefore, impacts with respect to utilities and service systems under Design and Use Option E would be less than significant.

Wildfire

While the proposed Project includes components located in an identified Very High Fire Hazard Severity Zone, the pedestrian bridge under Design and Use Option E would not be constructed in a Very High Fire Hazard Severity Zone. Although Design and Use Option E would be constructed within the Los Angeles State Historic Park, the vegetation in the park is landscaped and maintained and would not provide fuel for wildfires. Additionally, the area comprising and around Design and Use Option E is not characterized by vegetative fuels (e.g., expanses of dry grass, dead leaves, logs, stumps, branch wood or snags), slopes (e.g., steep uphill gradients over areas with vegetative fuels), or other features with a high potential to ignite or spread wildfires. Due to the developed nature of this site and adjacent areas surrounded by a network of fire hydrants and fire stations, construction activities associated with Design and Use Option E would not exacerbate wildfire, expose people to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, require the installation or maintenance of infrastructure that may exacerbate fire risk, or expose people or structures to risks as a result of runoff, post-fire slope instability, or drainage changes beyond existing conditions.

Under Design and Use Option E, construction of the pedestrian bridge would require lane closures on North Broadway. In the event of an emergency requiring evacuation during construction, the proposed lane closures have the potential to inhibit access to identified disaster routes, and routes that could be designated as evacuation routes. As with the proposed Project and in accordance with the City's Emergency Operations Plan, Design and Use Option E would include coordination with LAFD prior to construction and in accordance with the Los Angeles Fire Code would ensure that LAFD would have adequate access to fire response facilities, including hydrants, fire lanes, etc. during construction. Prior to construction of Design and Use Option E, the Project Sponsor would be required to coordinate with LAFD regarding construction plans and schedules during the plan check approvals. Fire lanes provided during the construction phase of Design and Use Option E would be designated and designed for fire and emergency team access pursuant to Section 503 of the Los Angeles Fire Code.

Therefore, similar to the proposed Project, impacts with respect to wildfire under Design and Use Option E would be less than significant.

7.0 ACRONYMS

°F	degrees Fahrenheit
µg/L	Microgram per Liter
µg/m^3	Micrograms per Cubic Meter
3S	Tricable Detachable Gondola System
AAM	Annual Arithmetic Mean
AB	Assembly Bill
ACC	Advanced Clean Cars
ACM	Asbestos Containing Material
ACRES	Assessment, Cleanup, and Redevelopment Exchange System
ADA	Americans with Disabilities Act
ADP	Alameda District Specific Plan
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Air Dispersion Model
Alquist-Priolo Act	Alquist-Priolo Earthquake Fault Zoning Act
ALS	Advanced Life Support
ANSI	American National Standards Institute
APCD	Air Pollution Control District
APE	Area of Potential Effect
API	Area of Potential Impact
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ART	Aerial Rapid Transit
ARTIC	Anaheim Regional Transportation Intermodal Center
ASTM	American Society of Testing and Materials
ATCM	Airborne Toxic Control Measure
AUF	Acoustic Use Factor
AVO	Average Vehicle Occupancy
AVTA	Antelope Valley Transit Authority
Basin Plan	Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties
BACM	Best Available Dust Control Measures
bgs	Below Ground Surface
BMP	Best Management Practice
BRT	Bus Rapid Transit

BSA	Biological Survey Area
BTEX	Benzene, Toluene, Ethylbenzene and Toluene
BTU	British Thermal Unit
C & D	Construction and Demolition
CAA	Clean Air Act
CAAP	Climate Action and Adaptation Plan
CAAQS	California Ambient Air Quality Standard
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
Cal EPA	California Environmental Protection Agency
CALFIRE	California Department of Forestry and Fire Protection
CalGEM	California Department of Conservation Geologic Energy Management Division
CALGreen	California Green Building Standards Code
Cal/OSHA	California Division of Occupational Safety and Health
CalRecycle	California Department of Resources, Recycling, and Recovery
Caltrans	California Department of Transportation
CAM	The Chinese American Museum
CAP	Criteria Air Pollutant
CARB	California Air Resources Board
CASGEM	California Statewide Groundwater Elevation Monitoring
CASP	Cornfield-Arroyo Seco Specific Plan
CBC	California Building Code
CCAA	California Clean Air Act
CCCC	California Climate Change Center
CCR	California Code of Regulations
cd/m^2	Candelas per Square Meter
CDFW	California Department of Fish and Wildlife
CE	Commuter Express
CEC	California Energy Commission
Central Basin	Central Subbasin
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERS	California Environmental Reporting System

CESA	California Endangered Species Act
CFC	California Fire Code
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CLA	Chief Legislative Analyst
CH_4	Methane
CHL	California Historical Landmarks
CHRIS	California Historical Resources Inventory System
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNG	Compressed Natural Gas
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	CO_2 Equivalents
CPUC	California Public Utilities Commission
CoIWMP	Countywide Integrated Waste Management Plan
Cortese	Hazardous Waste and Substances Sites
CRHR	California Register of Historical Resources
CRMMP	Cultural Resources Monitoring and Mitigation Plan
CRPR	California Rare Plant Ranks
CTMP	Construction Traffic Management Plan
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CVC	California Vehicle Code
CWA	Clean Water Act
CY	Cubic Yards
dB	Decibel
dBA	A-weighted Decibel
DBH	Diameter at Breast Height
DCA	Department of Cultural Affairs
DEIR	Draft Environmental Impact Report
DHS	Department of Health Services
DoD	Department of Defense

DOORS	Diesel Off-Road Online Reporting System
DPM	Diesel Particulate Matter
DPR	California Department of Parks and Recreation
DSE	Dodger Stadium Express
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EDR	Environmental Data Resources, Inc.
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
El Pueblo	El Pueblo de Los Angeles
EMD	Emergency Management Department
EMS	Emergency Medical Service
EOB	Emergency Operations Board
EOO	Emergency Operations Organization
EOP	Emergency Operation Plan
EPA	Environmental Protection Agency
ESA	Endangered Species Act (from Biological Resources)
ESA	Environmental Site Assessment (from Hazards and Hazardous Materials)
EV	Electric Vehicle
fc	Footcandles
FEIR	Certified Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zones
FHWA	Federal Highway Administration
FIRMS	Flood Insurance Rate Maps
FMP	Floodplain Management Plan
FPP	Fire Protection Program
ft	Feet
FT	Foothill Transit
FTA	Federal Transit Administration
General Plan	City of Los Angeles General Plan
GHG	Greenhouse Gas
GIS	Geographic Information System
GPA	GPA Consulting
GPD	Gallons per Day

GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GWh	Gigawatt Hours
GWP	Global Warming Potential
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
HCM	Los Angeles Historic-Cultural Monument
HDM	Highway Design Manual
HEPA	High-Efficiency Particulate Air
HFC	Hydrofluorocarbons
HIC	Non-Cancer Chronic Hazard Index
HIN	High Injury Network
HMBP	Hazardous Materials Business Plan
HOV	High Occupancy Vehicle
HPOZ	Historic Preservation Overlay Zone
HRA	Health Risk Assessment
HRTR	Historical Resources Technical Report
hp	Horsepower
HSC	Health and Safety Code
HSR	California High-Speed Rail
HVAC	Heating, Venting, and Air Conditioning
Hz	Hertz
I-5	Interstate 5
IEPR	Integrated Energy Policy Report (IEPR)
IFC	The International Fire Code
IGP	Industrial General Permit
IPaC	Information for Planning and Conservation
IRP	Integrated Resource Plan
ISTEA	Intermodal Surface Transportation Efficiency Act
Kizh Nation	Gabrieleno Band of Mission Indians – Kizh Nation
KOP	Key Observation Points
kWh	Kilowatt Hours
LABOE	Los Angeles Bureau of Engineering
LACDPW	Los Angeles County Department of Public Works
LACDRP	Los Angeles County Department of Regional Planning

LACMTA	Los Angeles County Metropolitan Transportation Authority
LADOT	Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power
LAFC	Los Angeles Fire Code
LAFC	Los Angeles Football Club
LAFD	City of Los Angeles Fire Department
LAGBC	Los Angeles Green Building Code
LAHCM	Los Angeles Historic-Cultural Monument
LAMC	Los Angeles Municipal Code
LAPD	Los Angeles Police Department
LAPL	Los Angeles Public Library
LARAP	Los Angeles Department of Recreation and Parks
LARWQCB	Los Angeles Regional Water Quality Control Board
LASAN	Los Angeles Sanitation & Environment Department
LASHP	Los Angeles State Historic Park
LASD	Los Angeles County Sheriff's Department's
LAUS	Los Angeles Union Station
LAUSD	Los Angeles Unified School District
LAX	Los Angeles International Airport
LAWA	Los Angeles World Airports
LBP	Lead-based Paints
Lbs	Pounds
LCFS	Low Carbon Fuel Standard
LED	Light-Emitting Diode
LEED	Leadership in Energy and Environmental Design
LHMP	Local Hazard Mitigation Plan
LID	Low Impact Development
LinkUS	Link Union Station Project
LOS	Level of Service
LOSSAN	Los Angeles-San Diego-San Lui Obispo Rail Corridor
LRA	Local Responsibility Area
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
LSAA	Lake or Streambed Alteration Agreement
LST	Localized Significance Threshold

LST	Localized Screening Threshold (from Alternatives)
LU	Landscape Units
LUST	Leaking Underground Storage Tank
L_v	Vibration Velocity Level
MBTA	Migratory Bird Treaty Act
MBS	Moving Beyond Sustainability Plan
MCL	Maximum Contaminant Level
Metro	Los Angeles County Metropolitan Transportation Authority
MFR	Multi-Family Residential
MGD	Million Gallons per Day
mg/kg	Milligrams per Kilogram
MICR	Maximum Incremental Cancer Risk
MLB	Major League Baseball
MLD	Most Likely Descendant
MOA	Mode of Access
MMBtu	Million British Thermal Unit
MPO	Metropolitan Planning Organization
MRZ	Mineral Resources Zone
MS4	Municipal Separate Storm Sewer Systems
msl	Mean Sea Level
MT	Metric Tons
MTA	Metropolitan Transit Authority
MUTCD	Manual on Uniform Traffic Control Devices
MW	Megawatts
MWD	Metropolitan Water District
MWh	Megawatt Hours
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFPA	National Fire Protection Association
NHTSA	National Highway Traffic Safety Administration
NHM	Natural History Museum of Los Angeles County
NHPA	National Historic Preservation Act of 1966
NO	Nitric Oxide

NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
NOI	Notice of Intent
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
NSR	Noise-Sensitive Receptors
O_3	Ozone
OCS	Overhead Contact Lines
OCTA	Orange County Transportation Authority
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
OVA	Organic Vapor Analyzer
Park General Plan	Los Angeles State Historic Park General Plan
Pb	Lead
PDF	Project Design Feature
PFC	Perfluorocarbons
pLAn	Sustainable City pLAn
PM	Particulate Matter
$PM_{2.5}$	Fine Particulate Matter
PM_{10}	Respirable Particulate Matter
ppm	Parts per Million
ppmv	Parts per Million by Volume
PPOP	Plans, Programs, Ordinances, or Policies
PPV	Peak Particle Velocity
PRC	Public Resources Code
PRMMP	Paleontological Resources Monitoring and Mitigation Plan
PUC	Public Utilities Code
REC	Recognized Environmental Condition
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RCTC	Riverside County Transportation Commission
RIO	Los Angeles River Improvement Overlay

RMS	Root Mean Square
ROG	Reactive Organic Gases
ROW	Right-of-Way
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Los Angeles Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
SANBAG	San Bernardino Association of Governments
SARA	Superfund Amendment and Reauthorization Act
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
Scoping Plan	Climate Change Scoping Plan: A Framework for Change
SCRIP	Southern California Regional Interconnector Project
SCRRA	Southern California Regional Rail Authority
SCS	Sustainable Communities Strategy
SCT	Santa Clarita Transit
SEA	Significant Ecological Area
sf	Square Feet
SF_6	Sulfur Hexafluoride
SFR	Single-Family Residential
SGMA	Sustainable Groundwater Management Act
SIC	Standard Industrial Classifications
SIP	State Implementation Plan
SLF	Sacred Lands File
SLIC	Spills, Leaks, Investigations, and Cleanups
SLTRP	Strategic Long-Term Resource Plan
SO_2	Sulfur Dioxide
SoCalGas	Southern California Gas Company
SO_X	Sulfur Oxides
SOHP	State Office of Historic Preservation
SOP	Standardized Operating Procedures
SP	Special Publication

SPL	Sound Pressure Levels
SR	State Route
SR-110	State Route 110
SRA	State Responsibility Area
Stafford Act	Robert T. Stafford Disaster Relief and Emergency Assistance Act
SSC	Species of Special Concern
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow Response Plan
SUSMP	Standard Urban Stormwater Mitigation Plan
SWITRS	Statewide Integrated Traffic Records System
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
TAG	Transportation Assessment Guidelines
TCE	Temporary Construction Easements
TCM	Transportation Control Measures
TCR	The Climate Registry
TCR	Tribal Cultural Resource
TCO	Traffic Control Officer
TDS	Total Dissolved Solid
TIMS	Transportation Injury Mapping System
TNC	Transportation Network Company
TNM	Traffic Noise Model
TPH	Total Petroleum Hydrocarbons
TSM	Transportation Systems Management
TVM	Ticket Vending Machines
UPRR	Union Pacific Railroad
USACE	United States Army Corps of Engineers
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGBC	United States Green Building Council
UST	Underground Storage Tank
VCP	Voluntary Cleanup Program
VCTC	Ventura County Transportation Commission

VdB	Decibel Notation for Vibration Level
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
WDR	Waste Discharge Requirements
WL	California Department of Fish and Wildlife Watch List
WMP	Watershed Management Plan
WRD	Water Replenishment District of Southern California
WQCMPUR	Water Quality Compliance Master Plan for Urban Runoff
ZEV	Zero Emission Vehicle
ZIMAS	Zoning Information and Map Access System
ZNE	Zero Net Energy

This page intentionally left blank.

8.0 LIST OF PREPARERS

This chapter provides the lead agency and list of preparers for the Draft EIR.

8.1 LEAD AGENCY

Los Angeles County Metropolitan Transportation Authority

- Cory Zelmer, Deputy Executive Officer
- Anthony Jusay, Transportation Planner
- Michael Cortez, Community Relations Manager
- Martha Butler, Senior Director
- Daniel Clark, Administrative Analyst
- Kimberly Sterling, Senior Transportation Planner
- Elizabeth Carvajal, Senior Director
- Andrina Dominguez, Senior Environmental Specialist
- Stacy Sinclair, Environmental Specialist
- Anthony Crump, Deputy Executive Officer – Community Relations
- Holly Rockwell, Senor Executive Officer
- Gary Byrne, Principal Transportation Planner

8.2 ENVIRONMENTAL IMPACT REPORT PREPARATION

AECOM

- David DeRosa, Project Manager
- David Rader, Project Manager, Public Outreach
- Fareeha Kibriya, Environmental Planner
- Jaime Guzman, Senior Project Manager
- Cristina Lowery, Deputy Project Manager
- Vicky Rosen, Deputy Project Manager
- Allie Beauregard, Environmental Planner
- Lauren Lockwood, Environmental Planner
- Hannah Allington, Environmental Planner
- Jessica Fernandes, Environmental Planner
- Jessie Kang, Environmental Planner
- Shannon Ledet, Senior Environmental Planner
- Natalie Thompson, Environmental Planner
- Kathalyn Tung, Environmental Planner
- Olivia Gastaldo, Environmental Planner
- Dalis De La More, Environmental Planner

Archaeology, Paleontology, and Cultural Resources

- Marc Beherec, Archaeologist
- Christy Dolan, Archaeologist

Biological Resources
- Art Popp, Biologist
- Michael Kuehn, Biologist

Geological Resources
- Jessica Himebauch, Senior Geologist
- Kristen Geleckas, Environmental Geologist

GIS and Graphics
- Brian Fogle, Graphics
- Jang Seo, GIS and Graphics

Hydrology and Water Quality
- Mark Williams, Environmental Compliance

Noise and Acoustics
- George Hitterman, Acoustician I
- Jim Cowan, Principal Engineer – Acoustics and Noise Control
- Paul Burge, Senior Noise Specialist
- Yona Simonson, Noise Specialist

Public Outreach
- Jessica Sisco, Stakeholder Engagement
- Paola Pena, Stakeholder Engagement

Additional Support Staff
- Lukas Yanni, Support Staff
- Frances Glaser, Support Staff

8.3 TECHNICAL SUBCONSULTANTS

Geology and Soils

ENGEO Incorporated
- Jeff Braun, PE, PMP, Associate
- Bahareh Heidarzadeh, PhD, PE, Associate
- J. Brooks Ramsdell, PG, CEG, Associate
- Uri Eliahu, PE, GE, President

Transportation

Fehr and Peers
- Michael Kennedy, AICP, Principal
- Tom Gaul, Principal
- Ribeka Toda, PE, Senior Engineer
- Diwu Zhou, PE, Senior Engineer
- Claude Strayer, PE Senior Associate
- Michael Kao, Senior Planner

Historic Resources

GPA Consulting

- Laura O'Neill, Senior Architectural Historian
- Amanda Duane, Senior Architectural Historian
- Emily Rinaldi, Associate Architectural Historian

Teresa Grimes | Historic Preservation

- Teresa Grimes, Principal

Historic Resources Group

- Peyton Hall, FAIA, Principal Architect Emeritus
- Christine Lazzaretto, Managing Principal

Air Quality/HRA, Energy, Greenhouse Gas Emissions

Ramboll US Consulting, Inc.

- Eric Lu, PE, Managing Principal
- Emily Weissinger, PE, Senior Managing Consultant
- Haley Grassi, PE, Managing Consultant
- Shannon Lee, Managing Consultant
- Elizabeth Tom, Senior Consultant
- Luke Pramod, EIT, Consultant

Wildfire

Reax Engineering Inc.

- David Rich, PhD.

Gondola Systems

SCJ Alliance

- Michael Deiparine, Senior Project Manager

Utilities

Kimley-Horn

- Jeff Baumgardner, PE, Civil Engineer
- Robert Blume, PE, Senior Project Manager

Construction

PCL Construction Services, Inc.

- Austin Wheelon, Preconstruction Manager
- Jeyre Lewis, MS, Manager, Special Projects

Structural Engineering

Nabih Youssef Associates Structural Engineers

- Nabih Youssef, S.E., P.E., President
- Ryan Wilkerson, S.E., C.E., Principal

Planning

Johnson Fain
- Juan Carlos Begazo, AIA, Principal
- Shuangdi Dou, Urban Designer

SCJ Alliance
- Shareefa Abdulsalam, Senior Urban Designer

Design

RIOS
- Naseema Asif, Studio Director, Architecture
- Russell Dykann, Technical Director, Architecture

Lighting

Francis Krahe & Associates, Inc.
- Francis Krahe, President
- Jacob Graige, Project Designer
- Jason Grandpre, Senior Construction Manager

Arborist

Carlberg Associates
- Cy Carlberg, Registered Consulting Arborist
- Scott McAllaster, Certified Arborist
- Daniel Cowell, Certified Arborist

Airspace Analysis

VMC LLC
- Angela Merrifield, President
- Robert Varani, PMP, CM, Vice President

8.4 RESPONSIBLE AGENCIES CONSULTED

City of Los Angeles

Department of Planning
- Milena Zasadzien, Major Projects, Senior City Planner
- Kathleen King, Major Projects, City Planner
- Ken Bernstein, Office of Historic Resources and Urban Design Studio, Principal City Planner and Manager
- Lambert Giessinger, Office of Historic Resources, Historic Preservation Architect
- Michelle Levy, Urban Design Studio, Senior City Planner

El Pueblo de Los Angeles Historical Monument Authority
- Arturo Chavez, General Manager
- Edgar Garcia, Assistant General Manager

Department of Transportation

- Tomas Carranza, Transportation Principal and Planning & Land use Review Engineer
- Wes Pringle, Transportation Engineer
- Eileen Hunt, Transportation Engineering Associate III
- Connie Llanos, Interim GM

Bureau of Engineering

- Ted Allen, City Engineer and Executive Director

Los Angeles Department of Building and Safety

- Frank Laura, Director of Government and Community Relations

Los Angeles Fire Department

- Hani Malki, Senior Fire Protection Engineer
- Eric French, Captain I, Fire Development Services Section
- Oscar Salgado, Acting Fire Protection Engineer

California Department of Parks and Recreation

- Brian Dewey, Assistant Deputy Director
- James Newland, Historian/Planner
- Amy Schuessler, Architect

8.5 PROJECT SPONSOR

LA Aerial Rapid Transit Technologies LLC

This page intentionally left blank.

9.0 REFERENCES

3.1 Aesthetics Section

AECOM. Visual Impact Assessment for The Los Angeles Aerial Rapid Transit Project. September 2022.

California Department of Transportation (Caltrans). 2022. Scenic Highways – Scenic Highway System Lists. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed April 2022.

California State Parks. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.laparksalliance.org/wp-content/uploads/2021/02/lashp-general-plan-eir.pdf. Accessed August 2022.

City of Los Angeles, CEQA Thresholds Guide, 2006.

Cornfield Arroyo Seco Specific Plan (CASP) Update. Los Angeles City Planning. Available at: https://planning.lacity.org/plans-policies/casp-update#about. Accessed May 2022.

El Pueblo de Los Angeles Historical Monument. 2022. About Us. Available at: https://elpueblo.lacity.org/about-us. Accessed May 2022.

El Pueblo de Los Angeles Historical Monument. 2022. Educational Resources. Available at: https://elpueblo.lacity.org/educational-resources. Accessed May 2022.

FHWA. 2015. Guidelines for Visual Impact Assessment of Highway Projects, Publication No. FHWA-HEP-15-029. Available at: https://www.environment.fhwa.dot.gov/env_topics/other_topics/VIA_Guidelines_for_Highway_Projects.pdf. Accessed September 2022.

Francis Krahe & Associates Inc. Lighting Technical Study for The Los Angeles Aerial Rapid Transit Project. September 2022.

LAMC. 2014. Section 13.17.

Los Angeles Conservancy. 2022. Dodger Stadium: Overview. Available at: https://www.laconservancy.org/locations/dodger-stadium. Accessed May 2022.

Los Angeles Conservancy. 2022. Los Angeles Union Station: Overview. Available at: https://www.laconservancy.org/locations/los-angeles-union-station. Accessed May 2022.

Los Angeles County Metropolitan Transportation Authority (Metro). 2018. Adjacent Construction Design Manual, Volume III, MTA Design Criteria and Standards.

Los Angeles Department of City Planning. 2015. Zoning Information No. 2358. River Improvement Overlay District: Ordinance Nos. 183144 and 183145. Available at: http://zimas.lacity.org/documents/zoneinfo/ZI2358.pdf. Accessed May 2022.

Los Angeles State Historic Park (LASHP). 2022. History at LA State Historic Park. Available at: https://lastatehistoricpark.org/history/. Accessed May 2022.

LASHP. 2022. Our History. Available at: https://lastatehistoricpark.org/history/. Accessed May 2022.

LASHP. 2020. Roundhouse and River Station Shops. Available at: https://lashp.com/history-2/roundhouse-and-river-station-shops/. Accessed April 2022.

LASHP. 2020. Zanja Madre. Available at: https://lashp.com/history-2/zanja-madre/. Accessed September 2022.

National Park Service (NPS). 2022. California: Arroyo Seco Parkway. Available at: https://www.nps.gov/places/arroyo-seco-parkway.htm. Accessed May 2022.

National Park Service (NPS). 1985. National Register of Historic Places Inventory – Nomination Form (U.S. Post Office-Los Angeles Terminal Annex Post Office). Available at: https://npgallery.nps.gov/NRHP/GetAsset/NRHP/85000131_text. Accessed May 2022.

3.2 Agriculture and Forestry Resources Section

California Department of Conservation, Division of Land Resource Protection. Williamson Act, Reports and Statistics, 2018 Status Report. Available at: https://www.conservation.ca.gov/dlrp/wa/Pages/stats_reports.aspx. Accessed April 2022.

City of Los Angeles Department of City Planning. 2013. Cornfield Arroyo Seco Specific Plan. Available at: https://planning.lacity.org/odocument/9d013e0f-452b-4857-86d5-fcd357b27a4d. Accessed April 2022.

City of Los Angeles Department of City Planning. 1960. Office of Zoning Administrator, Z.A Case No. 15430, Dodger Baseball Stadium Site – Chavez Ravine Area.

City of Los Angeles Department of City Planning, Zoning Information and Map Access System (ZIMAS). Interactive map available at: http://zimas.lacity.org. Accessed April 2022.

City of Los Angeles Municipal Code (LAMC). Section 12.05.

State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, Los Angeles County, Los Angeles County Important Farmland 2016 map. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/LosAngeles.aspx. Accessed April 2022.

State of California Department of Conservation, Division of Land Resource Protection. Farmland Mapping and Monitoring Program, Prime Farmland and Farmland of Statewide Importance. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/prime_farmland_fmmp.aspx. Accessed April 2022.

State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, Overview. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/Program_Overview.aspx. Accessed April 2022.

State of California Department of Conservation, Division of Land Resource Protection, Williamson Act Program. Available at: https://www.conservation.ca.gov/dlrp/wa. Accessed April 2022.

State of California Department of Forestry and Fire Protection, Fire and Resource Protection Program, California's Forests and Rangelands: 2017 Assessment, August 2019. Available at: https://frap.fire.ca.gov/assessment. Accessed April 2022.

State of California Department of Forestry and Fire Protection, Programs, Resource Management, Forestry/Landowner Assistance, Forest Legacy Program. Available at: https://www.fire.ca.gov/grants/forest-legacy. Accessed April 2022.

3.3 Air Quality Section

California Air Resources Board (CARB). 2016. Overview: Diesel Exhaust and Health. Available at: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed April 2022.

CARB. Area Designation Maps/State and National. Available at: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations, accessed April 2022.

CARB. 2008. Fact Sheet: Diesel Particulate Matter Health Risk Assessment Study for the West Oakland Community: Preliminary Summary of Results. Available at: https://ww3.arb.ca.gov/ch/communities/ra/westoakland/documents/factsheet0308.pdf. Accessed April 2022.

CARB. 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. October. Available at: https://ww2.arb.ca.gov/sites/default/files/classic//diesel/documents/rrpfinal.pdf. Accessed April 2022.

California Environmental Protection Agency (Cal EPA), Office of Environmental Health Hazard Assessment (OEHHA). February 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed April 2022.

National Ambient Air Quality Standards (NAAQS). Available at: https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed April 2022.

National Highway Traffic Safety Administration (NHTSA). April 2021. NHTSA Advances Biden-Harris Administration's Climate & Jobs Goals. Available at: https://www.nhtsa.gov/press-releases/nhtsa-advances-biden-harris-administrations-climate-jobs-goals. Accessed April 2022.

Ramboll US Consulting, Inc. Los Angeles Aerial Rapid Transit Project Air Quality/Health Risk Assessment Technical Report. September 2022.

South Coast Air Quality Management District (SCAQMD). April 2019. Air Quality Significance Thresholds. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf. Accessed April 2022.

SCAQMD. California Emissions Estimator Model®. Available at: http://www.caleemod.com/. Accessed April 2022.

SCAQMD. 1993. CEQA Air Quality Handbook. Available at: https://www.dtsc-ssfl.com/files/lib_ceqa/ref_draft_peir/Chap4_2-AirQuality/SCAQMD_1993_-_CEQA_Handbook.pdf. Accessed September 2022.

SCAQMD. Draft 2022 Air Quality Management Plan. Available at: http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan. Accessed July 2022.

SCAQMD. Historical Data by Year. Available at: https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year. Accessed April 2022.

SCAQMD. NAAQS and CAAQS Attainment Status for South Coast Air Basin. Available at: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf. Accessed April 2022.

SCAQMD. 2008. SCAQMD Final Localized Significance Threshold Methodology. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf. Accessed April 2022.

SCAQMD. 2008. SCAQMD Final Localized Significance Threshold Methodology, Mass Rate LST Look-up Tables. Available at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds. Accessed May 2021.

Southern California Association of Governments (SCAG). 2020. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. Available at: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176. Accessed April 2022.

SCAG. Connect SoCal. Available at: https://scag.ca.gov/connect-socal. Accessed April 2022.

United States Environmental Protection Agency (USEPA). AP-42: Compilation of Air Emissions Factors. Available at: https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors. Accessed April 2022.

USEPA. EPA Region 9 Air Quality Maps. Available at: https://www3.epa.gov/region9/air/maps/. Accessed April 2022.

USEPA. 2021. Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed: April 2022.

USEPA. April 2021. Notice of Reconsideration of a Previous Withdrawal of a Waiver for California's Advanced Clean Car Program (Light-Duty Vehicle Greenhouse Gas Emission Standards and Zero Emission Vehicle Requirements). Available at:

https://www.epa.gov/regulations-emissions-vehicles-and-engines/notice-reconsideration-previous-withdrawal-waiver. Accessed April 2022.

USEPA and NHTSA. September 2019. Federal Register, Vol. 84. No. 188, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. Available at: https://www.govinfo.gov/content/pkg/FR-2019-09-27/pdf/2019-20672.pdf. Accessed April 2022.

USEPA and NHTSA. 2016. Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium and Heavy-Duty Engines and Vehicles – Phase 2. Available at: https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed April 2022.

White House Briefing Room. January 2021. Executive Order on Tackling the Climate Crisis at Home and Abroad. Available at: https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement. Accessed April 2022.

3.4 Biological Resources Section

AECOM. Biological Resources Assessment for the Los Angeles Aerial Rapid Transit Project. September 2022.

Avian Power Line Interaction Committee and Edison Electric Institute. 2012. Reducing Avian Collisions with Power Lines: The State of the Art in 2012. Washington. D.C. Available at: http://www.aplic.org/uploads/files/15518/Reducing_Avian_Collisions_2012watermarkLR.pdf. Accessed April 2022.

California Department of Fish and Wildlife (CDFW). 2022. California Natural Diversity Data Base (CNDDB). Full report for Los Angeles, Burbank, Pasadena, Mt. Wilson, Hollywood, El Monte, Inglewood, South Gate, and Whittier quadrangles. Accessed May 10, 2022.

CDFW. 2022. California Natural Diversity Database, Special Animals List. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406. Accessed May 10, 2022.

California Department of Parks and Recreation. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf. Accessed April 2022.

CDFW. 2022. California Natural Diversity Data Base (CNDDB), Full Report for Los Angeles, Burbank, Pasadena, Mt. Wilson, Hollywood, El Monte, Inglewood, South Gate, and Whittier Quadrangles. Accessed May 10, 2022.

California Native Plant Society (CNPS). 2022. Inventory of Rare and Endangered Plants (online edition, v8-03 0.39). California Native Plant Society. Sacramento, CA. Available at http://www.rareplants.cnps.org. Accessed May 2022.

City of Los Angeles. 2001. City of Los Angeles General Plan Conservation Element. Available at: https://planning.lacity.org/odocument/28af7e21-ffdd-4f26-84e6-dfa967b2a1ee/Conservation_Element.pdf. Accessed April 2022.

Cornfield Arroyo Seco Specific Plan (CASP) Update. Los Angeles City Planning. Available at: https://planning.lacity.org/plans-policies/casp-update#about. Accessed April 2022.

Los Angeles County, Department of Regional Planning (LACDRP). 2015. Los Angeles County General Plan. Available at: http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan.pdf. Accessed April 2022.

LACDRP. 2020. Significant Ecological Areas (SEA) Ordinance Implementation Guide. Available at: http://planning.lacounty.gov/site/sea/wp-content/uploads/2020/07/SEA-IG-6-30-20.pdf. Accessed April 2022.

U.S. Fish and Wildlife Service (USFWS). 2020. Migratory Bird Treaty Act Protected Species (10.13 List). Available at: https://www.fws.gov/birds/management/managed-species/migratory-bird-treaty-act-protected-species.php. Accessed April 2022.

USFWS. 2022. Information for Planning and Conservation. Available at https://ecos.fws.gov/ipac. Accessed August 2022.

3.5 Cultural Resources Section

AECOM. Archaeological and Paleontological Resources Assessment for the Los Angeles Aerial Rapid Transit Project. September 2022.

California Code of Regulations. 2022. Sections 4850 and 15064.5(a)(2).

California Code of Regulations. 2022. Sections 5024.1 and 14.

California Code of Regulations. 2022. Title 14 § 4852 (c).

California Department of Parks and Recreation. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf. Accessed April 2022.

California Department of Parks and Recreation. El Pueblo de Los Angeles State Historic Park General Plan. August 1981.

California Office of Historic Preservation. Are Archeological Sites Part of the California Register? Available at: https://ohp.parks.ca.gov/?page_id=21725, accessed April 2022.

California Public Resources Code, Section 5024 and 5024.5. Available at:https://california.public.law/codes/ca_pub_res_code_section_5024 and https://california.public.law/codes/ca_pub_res_code_section_5024.5) Accessed August 2022.

City of Los Angeles Office of Historic Resources. 2016. Cultural Heritage Ordinance. Available at: http://preservation.lacity.org/commission/cultural-heritage-ordinance. Accessed August 2022.

City of Los Angeles. 2000. Central City North Community Plan. Available at: https://planning.lacity.org/odocument/e06434a6-341a-48ed-97dc-8f6a85780951/Central_City_North_Community_Plan.pdf.Accessed April 2022.

City of Los Angeles. 2003. Central City Community Plan. Available at: https://planning.lacity.org/odocument/2ddbdde0-a8fb-46e3-a151-f52fd09cc084/Central_City_Community_Plan.pdf. Accessed April 2022.

City of Los Angeles. 2001. City of Los Angeles General Plan Conservation Element. Available at: https://planning.lacity.org/odocument/28af7e21-ffdd-4f26-84e6-dfa967b2a1ee/Conservation_Element.pdf. Accessed April 2022.

City of Los Angeles, 2016, El Pueblo de Los Angeles Strategic Plan, 2016-2020: p. 9. Available at: https://elpueblo.lacity.org/sites/g/files/wph1641/files/2021-01/Low.Res_.EP%20Strategic%20Plan.2016.2021.pdf. Accessed September 2022.

City of Los Angeles, 1980, El Pueblo General Plan. Not available online.

City of Los Angeles. 2004. Silver Lake-Echo Park-Elysian Park Community Plan. Available at: https://planning.lacity.org/odocument/e87507ac-8c40-49a0-aa1c-21df963f2298/Silver_Lake-Echo_Park- Elysian_Valley_Community_Plan.pdf. Accessed April 2022.

GPA Consulting. Historical Resource Technical Report for Los Angeles Aerial Rapid Transit Project. September 2022.

Los Angeles Administrative Code. 2018. Section 22.171.7.

National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation, p.4-5, 7-8, 44-45. Available at: https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf. Accessed April 2022.

National Register Bulletin #16: How to Complete the National Register Registration Form, p. 16. Available at: https://www.nps.gov/subjects/nationalregister/upload/NRB16A-Complete.pdf. Accessed April 2022.

National Register Bulletin #21: Defining Boundaries for National Register Properties Form, p. 12. Available at: https://www.nps.gov/subjects/nationalregister/upload/Boundaries-Completed.pdf. Accessed April 2022.

Public Resources Code Section 5024.1 and 14 California Code of Regulations Sections 4850 & 15064.5(a)(2). 2019.

Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation: HABS/HAER Standards, Available at: https://www.nps.gov/hdp/standards/standards.pdf. Accessed April 2022.

Title 14 California Code of Regulations Section 4852 (c). 2022.

Title 36 Code of Federal Regulations Part 60.3(d). 2022.

Title 36 Code of Federal Regulations Part 60.4. 2022.

3.6 Energy Section

CARB. 2020 Mobile Source Strategy. Available at: https://ww2.arb.ca.gov/resources/documents/2020-mobile-source-strategy. Accessed April 2022.

CARB. 2022. 2022 Scoping Plan Documents. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents#:~:text=The%202022%20Scoping%20Plan%20Update%20focuses%20on%20outcomes%20needed%20to,economic%2C%20environmental%2C%20energy%20security%2C. Accessed June 2022.

CARB. Advanced Clean Trucks. Available at: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks. Accessed April 2022.

CARB. 2017. California's 2017 Climate Change Scoping Plan. November. Available at: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed April 2022.

CARB. June 2020. EMFAC Off-Model Adjustment Factors for Carbon Dioxide Emissions to Account for the SAFE Vehicles Rule Part One and the Final SAFE Rule. Available at: https://ww3.arb.ca.gov/msei/emfac_off_model_co2_adjustment_factors_06262020-final.pdf. Accessed May 2021.

CARB. 2014. First Update to the Climate Change Scoping Plan: Building on the Framework. May. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2013-scoping-plan-documents. Accessed April 2022.

CARB. SB 375 Regional Plan Climate Targets. Available at: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed April 2022.

CARB. Tractor-Trailer Greenhouse Gas Regulation. Available at: https://ww2.arb.ca.gov/our-work/programs/ttghg#:~:text=The%20California%20Air%20Resources%20Board.Regulation%20took%20effect%20in%202010. Accessed April 2022.

California Energy Commission (CEC). 2018. 2018 Integrated Energy Policy Report Update. Available at: https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report. Accessed May 2021.

CEC. 2019. 2018 Total System Electric Generation in Gigawatt Hours. Available at: https://www.energy.ca.gov/almanac/electricity_data/total_system_power.html. Accessed April 2022.

CEC. 2021. 2020 Natural Gas Consumption by County. Available at: https://ecdms.energy.ca.gov/gasbycounty.aspx. Accessed April 2022.

CEC. 2021. 2020 Total System Electric Generation in Gigawatt Hours. Available at: https://www.energy.ca.gov/almanac/electricity_data/total_system_power.html. Accessed April 2022.

CEC. 2018. California Energy Demand 2018-2030 Revised Forecast. Available at: https://efiling.energy.ca.gov/getdocument.aspx?tn=223244. Accessed April 2022.

CEC. 2018. California's Pioneering Policies for New Homes: Greater Efficiency with Required Solar Energy. Available at: https://www.cesa.org/wp-content/uploads/CESA-webinar-slides-9.11.2018.pdf. Accessed April 2022.

CEC. Electricity Consumption by County. Available at: https://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed April 2022.

CEC. Gas Consumption by County. Available at: https://ecdms.energy.ca.gov/gasbycounty.aspx. Accessed April 2022.

CEC. Integrated Energy Policy Report - IEPR. Available at: https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report. Accessed April 2022.

CEC. 2016. Summary of California Vehicle and Transportation Energy. Available at: http://www.energy.ca.gov/almanac/transportation_data/summary.html#vehicles. Accessed April 2022.

California Executive Department. 2018. Executive Order B-55-18 to Achieve Carbon Neutrality. Available at: https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf. Accessed June 2022.

City of Los Angeles. L.A.'s Green New Deal: Sustainable City pLAn. Available at: https://plan.lamayor.org/sites/default/files/pLAn_2019_final.pdf. Accessed April 2022.

Federal Register. 2018. The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks. Available at: https://www.federalregister.gov/documents/2018/08/24/2018-16820/the-safer-affordable-fuel-efficient-safe-vehicles-rule-for-model-years-2021-2026-passenger-cars-and. Accessed April 2022.

LADWP. October 2020. 2020 Power Content Label. Available at: https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-powercontentlabel?_adf.ctrl-state=pf527sf87_17&_afrLoop=419132207075050. Accessed April 2022.

LADWP. 2020. 2020 Power Content Label. October. Available at: https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-powercontentlabel?_adf.ctrl-state=pf527sf87_17&_afrLoop=419132207075050. Accessed April 2022.

Metro. 2019. Metro Climate and Adaptation Plan 2019. Available at: https://media.metro.net/projects_studies/sustainability/images/Climate_Action_Plan.pdf. Accessed April 2022.

NHTSA. 2021. NHTSA Advances Biden-Harris Administration's Climate & Jobs Goals. Available at: https://www.nhtsa.gov/press-releases/nhtsa-advances-biden-harris-administrations-climate-jobs-goals. Accessed April 2022.

NHTSA. 2021. NHTSA Repeals SAFE I Rule. December 21. Available at: https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy. Accessed: April 2022.

Ramboll US Consulting, Inc. Los Angeles Aerial Rapid Transit Project Energy Technical Report. September 2022.

U.S. Energy Information Administration (USEIA). 2022. California State Profile and Energy Estimates: Profile Overview. Available at: http://www.eia.gov/state/?sid=CA. Accessed April 2022.

USEIA. 2021. Petroleum & Other Liquids. Number and Capacity of Petroleum Refineries. Available at: https://www.eia.gov/dnav/pet/PET_PNP_CAP1_DCU_SCA_A.htm. Accessed April 2022.

USEPA. 2021. Federal Register, Vol. 86, No. 80, California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a previous Withdrawal of a Waiver of Preemption; Opportunity for Public Hearing and Public Comment. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/notice-reconsideration-previous-withdrawal-waiver. Accessed April 2022.

USEPA. 2021. Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed April 2022.

USEPA. 2009. Recovery: EPA Gets Involved. Available at: https://archive.epa.gov/recovery/web/html/. Accessed April 2022.

USEPA and NHTSA. 2016. Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium and Heavy-Duty Engines and Vehicles – Phase 2. Available at: https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed April 2022.

USEPA and NHTSA. 2019. Federal Register, Vol. 84. No. 188, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. Available at: https://www.govinfo.gov/content/pkg/FR-2019-09-27/pdf/2019-20672.pdf. September 2019. Accessed April 2022.

White House Briefing Room. 2021. Executive Order on Tackling the Climate Crisis at Home and Abroad. Available at: https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/. January 2021. Accessed April 2022.

3.7 Geology and Soils Section

2019 California Building Code, Title 24, Part 2, Volume 2, Chapter 18, Section 1803.5.3. Available at: https://codes.iccsafe.org/content/CABCV22019JUL21S/chapter-18-soils-and-foundations. Accessed April 2022.

Arcadis. 2019. 2018 Annual Groundwater Monitoring Report and Request for No Further Action, Union Pacific Railroad, Los Angeles, CA, Lease Site, Cornfield. February 2019.

California Building Standards Commission. 2019. California Building Standards Code, Title 24, Part 2, Vol. 1 and 2. Available at: https://codes.iccsafe.org/content/CBC2019P4.

California Department of Conservation, California Geological Survey. 1998. Seismic Hazard Zone Report for the Los Angeles 7.5-Minute Quadrangle, Los Angeles County, California, Seismic Hazard Zone Report 029.

California Department of Conservation, California Geological Survey. Revised 2018 Special Publication 42 (SP 42), Earthquake Fault Zones, A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California.

California Department of Conservation, California Geological Survey. 2017. Earthquake Fault Zones, Los Angeles Quadrangle, Revised Official Map, June 2017.

California Department of Water Resources. 1961. Bulletin No. 104. Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County, Appendix A Ground Water Geology.

Campbell, R.H. 2014. Preliminary Geologic Map of the Los Angeles 30'x 60' Quadrangle, California. California Geological Survey.

California Legislative Information. Public Resources Code. Division 2, Geology, Mines and Mining [2001-2815], Chapter 7.5, Earthquake Fault Zoning [2621-2630], Alquist Priolo Earthquake Fault Zoning Act.

City of Los Angeles. Zone Information and Map Access (ZIMAS). Interactive map available at: http://zimas.lacity.org/. Accessed August 2022.

City of Los Angeles Department of City Planning. 1996. Safety Element of the Los Angeles City General Plan. Available at: https://planning.lacity.org/odocument/31b07c9a-7eea-4694-9899-f00265b2dc0d/Safety_Element.pdf. Accessed April 2022.

ENGEO Incorporated. 2022. Los Angeles Aerial Rapid Transit Project Geotechnical Document in Support of the Environmental Impact Report. September 2022.

Wallace. Robert. ed. 1980. The San Andreas Fault System, California: U.S. Geological Survey Professional Paper 1515, p. 283.

3.8 Greenhouse Gas Emissions Section

California Executive Department. 2018. Executive Order B-55-18 to Achieve Carbon Neutrality. Available at: https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf. Accessed June 2022.

California Natural Resources Agency. 2018. Final Adopted Text of the 2018 Amendments and Additions to the State CEQA Guidelines. Available at: http://resources.ca.gov/ceqa/docs/2018_CEQA_FINAL_TEXT_122818.pdf. Accessed April 2022.

California Senate Bill 44. Available at: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB44. Accessed April 2022.

CARB. 2022. 2022 Scoping Plan Documents. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents#:~:text=The%202022%20Scoping%20Plan%20Update%20focuses%20on%20outcomes%20needed%20to,economic%2C%20environmental%2C%20energy%20security%2C. Accessed June 2022.

CARB. 2017. California's 2017 Climate Change Scoping Plan. November. Available at: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed April 2022.

CARB. 2019. California Greenhouse Gas Emissions for 2000-2017 – Trends of Emissions and Other Indicators. Available at: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf. Accessed April 2022.

CARB. 2020. California Greenhouse Gas Emissions for 2000-2018 – Trends of Emissions and Other Indicators. Available at: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2018/ghg_inventory_trends_00-18.pdf. Accessed April 2022.

CARB. 2008. Climate Change Scoping Plan: A Framework for Change. December. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2008-scoping-plan-documents. Accessed April 2022.

CARB. 2020. EMFAC Off-Model Adjustment Factors for Carbon Dioxide Emissions to Account for the SAFE Vehicles Rule Part One and the Final SAFE Rule. Available at: https://ww3.arb.ca.gov/msei/emfac_off_model_co2_adjustment_factors_06262020-final.pdf. June 2020. Accessed April 2022.

CARB. 2019. EMFAC Off-Model Adjustment Factors to Account for the SAFE Vehicle Rule Part One. Available at: https://ww3.arb.ca.gov/msei/emfac_off_model_adjustment_factors_final_draft.pdf. November 2019. Accessed April 2022.

CARB. 2014. First Update to the Climate Change Scoping Plan: Building on the Framework. May. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2013-scoping-plan-documents. Accessed April 2022.

CARB. 2020. LCFS Basics. Available at: https://ww2.arb.ca.gov/sites/default/files/2020-09/basics-notes.pdf. Accessed April 2022.

CARB. SB 375 Regional Plan Climate Targets. Available at: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed April 2022.

CEC. 2019. California's Energy Efficiency Standards for Residential and Nonresidential Buildings. Available online at: https://www.energy.ca.gov/title24/2019standards/. Accessed April 2022.

CARB. 2019. California Greenhouse Gas Emissions for 2000-2017 – Trends of Emissions and Other Indicators. Available at: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf. Accessed April 2022.

CARB. 2020. California Greenhouse Gas Emissions for 2000-2018 – Trends of Emissions and Other Indicators. Available at: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2018/ghg_inventory_trends_00-18.pdf. Accessed April 2022.

CCCC. 2019. California's Fourth Climate Change Assessment. Key Findings. Available at: http://www.climateassessment.ca.gov/state/overview/. Accessed April 2022.

City of Los Angeles. 2019. L.A.'s Green New Deal: Sustainable City pLAn. Available at: https://plan.lamayor.org/sites/default/files/pLAn_2019_final.pdf. Accessed April 2022.

CNRA. 2018. Final Adopted Text of the 2018 Amendments and Additions to the State CEQA Guidelines. Available at: http://resources.ca.gov/ceqa/docs/2018_CEQA_FINAL_TEXT_122818.pdf. Accessed April 2022.

FTA/FHWA. June 2020. SCAG Connect SoCal RTP/SCS, 2019 FTIP Amendment No. 19- 12 (and associated conformity determination) Letter. Available at: https://scag.ca.gov/sites/main/files/file-attachments/scagff12_060520_2.pdf. Accessed June 2022.

Metro. 2019. Metro Climate and Adaptation Plan 2019. Available at: https://media.metro.net/projects_studies/sustainability/images/Climate_Action_Plan.pdf. Accessed April 2022.

Metro. 2020. Moving Beyond Sustainability Strategic Plan. Available at: http://media.metro.net/2020/Moving-Beyond-Sustainability-Strategic-Plan-2020.pdf. Accessed April 2022.

National Oceanic and Atmospheric Administration (NOAA). 2022. Monthly Average Mauna Loa CO_2. Available at: https://www.esrl.noaa.gov/gmd/ccgg/trends/. Accessed April 2022.

NHTSA. 2021. NHTSA Advances Biden-Harris Administration's Climate & Jobs Goals. Available at: https://www.nhtsa.gov/press-releases/nhtsa-advances-biden-harris-administrations-climate-jobs-goals. April 2021. Accessed April 2022.

Office of Planning and Research (OPR). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. Available at: https://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. December 2018. Accessed April 2022.

POET, LLC v. CARB (2013) 217 Cal.App.4th 1214.

Ramboll US Consulting, Inc. Los Angeles Aerial Rapid Transit Project Greenhouse Gas Emissions Technical Report. September 2022.

SCAG. 2020. Connect SoCal. Available at: https://scag.ca.gov/connect-socal. Accessed April 2022.

SCAG. 2016. The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. Available at: https://scag.ca.gov/sites/main/files/file-attachments/f2016rtpscs.pdf?1606005557. Accessed April 2022.

SCAQMD. 2008. Interim CEQA GHG Significance Threshold. Available at: https://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf. Accessed April 2022.

State of California, Climate Change Assessment. 2019. California's Fourth Climate Change Assessment, Key Findings. Available at: http://www.climateassessment.ca.gov/state/overview/. Accessed April 2022.

United Nations Framework Convention on Climate Change. 2016. 2016 Climate Action Report: Second Biennial Report of the United States of America. Available at: https://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/2016_second_biennial_report_of_the_united_states_.pdf. Accessed April 2022.

United Nations Framework Convention on Climate Change. 2017. The Paris Agreement. Available at: http://unfccc.int/paris_agreement/items/9485.php. July 2017. Accessed July 2021.

United States. 2016. 2016 Climate Action Report: Second Biennial Report of the United States of America Under the United Nations Framework Convention on Climate Change. Available at: https://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/2016_second_biennial_report_of_the_united_states_.pdf. Accessed April 2022.

USEPA and NHTSA. 2016. Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium and Heavy-Duty Engines and Vehicles – Phase 2. Available at: https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed April 2022.

USEPA and NHTSA. 2019. Federal Register. Vol. 84. No. 188. The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. Available at: https://www.govinfo.gov/content/pkg/FR-2019-09-27/pdf/2019-20672.pdf. September 2019. Accessed April 2022.

USEPA. 2019. Inventory of U.S. Greenhouse Gas Emissions and Sinks. Available at: https://www.epa.gov/sites/production/files/2019-04/documents/us-ghg-inventory-2019-main-text.pdf. Accessed April 2022.

USEPA. 2021. Federal Register, Vol. 86, No. 80, Notice of Reconsideration of a Previous Withdrawal of a Waiver for California's Advanced Clean Car Program (Light-Duty Vehicle Greenhouse Gas Emission Standards and Zero Emission Vehicle Requirements). Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/notice-reconsideration-previous-withdrawal-waiver. Accessed April 2022.

USEPA. 2021. Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed April 2022.

USEPA. June 2017. Administrator Scott Pruitt Speech on Paris Accord, As Prepared. Available at: https://archive.epa.gov/epa/speeches/administrator-scott-pruitt-speech-paris-accord-prepared.html. Accessed April 2022.

White House Briefing Room. 2021. Executive Order on Tackling the Climate Crisis at Home and Abroad. January 27. Available at: https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/. Accessed April 2022.

3.9 Hazards and Hazardous Materials Section

AECOM. Phase I Environmental Site Assessment of Proposed Los Angeles Aerial Rapid Transit Project. September 2022.

American Society for Testing and Materials. ASTM E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Available at https://www.astm.org/Standards/E1527.htm. Accessed May 2022. Please note that this material is either covered under a NDA, otherwise confidential, and/or copywritten.

Cal EPA. Overview of Environmental Law. Available at: https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/CUPA-Documents-Inspection-OvrviwEnvlaw.pdf. Accessed May 2022.

California Building Code. Chapter 7A [SFM] Materials and Construction Methods for Exterior Wildfire Exposure. Available at: https://up.codes/viewer/california/ca-building-code-2016/chapter/7A/sfm-materials-and-construction-methods-for-exterior-wildfire-exposure#7A. Accessed April 2022.

California Code of Regulations. Title 8, Section 1529: Asbestos. Available at: https://www.dir.ca.gov/title8/1529.html. Accessed May 2022.

California Code of Regulations. Title 8, Section 1532.1: Lead. Available at: https://www.dir.ca.gov/title8/1532_1.html. Accessed May 2022.

California Code of Regulations. Title 8, Section 5208: Asbestos. Available at: https://www.dir.ca.gov/title8/5208.html. Accessed May 2022.

California Legislative Information, Public Resources Code. Division 4, Forests, Forestry and Range And Forage Lands [4001 - 4958], Chapter 3, Mountainous, Forest-, Brush- and Grass-Covered Lands [4291 - 4299]. Available at: http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=4291. Accessed May 2022.

California Legislative Information, Public Resources Code. Division 4, Forests, Forestry and Range And Forage Lands [4001 - 4958], Chapter 1, Prevention and Control of Forest Fires [4101 - 4205]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=4201. Accessed May 2022.

California Senate Bill 158. Available at: https://legiscan.com/CA/text/SB158/id/2424457. Accessed August 2022.

City of Los Angeles, Emergency Management Department. 2018. Emergency Operations Plan. Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-04/comprehensive_emergency_operations_plan_eop-_2018.pdf. Accessed May 2022.

City of Los Angeles, Emergency Management Department. Emergency Plans and Annexes. Available at: https://emergency.lacity.org/emergency-plans-and-annexes. Accessed April 2022.

City of Los Angeles Emergency Operations Plan Evacuation Functional Support Annex. 2018. Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-04/evacuation_annex_2018.pdf. May 2018. Accessed May 2022.

City of Los Angeles, Fire Code. 2017. Chapter 49 Requirements for Wildland-Urban Interface Fire Areas. Available at: https://codes.iccsafe.org/content/chapter/10285/. Accessed April 2022.

City of Los Angeles. 2020. City of Los Angeles General Plan Framework Element, Chapter 9, Infrastructure and Public Services. Available at: https://planning.lacity.org/cwd/framwk/chapters/09/09.htm#police. Accessed April 2022.

City of Los Angeles. 2021. Downtown Community Plan. Available at: https://planning.lacity.org/odocument/2425dc72-10bd-49c8-afd6-e862225f4b1c/CPU_Downtown_v18.pdf. Accessed May 2022.

City of Los Angeles. Fire Hazard Severity Zones. Available at: https://geohub.lacity.org/datasets/lacounty::fire-hazard-severity-zones. Accessed April 2022.

City of Los Angeles. General Plan Safety Element. Available at: https://planning.lacity.org/odocument/31b07c9a-7eea-4694-9899-f00265b2dc0d/Safety_Element.pdf. Accessed May 2022.

County of Los Angeles Public Works. n.d. Disaster Routes. Available at: https://dpw.lacounty.gov/dsg/DisasterRoutes. Accessed May 2022.

County of Los Angeles. Los Angeles County Operational Area Emergency Response Plan, June 2012.

International Code Council. 2018. 2018 International Fire Code. Available at: https://codes.iccsafe.org/content/IFC2018P4/preface. Accessed April 2022.

Los Angeles County Operational Area Emergency Response Plan, Section 5 – Los Angeles County Hazard Analysis and Mitigation. Available at: https://ceo.lacounty.gov/wp-content/uploads/OEM/OAERP/SECTION%205.%20%20LOS%20ANGELES%20COUNTY%20HAZARD%20ANALYSIS%20AND%20MITIGATION.pdf. Accessed May 2022.

Los Angeles Fire Department. Hydrants and Access. Available at: https://www.lafd.org/hydrants-and-access. Accessed April 2022.

South Coast Air Quality Management District. Asbestos Demolition and Removal. Available at: http://www.aqmd.gov/home/rules-compliance/compliance/asbestos-demolition-removal. Accessed May 2022.

South Coast Air Quality Management District, Rule 1166. Available at: https://www.aqmd.gov/home/rules-compliance/compliance/rule-1166-site-specific-and-various-locations-soil-mitigation-plan. Accessed May 2022.

State Water Resources Control Board. Revised 2019. California Ocean Plan. Available at: https://www.waterboards.ca.gov/water_issues/programs/ocean/docs/oceanplan2019.pdf. Accessed August 2022.

United States Code. Title 42, Chapter 116 et seq.: Emergency Planning and Community Right-to-Know Act. Available at: https://www.law.cornell.edu/uscode/text/42/chapter-116. Accessed May 2022.

United States Department of Labor, Occupational Safety and Health Administration: https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.55. Accessed May 2022.

USEPA. 2020. Chemicals and Toxic Topics. Available at: https://www.epa.gov/environmental-topics/chemicals-and-toxics-topics. Accessed May 2022.

USEPA. Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP). Available at: https://www.epa.gov/stationary-sources-air-pollution/asbestos-national-emission-standards-hazardous-air-pollutants. Accessed May 2022.

World Health Organization. 2016. Public Health Impact of Chemicals: Knowns and Unknowns. Available at: https://www.who.int/publications/i/item/WHO-FWC-PHE-EPE-16.01-eng. Accessed May 2022.

3.10 Hydrology and Water Quality Section

AECOM. 2022. Los Angeles Aerial Rapid Transit Project Hydrology and Water Quality Technical Study. September 2022.

Arcadis. 2009. Summary of Site Conditions and Request for Closure, Former Cornfield Yard, 1245 North Spring Street, Los Angeles, California, SLIC Site SL2047T1683. Available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL2047T1683. Accessed May 2022.

California Dam Breach and Inundation Maps. 2022. Available at: https://fmds.water.ca.gov/maps/damim. Accessed May 2022.

California Department of Parks and Recreation. 2022. State Park Peace Officer (Ranger). Available at: https://www.parks.ca.gov/?page_id=851. Accessed August 2022.

California Department of Water Resources. 1961. Bulletin 104, Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County. Available at: https://semspub.epa.gov/work/09/1144638.pdf. Accessed May 2022.

California Department of Water Resources. 2004. Bulletin 118, Coastal Plain of Los Angeles Groundwater Basin. Central Subbasin. Available at: https://water.ca.gov/-/media/DWR-Available at:/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/4_011_04_CentralSubbasin.pdf. Accessed May 2022.

California Department of Toxic Substances Control. 2022. EnviroStor, Cornfield Site (19400013). Available at: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19400013.Accessed May 2022.

Cal. Penal Code § 830(f). 2019.

California Water Boards. 2016. Impaired Water Bodies. Available at: https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml. Accessed July 2021.

California Water Boards. 2022. Impaired Water Bodies. Available at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2022/rs2022_0006.pdf. Accessed May 2022.

California Water Boards. 2020. Los Angeles R4 Municipal Storm Water Permit. Available at: https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/los_angeles_ms4/index.html. Accessed May 2022.

California Water Boards. Facilities Covered by National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activities (General Permit). Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/industrial/2014indgenpermit/atta.pdf. Accessed May 2022.

California Water Boards. Storm Water Program - Caltrans Permits. Available at: https://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/caltrans_permits/. Accessed May 2022.

City of Los Angeles Department of Aging. 2022. Multipurpose Senior Centers. Available at: http://aging.lacity.org/index.php?fetch=mpc. Accessed April 2022.

City of Los Angeles Emergency Management Department. 2018. Emergency Operations Plan. Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-04/comprehensive_emergency_operations_plan_eop-_2018.pdf. Accessed April 2022.

City of Los Angeles. 1995. Los Angeles Citywide General Plan Framework EIR. Available at: https://planning.lacity.org/odocument/6aa45676-e431-43ab-8621-dd493e64d2ea/FrameworkFEIR.pdf. Accessed April 2022.

City of Los Angeles. 2022. Office of Mayor Eric Garcetti. A Bridge Home. Available at: https://www.lamayor.org/ABridgeHome. Accessed April 2022.

City of Los Angeles, Department of Recreation and Parks. 2022. Senior Citizen Centers. Available at: https://www.laparks.org/scc. Accessed April 2022.

Central Basin Watermaster. 2020. Central Basin Watermaster Available at: Available at: http://www.cbwatermaster.org/about.html. Accessed May 2022.

City of Los Angeles Bureau of Sanitation. 2016. Planning and Land Development Handbook for Low Impact Development (LID), 5th edition.

City of Los Angeles Department of City Planning. 2000. Central City North Community Plan. Available at: https://planning.lacity.org/odocument/e06434a6-341a-48ed-97dc-8f6a85780951/Central_City_North_Community_Plan.pdf. Accessed April 2022.

City of Los Angeles Department of City Planning. 2003. Central City Community Plan. Available online at: https://planning.lacity.org/odocument/2ddbdde0-a8fb-46e3-a151-f52fd09cc084/Central_City_Community_Plan.pdf. Accessed August 2022.

City of Los Angeles Department of City Planning. 1996. Safety Element of the Los Angeles City General Plan. Available at: https://planning.lacity.org/odocument/31b07c9a-7eea-4694-9899-f00265b2dc0d/Safety_Element.pdf. Accessed April 2022.

City of Los Angeles Department of City Planning. 2004. Silver Lake-Echo Park-Elysian Park Community Plan. Available at: https://planning.lacity.org/odocument/e87507ac-8c40-49a0-aa1c-21df963f2298/Silver_Lake-Echo_Park- Elysian_Valley_Community_Plan.pdf. Accessed April 2022.

City of Los Angeles Department of City Planning. General Plan Overview. Available at: https://planning.lacity.org/plans-policies/general-plan-overview. Accessed May 2022.

City of Los Angeles, Department of Recreation and Parks. 2022. Senior Citizen Centers. Available at: https://www.laparks.org/scc. Accessed April 2022.

ENGEO Incorporated. July 2021. Los Angeles Aerial Rapid Transit Project Geotechnical Document in Support of the Environmental Impact Report.

Federal Emergency Management Agency (FEMA). 2020. Flood Insurance Rate Maps; 06037C1628F (effective September 2008) and 06037C1636G (effective December 2018). Available at: https://msc.fema.gov/portal/search. Accessed May 2022.

Greater Los Angeles County Integrated Regional Water Management Region. 2014. The Greater Los Angeles County Integrated Regional Water Management Plan, 2013 Update. Available at: https://dpw.lacounty.gov/wmd/irwmp/FileList.aspx?path=docs\2014%20Public%20IRWMP%20Update.Accessed May 2022.

Hilda L. Solis. 2022. Hilda L. Solis Care First Village Receives License Agreement to Initiate Operation. Available at: https://hildalsolis.org/hilda-l-solis-care-first-village-receives-license-agreement-initiate-operation. Accessed April 2022.

Los Angeles County Department of Public Works (LACDPW). 2020. Groundwater Wells Online Data. Available at: https://dpw.lacounty.gov/general/wells/. Accessed May 2022.

LACDPW. 2006. Hydrology Manual.

LACDPW. 2020. Los Angeles County Storm Drain System. Available at: https://pw.lacounty.gov/fcd/stormdrain/disclaimer.cfm. Accessed May 2022.

LACDPW. June 1996. Los Angeles River Master Plan. June. Available at: http://ladpw.org/wmd/watershed/LA/LARMP. Accessed May 2022.

LACDPW. Los Angeles County Topography Maps Web Viewer. Available at: https://pw.lacounty.gov/smpm/cetopo. Accessed May 2022.

LACDPW. Los Angeles County Storm Drain System. Available at: https://pw.lacounty.gov/fcd/stormdrain/disclaimer.cfm. Accessed May 2022.

Los Angeles Fire Department (LAFD). 2020. Los Angeles Fire Department Strategic Plan 2018-2020. Available at: https://issuu.com/lafd/docs/strategic_plan_final_2018.02.09?e=17034503/59029441. Accessed April 2022.

LAFD. 2022. FireStatLA. Available at: https://www.lafd.org/fsla/stations-map. Accessed April 2022.

LAFD. 2022. Our Mission. Available at: https://www.lafd.org/about/about-lafd/our-mission. Accessed April 2022.

Los Angeles Police Department. 2022. About: Central Area. Available at: https://www.lapdonline.org/lapd-contact/central-bureau/central-community-police-station. Accessed April 2022.

Los Angeles Police Department (LAPD). 2020. Use of Force Year-End Review 2020. Available at: https://lapdonlinestrgeacc.blob.core.usgovcloudapi.net/lapdonlinemedia/2021/05/year-2020-uof-review.pdf. Accessed April 2022.

LAPD. 2022. Your LAPD by Division: Northeast Community Police Station. Available at: https://www.lapdonline.org/lapd-contact/central-bureau/northeast-community-police-station. Accessed August 2022.

Los Angeles County Flood Control District. 2015. District Enhanced Watershed Management Programs Draft Environmental Impact Report. Available at: https://dpw.lacounty.gov/LACFCD/ewmppeir/. April 2015. Accessed May 2022.

Los Angeles Gateway Region Integrated Regional Water Management Joint Powers Authority. June 2013. Gateway Integrated Regional Water Management Plan. June. Available at: https://gatewaywater.org/download/irwmp_general_documents/gateway-irwm-plan/Gateway-IRWMP-Report-Final.pdf. Accessed May 2022.

Los Angeles Gateway Region. 2015. Los Angeles River Upper Reach 2 Watershed Management Area, Revised Watershed Management (WMP) Plan. Available at: https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/los_angeles/upper_reach2/15-01-27LARUR2WMARevWMP.pdf. January 2015. Accessed May 2022.

Los Angeles Public Library. 2022. Interactive map available at: https://www.lapl.org/branches. Accessed April 2022.

Los Angeles Regional Water Quality Control Board. 2014. Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. Available at: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.html. September 2014. Accessed May 2022.

Los Angeles Unified School District. 2022. Fingertip Facts 2021-2022. Available at: https://achieve.lausd.net/cms/lib/CA01000043/Centricity/Domain/280/Fingertip_Facts_2021_2022.pdf. Accessed August 2022.

State of California Natural Resources Agency. 2015. California's Groundwater Update 2013. Available at: https://cawaterlibrary.net/document/californias-groundwater-update-2013-south-coast-hydrologic-region/. April 2015. Accessed May 2022.

State Water Resources Control Board (SWRCB). 2019. California Ocean Plan. Available at: https://www.waterboards.ca.gov/water_issues/programs/ocean/docs/oceanplan2019.pdf. Revised 2019. Accessed August 2022.

SWRCB. 2022. GeoTracker. Available at: https://geotracker.waterboards.ca.gov/map. Accessed May 2022.

SWRCB. 2020. GeoTracker®, Domenich Basso, Inc. (T0603790010). Available at: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0603790010. Accessed May 2022.

SWRCB. 2022. GeoTracker®, Los Angeles County Department of Public Works (T10000018616). Available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000018616. Accessed May 2022.

SWRCB. 2022. GeoTracker®. Metro Rail Union Station (SLT43207205). Available at https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SLT43207205. Accessed May 2022.

SWRCB. 2020. GeoTracker®, Union Pacific - Cornfield Yard (2047T1683). Available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL2047T1683. Accessed May 2022.

SWRCB. NPDES Construction Stormwater General Permit Reissuance. Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/general_permit_reissuance. html. Accessed: August 2022.

SWRCB. 2020. Industrial General Permit. Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/igp_20140057dwq.html. Accessed July 2022.

SWRCB. Storm Water Program – Caltrans Permits. Available at: https://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/caltrans_permits. Accessed May 2022.

The Metropolitan Water District of Southern California. 2016. Potential Regional Recycled Water Program Feasibility Study. Available at: https://www.ocwd.com/media/4888/wic05xcarson-rrwp-feasibility-main-report.pdf. November 2016. Accessed May 2022.

University of California Libraries. 2022. Los Angeles Public Library. Department of Water and Power Photo Collection: Solano Reservoir. Available at: https://calisphere.org/item/3f413ecf3009034d6f503455292bc7de/. Accessed June 2022.

US Department of the Interior, Bureau of Reclamation. 2014. Los Angeles Basin Groundwater Adjudication Summary. Available at: https://www.usbr.gov/lc/socal/basinstudies/LA%20Adjudication%20Dec%202014.pdf. Accessed May 2022.

Verbal confirmation from LAPD Air Support Division, Officer Coley Madigan. February 2021.

Water Replenishment District of Southern California. 2016. Groundwater Basins Master Plan. Available at: https://www.wrd.org/sites/pr/files/GBMP_FinalReport_Text%20and%20Appendicies.pdf. September 2016. Accessed May 2022.

Western Regional Climate Center. 2022. Los Angeles Downtown USC Campus, California (045115), Period of Record Monthly Climate Summary (7/1/1877 to 6/9/2016). Available at: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5115. Accessed May 2022.

3.11 Land Use and Planning Section

California Department of Housing and Community Development. CALGreen. Available at https://www.hcd.ca.gov/calgreen. Accessed August 2022.

California State Department of Parks and Recreation. Los Angeles State Historic Park Interpretive Master Plan. 2006. Available at: https://lastatehistoricpark.org/wp-content/uploads/2021/07/LASHP-Interpretive-Master-Plan-1.pdf. Accessed September 2022.

California Department of Parks and Recreation. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf. Accessed April 2022.

City of Los Angeles Bureau of Engineering. 2002. Los Angeles River Revitalization Master Plan: Guiding Principles. Available at: https://boe.lacity.org/lariverrmp/Background/guiding_principles.htm. Accessed May 2022.

City of Los Angeles Department of City Planning, Alameda District Specific Plan. 1996. Available at: https://planning.lacity.org/odocument/11788e44-7659-4e6f-95d6-4b5d5861b1ba/Alameda_District_Specific_Plan.pdf. June 1996. Accessed May 2022.

City of Los Angeles Department of City Planning. 2013. Cornfield Arroyo Seco Specific Plan. Available at: https://planning.lacity.org/odocument/9d013e0f-452b-4857-86d5-fcd357b27a4d. Accessed May 2022.

City of Los Angeles Department of City Planning. Central City North Community Plan. Available at: https://planning.lacity.org/odocument/e06434a6-341a-48ed-97dc-8f6a85780951/Central_City_North_Community_Plan.pdf. December 2000. Accessed May 2022.

City of Los Angeles Department of City Planning. Central City Community Plan. 2003. Available at: https://planning.lacity.org/plans-policies/community-plan-area/central-city. January 2003. Accessed May 2022.

City of Los Angeles Department of City Planning. 2013. Cornfield Arroyo Seco Specific Plan. Available at: https://planning.lacity.org/odocument/9d013e0f-452b-4857-86d5-fcd357b27a4d. Accessed May 2022.

City of Los Angeles Department of City Planning. 2001. General Plan. Framework Element. Available at: https://planning.lacity.org/plans-policies/framework-element. Accessed May 2022.

City of Los Angeles Department of City Planning. 2014. General Plan Land Use Map: Central City North Community Plan. Available at: https://planning.lacity.org/odocument/2c941d9c-7285-4268-8593-44b53dbd2995/ccnplanmap.pdf. Accessed May 2022.

City of Los Angeles Department of City Planning. 2020. List No. 1 of Uses Permitted in Various Zones in the City of Los Angeles (Breakdown by Different Zones). Available at: https://planning.lacity.org/odocument/647665b9-6246-4eaf-a70c-f06285ff28c4/UseListMemo.pdf. Accessed May 2022.

City of Los Angeles Department of City Planning. 2004. Silver Lake-Echo Park-Elysian Valley Community Plan. August 2004, available at: https://planning.lacity.org/odocument/e87507ac-8c40-49a0-aa1c-21df963f2298/Silver_Lake-Echo_Park-Elysian_Valley_Community_Plan.pdf. August 2004. Accessed May 2022.

City of Los Angeles Department of City Planning. 1960. Office of Zoning Administrator. Z.A Case No. 15430. Dodger Baseball Stadium Site – Chavez Ravine Area. August 1960.

Continuing Education of the Bar, Practice Under the California Environmental Quality Act, Section 12.34. Available at: https://store.ceb.com/practice-under-the-california-environmental-quality-act. Accessed September 2022.

Cornfield Arroyo Seco Specific Plan (CASP) Update. Los Angeles City Planning. Available at: https://planning.lacity.org/plans-policies/casp-update#about. Accessed May 2022.

CRA/LA. 2021. Chinatown Redevelopment Plan. Project Area Overview. Available at: http://www.crala.org/internet-site/projects/chinatown/index.cfm. Accessed May 2022.

LAMC. Section 12.04.09B3-8. 2013.

LAMC. Section 12.14. 2002.

LAMC. Section 12.17.6A4. 2022.

LAMC. Section 12.04.05. 1990.

LAMC Section 12.04.09. 1991.

LAMC. Section 13.17.2014.

Los Angeles Department of City Planning. 2021. Chinatown Redevelopment Plan. Available at: https://planning.lacity.org/plans-policies/overlays/chinatown. Accessed August 2022.

Los Angeles Department of City Planning. 1980. Chinatown Redevelopment Plan. Available at: http://www.crala.org/internet-site/Projects/Chinatown/upload/chinatownredevelopmentplan.pdf. Accessed August 2022.

Los Angeles Department of City Planning. 2015. Zoning Information No. 2358. River Improvement Overlay District: Ordinance Nos. 183144 and 183145. Available at: http://zimas.lacity.org/documents/zoneinfo/ZI2358.pdf. Accessed May 2022.

Los Angeles County Metropolitan Transportation Authority, August 17, 2017. LAUS Forecourt and Esplanade Improvements Project, Draft Environmental Impact Report. Available at: https://www.metro.net/projects/la-union-station-forecourt-and-esplanade-improvements. Accessed May 2022.

Southern California Association of Governments (SCAG). 2020. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy Adopted Final Connect SoCal. Available at: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176. September 2020. Accessed May 2022.

Sequoyah Hills Homeowners Association. City of Oakland (1993) 23 Cal.App.4th 704, 719.

SCAG. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, Adopted September 3, 2020, available at: https://scag.ca.gov/read-plan-adopted-final-plan. Accessed May 2022.

SCAG. Connect SoCal website: https://scag.ca.gov/connect-socal. Accessed May 2022.

South Coast Air Quality Management District (SCAQMD), Final 2016 Air Quality Management Plan (AQMP). March 2017. Available at: https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp. Accessed May 2022.

Studio-MLA Survey. 2020. Submitted by the Los Angeles Dodgers to the City of Los Angeles as part of the 2020 Centerfield Improvements in 2020. April 2020.

City of Los Angeles Department of City Planning, Zoning Information and Map Access System (ZIMAS). Interactive map available at: http://zimas.lacity.org/. Accessed May 2022.

3.12 Mineral Resources Section

California Department of Conservation. 2021. California Geological Survey, Special Report 254, Plate 1 – Mineral Resource Zone Map. Available at: https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_254-MLC-SanFernandoValleySaugusNewhallPCR-2021-Plate01-MRZs-a11y.pdf. Accessed August 2022.

California Department of Conservation, Geologic Energy Management Division (CalGEM), Well Finder, search by address. Available at: https://maps.conservation.ca.gov/doggr/wellfinder/#openModal. Accessed April 2022.

City of Los Angeles Department of City Planning. 2001. City of Los Angeles General Plan Conservation Element. Available at: http://planning.lacity.org/cwd/gnlpln/consvelt.pdf. Adopted 2001. Accessed April 2022.

City of Los Angeles Department of City Planning. 2001. City of Los Angeles General Plan Conservation Element: Exhibit A, Mineral Resources. Available at: https://planning.lacity.org/odocument/28af7e21-ffdd-4f26-84e6-dfa967b2a1ee/Conservation_Element.pdf. Adopted 2001. Accessed April 2022.

3.13 Noise Section

AECOM. Los Angeles Aerial Rapid Transit Project Noise and Vibration Technical Report. 2022. September.

California Department of Finance. 2021. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark. Available at: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5. May 2021. Accessed July 2021.

Caltrans. 2013. Technical Noise Supplement to Traffic Noise Analysis Protocol. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf. Accessed July 2021.

Caltrans. 2020. Transportation and Vibration Guidance Manual. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed July 2021.

Cornfield Arroyo Seco Specific Plan (CASP) Update. Los Angeles City Planning. Available at: https://planning.lacity.org/plans-policies/casp-update#about. Accessed April 2022.

City of Los Angeles. 1999. City of Los Angeles General Plan Noise Element. Available at: https://planning.lacity.org/odocument/b49a8631-19b2-4477-8c7f-08b48093cddd/Noise_Element.pdf. Accessed July 2021.

City of Los Angeles. 2006. L.A. CEQA Thresholds Guide. 2006. Available at: https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/A07.pdf. Accessed July 2021.

Cornfield Arroyo Seco Specific Plan (CASP) Update. Los Angeles City Planning. Available at: https://planning.lacity.org/plans-policies/casp-update#about. Accessed April 2022.

Federal Highway Administration. 2006. FHWA Roadway Construction Noise Model, User's Guide. Available at: https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnm.pdf. Accessed July 2021.

Federal Transit Administration. 2018. Transit Noise and Vibration Impact Assessment Manual. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed July 2021.

Los Angeles Unified School District. 2015. School Upgrade Program EIR. Available at: https://achieve.lausd.net/cms/lib08/CA01000043/Centricity/domain/135/pdf%20files/Final_EIR.pdf Accessed July 2021.

Rossi, Federico, and Andrea Nicpolini. 2011. Noise Prediction Models for Gondola Ropeway Components, Noise Control Engineering Journal. September 2011.

3.14 Population and Housing Section

Cornfield Arroyo Seco Specific Plan (CASP) Update. n.d. Los Angeles City Planning. Available at: https://planning.lacity.org/plans-policies/casp-update#about. Accessed April 2022.

Los Angeles City Department of Planning, City of Los Angeles General Plan Housing Element 2021-2029. 2022. Available at: https://planning.lacity.org/plans-policies/housing-element. Accessed September 2022.

SCAG (Southern California Association of Governments). 2020. Connect SoCal. Demographics and Growth Forecast. September 2020.

Southern California Association of Governments, Connect SoCal, Demographics and Growth Forecast. 2020. Adopted September 2020.

State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark. 2021. Available at: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5. Accessed April 2022.

U.S. Census Bureau. 2020. Definitions and Explanations. Available at: https://www.census.gov/housing/hvs/definitions.pdf. Accessed April 2022.

U.S. Census Bureau. American Community Survey. 2019 5-Year Estimates. Total Population Data for Census Block Groups in Project Study Area. Table B01003. Available at: www.data.census.gov. Accessed April 2022.

U.S. Census Bureau. American Community Survey. 2019 5-Year Estimates. Data for Census Block Groups in Project Study Area. B25001. Available at: www.data.census.gov. Accessed April 2022.

U.S. Census Bureau. American Community Survey. 2019 5-Year Estimates. Detailed Housing Units. Table B25001 and Occupied Housing Units Table B25003. Available at: www.data.census.gov. Accessed April 2022.

U.S. Census Bureau. American Community Survey. 2019 5-Year Estimates. Employment Status for the Population 16 Years and Over. Table B23025. Data for Census Block Groups in Project Study Area. Available at: www.data.census.gov. Accessed April 2022.

U.S. Census Bureau. American Community Survey. 2019 5-Year Estimates. Means of Transportation to Work. Table B08301. Data for Census Block Groups in Project Study Area. Available at: www.data.census.gov. Accessed April 2022.

U.S. Census Bureau. American Community Survey. 5-Year Estimates 2011-2019. Employment Status for the Population 16 Years and Over. Table B23025. Available at: www.data.census.gov. Accessed April 2022.

3.15 Public Services Section

Available at: https://www.ansi.org/about/introduction. Accessed April 2022.

Available at: https://www.nfpa.org/overview. Accessed April 2022.

California Department of Parks and Recreation. 2022. State Park Peace Officer (Ranger). Available at: https://www.parks.ca.gov/?page_id=851. Accessed August 2022.

Cal. Penal Code § 830(f).

City of Los Angeles Department of Aging. 2021. Multipurpose Senior Centers. Available at: http://aging.lacity.org/index.php?fetch=mpc. Accessed April 2022.

City of Los Angeles Department of City Planning. 2003. Central City Community Plan. Available online at: https://planning.lacity.org/odocument/2ddbdde0-a8fb-46e3-a151-f52fd09cc084/Central_City_Community_Plan.pdf. Accessed August 2022.

City of Los Angeles Department of City Planning. 2000. Central City North Community Plan. Available at: https://planning.lacity.org/odocument/e06434a6-341a-48ed-97dc-8f6a85780951/Central_City_North_Community_Plan.pdf. Accessed April 2022.

City of Los Angeles Department of City Planning. 1995. Los Angeles Citywide General Plan Framework EIR. Available at: https://planning.lacity.org/odocument/6aa45676-e431-43ab-8621-dd493e64d2ea/FrameworkFEIR.pdf. Accessed April 2022.

City of Los Angeles Department of City Planning. 1996. Safety Element of the General Plan. Available at: https://planning.lacity.org/odocument/31b07c9a-7eea-4694-9899-f00265b2dc0d/Safety_Element.pdf. Accessed April 2022.

City of Los Angeles Department of City Planning. 2004. Silver Lake-Echo Park-Elysian Park Community Plan. Available at: https://planning.lacity.org/odocument/e87507ac-8c40-49a0-aa1c-21df963f2298/Silver_Lake-Echo_Park- Elysian_Valley_Community_Plan.pdf. Accessed April 2022.

City of Los Angeles Department of Recreation and Parks. 2021. Senior Citizen Centers. Available at: https://www.laparks.org/scc. Accessed April 2022.

City of Los Angeles Emergency Management Department. 2018. Emergency Operations Plan. Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-04/comprehensive_emergency_operations_plan_eop-_2018.pdf. Accessed April 2022.

City of Los Angeles. 2021. Office of Mayor Eric Garcetti. A Bridge Home. Available at: https://www.lamayor.org/ABridgeHome. Accessed April 2022.

Hilda L. Solis. 2022. Available at: https://hildalsolis.org/hilda-l-solis-care-first-village-receives-license-agreement-initiate-operation/. Accessed April 2022.

Los Angeles Fire Department (LAFD). 2020. Los Angeles Fire Department Strategic Plan 2018-2020. Available at: https://issuu.com/lafd/docs/strategic_plan_final_2018.02.09?e=17034503/59029441. Accessed April 2022.

LAFD. 2022. FireStatLA. Available at: https://www.lafd.org/fsla/stations-map. Accessed April 2022.

LAFD. 2022. Our Mission. Available at: https://www.lafd.org/about/about-lafd/our-mission. Accessed April 2022.

Los Angeles Police Department (LAPD). 2022. About: Central Area. Available at: http://www.lapdonline.org/central_community_police_station/content_basic_view/1681. Accessed April 2022.

LAPD. 2020. Use of Force Year-End Review 2019. Available at: http://lapd-assets.lapdonline.org/assets/pdf/2019_uof_review.pdf. Accessed April 2022.

LAPD. 2022. Your LAPD by Division: Northeast Community Police Station. Available at: https://www.lapdonline.org/lapd-contact/central-bureau/northeast-community-police-station. Accessed August 2022.

Los Angeles Public Library. 2022. Interactive map available at: https://www.lapl.org/branches. Accessed April 2022.

Los Angeles Unified School District. 2022. Fingertip Facts 2021-2022. Available at: https://achieve.lausd.net/cms/lib/CA01000043/Centricity/Domain/280/Fingertip_Facts_2021_2022.pdf. Accessed August 2022.

Verbal confirmation from LAPD Air Support Division, Officer Coley Madigan, February 2021.

3.16 Recreation Section

California Department of Parks and Recreation. (DPR). 2012. Los Angeles State Historic Park Master Development Plan, Final Environmental Impact Report. Available at: https://www.parks.ca.gov/?page_id=26953. Accessed August 2022.

California Department of Parks and Recreation. (DPR). 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf. Accessed April 2022.

California Department of Parks and Recreation. (DPR). 2006. Los Angeles State Historic Park Interpretive Master Plan.

California Department of Parks and Recreation. 2021. Los Angeles State Historic Park. Available at: https://www.parks.ca.gov/?page_id=22272. Accessed April 2022.

California Department of Parks and Recreation. 2021. Los Angeles State Historic Park. Concerts and Events. Available at: https://lastatehistoricpark.org/events. Accessed April 2022.

California Department of Toxic Substances Control (DTSC). 2021. Envirostor. Cornfield Site (19400013). Activities. Available at: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19400013. Accessed April 2022.

City of Los Angeles. 2021. El Pueblo de Los Angeles: Events. Available at: https://elpueblo.lacity.org/events. Accessed April 2022.

City of Los Angeles Department of City Planning. 1968. City of Los Angeles Park General Plan: Public Facilities and Services Element. Available at: https://planning.lacity.org/odocument/43319adf-80e9-4080-8d1d-ed7b3d3e2607/Public%20Facilities.pdf. Accessed April 2022.

City of Los Angeles Department of City Planning. 1973. City of Los Angeles Park: General Plan Open Space Element. Available at: https://planning.lacity.org/odocument/01ea5f66-3281-488a-930b-f523712fef07/Open_Space_Element.pdf. Accessed April 2022.

City of Los Angeles Department of City Planning. 2000. Central City North Community Plan. Available at: https://planning.lacity.org/odocument/e06434a6-341a-48ed-97dc-8f6a85780951/Central_City_North_Community_Plan.pdf. Accessed April 2022.

City of Los Angeles Department of City Planning. 1995. City of Los Angeles General Plan Framework Element. Available at: https://planning.lacity.org/plans-policies/framework-element. Accessed April 2022.

City of Los Angeles Department of City Planning. 2003. Central City Community Plan. Available at: https://planning.lacity.org/odocument/2ddbdde 0-a8fb-46e3-a151-f52fd09cc084/Central_City_Community_Plan.pdf. Accessed April 2022.

City of Los Angeles Department of City Planning. 2004. Silver Lake-Echo Park-Elysian Park Community Plan. Available at: https://planning.lacity.org/odocument/e87507ac-8c40-49a0-aa1c-21df963f2298/Silver_Lake-Echo_Park-Elysian_Valley_Community_Plan.pdf. Accessed April 2022.

City of Los Angeles Department of Recreation and Parks. 2021. 50 Parks Initiative. Available at: https://www.laparks.org/50parks. Accessed April 2022.

City of Los Angeles Department of Recreation and Parks. 2021. Los Angeles Plaza Park (A.K.A. Father Serra Park). Available at: https://www.laparks.org/park/los-angeles-plaza. Accessed April 2022.

City of Los Angeles Department of Recreation and Parks. 2021. Who We Are. Available at: https://www.laparks.org/department/who-we-are. Accessed April 2022.

Cornfield Arroyo Seco Specific Plan (CASP) Update. Los Angeles City Planning. Available at: https://planning.lacity.org/plans-policies/casp-update#aboutabout. Accessed April 2022.

Department of Toxic Substances Control. 2021. Envirostor. Cornfield Site (19400013), Activities. Available at: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19400013. Accessed April 2022.

Echo Park Historical Society. 2021. Elysian Park. Available at: http://historicechopark.org/history-landmarks/places-landmarks/elysian-park/. Accessed April 2022.

Los Angeles County Department of Parks and Recreation. 2016. Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment. Available at: https://lacountyparkneeds.org/wp-content/uploads/2016/06/FinalReport.pdf. Accessed April 2022.

Los Angeles County Department of Parks and Recreation. 2021. Find A Park (Search by Finding Parks Near: 800 North Alameda St, Los Angeles, CA 90012; Distance: 5 miles; Search for Parks and Amenities). Interactive park map available at: https://parks.lacounty.gov. Accessed April 2022.

Los Angeles Dodgers Foundation. 2021. Los Angeles Dodgers Foundation Sunset Run. Available at: https://dodgers.race-mlb.com. Accessed April 2022.

Los Angeles County Metropolitan Transportation Authority. 2019. Transit to Parks Strategic Plan. Available at: http://media.metro.net.s3.amazonaws.com/projects_studies/toc/images/nextStop_transitToParks_05-2019.pdf. Accessed April 2022.

Major League Baseball Advanced Media. 2021. Dodger Stadium History. Available at: https://www.mlb.com/dodgers/ballpark/information/history. Accessed April 2022.

Metro. 2019. Transit to Parks Strategic Plan. http://media.metro.net/projects_studies/toc/images/nextStop_transitToParks_05-2019.pdf. Accessed April 2022.

Public Art in Public Places. 2021. "Antonio Aguilar" (2012) by Dan Medina. Available at: https://www.publicartinpublicplaces.info/antonio-aguilar-2012-by-dan-medina. Accessed April 2022.

S. Campbell. May 19, 2020. Email Correspondence.

The McCourt Foundation. 2022. Los Angeles Marathon. Available at: https://www.lamarathon.com/. Accessed April 2022.

The McCourt Foundation. 2022. The LA Big 5K. Available at: https://www.labig5k.com/pages/la-big-5k-info Accessed April 2022.

3.17 Transportation Section

Caltrans. Statewide Transportation Improvement Program. Available at: https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/state-transportation-improvement-program. Accessed April 2022.

City of Los Angeles Department of City Planning. 2020. Downtown Community Plan Update/New Zoning Code for Downtown Community Plan. Available at: https://planning.lacity.org/development-services/eir/downtown-community-plan-updatenew-zoning-code-downtown-community-plan. August 2020. Accessed July 2021.

City of Los Angeles Department of City Planning. General Plan Safety Element. Exhibit H: Critical Facilities & Lifeline Systems. 1996. Available at: https://planning.lacity.org/odocument/31b07c9a-7eea-4694-9899-f00265b2dc0d/Safety_Element.pdf. Adopted November 26, 1996. Accessed July 2021.

City of Los Angeles Department of City Planning. 2016. Mobility Plan 2035: An Element of the General Plan. Available at: https://planning.lacity.org/odocument/523f2a95-9d72-41d7-aba5-1972f84c1d36/Mobility_Plan_2035.pdf. September 2016. Accessed April 2022.

County of Los Angeles Department of Public Works. 2012. Disaster Routes. South Los Angeles County Operational Area. https://dpw.lacounty.gov/dsg/DisasterRoutes/map/disaster_rdm-South.pdf. Accessed July 2021.

County of Los Angeles, Disaster Routes, Los Angeles County Operational Area, https://dpw.lacounty.gov/dsg/DisasterRoutes. Accessed July 2021.

Fehr & Peers. 2019. Estimated TNC Share of VMT in Six US Metropolitan Regions, 2019.

Fehr & Peers. Transportation Technical Report for Los Angeles Aerial Rapid Transit Project. September 2022.

Governor's Office of Planning and Research, Technical Advisory on Evaluating Transportation Impacts in CEQA, p.23. December 2018. Available at: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. Accessed July 2021.

Metro. 2014. Complete Streets Policy. Available at: https://media.metro.net/projects_studies/sustainability/images/policy_completestreets_2014-10.pdf. October 2014. Accessed April 2022.

SCAG. 2018. 2019 Federal Transportation Improvement Program. Available at: http://ftip.scag.ca.gov/Pages/2019/adopted.aspx. September 2018. Accessed April 2022.

SCAG. 2020. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. Available at: https://www.connectsocal.org/Documents/Adopted/0903fConnectSoCal-Plan.pdf. September 2020. Accessed April 2022.

United States Code (U.S.C.) 42. 2009. Chapter 126—Equal Opportunity for Individuals with Disabilities. Available at: https://www.govinfo.gov/content/pkg/USCODE-2009-title42/html/USCODE-2009-title42-chap126.htm.Accessed September 2022.

3.18 Tribal Cultural Resources Section

Bean, Lowell John, and Charles R. Smith. 1978. Gabrielino. In California, edited by Robert F. Heizer, pp. 538–562. Handbook of North American Indians, Vol. 9, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC.; Shipley, William F., 1978, 1978 Native Languages of California. In Handbook of North American Indians, Vol. 8 (California), edited by William C. Sturtevant and Robert F. Heizer. Washington, D.C.: Smithsonian Institution.

Beherec, Marc A. 2019. John Romani's Forgotten 1984 Excavations at CA-LAN-007 and the Archaeology of Native American Los Angeles. Proceedings of the Society for California Archaeology 33: 145-164.

California Department of Parks and Recreation. 2005. Los Angeles State Historic Park General Plan and Final Environmental Impact Report. Available at: https://www.parks.ca.gov/pages/21299/files/LASHP%20General%20Plan-EIR.pdf. Accessed April 2022.

City of Los Angeles. 2001. City of Los Angeles General Plan Conservation Element. Available at: https://planning.lacity.org/odocument/28af7e21-ffdd-4f26-84e6-dfa967b2a1ee/Conservation_Element.pdf. Accessed April 2022.

City of Los Angeles. 1981. El Pueblo de Los Angeles State Historic Park General Plan.

City of Los Angeles. 2016. El Pueblo de Los Angeles Strategic Plan. Available at: https://elpueblo.lacity.org/sites/g/files/wph1641/files/2021-01/Low.Res_.EP%20Strategic%20Plan.2016.2021.pdf. Accessed August 2022.

Erlandson, Jon M. 2012. A Land by the Sea: An Ocean View of California Archaeology. In Contemporary Issues in California Archaeology, edited by Terry L. Jones and Jennifer E. Perry, Chapter 2, pp. 21–36. Left Coast Press.

Erlandson, Jon M., Torben C. Rick, Terry L. Jones, and Judith F. Prcasi. 2007. One if by Land, Two if by Sea: Who were the First Californians? In California Prehistory, edited by Terry L. Jones and Kathryn Klar, pp. 53–62; Glassow, Michael A., Lynn H. Gamble, Jennifer E. Perry, and Glenn S. Russell, 2007, Prehistory of the Northern California Bight and the Adjacent Transverse Range. In California Prehistory, edited by Terry L. Jones and Kathryn Klar, pp. 191–205.

Goldberg, Susan K., Bradley J. Adams, Carole Denardo, Scott A. Williams, Marilyn J. Wyss, Mark C. Robinson, Jill A. Onken, Cari M. Inoway, Melinda C. Horne, Kenneth Moslak, Suzanne Griset, Virgina S. Popper, Steve L. Martin, M. Steven Shackley, Thomas M. Origer, Janet L. McVickar, Beta Analytic, Inc., Suzanne Bircheff, Susan Rapp, and Patrick Knisely. 1999. The Metropolitan Water District of Southern California Headquarters Facility Project. The People of Yaanga?: Archaeological Investigations at CA-LAN-1575/H. Document prepared by Applied Earth Works and the Metropolitan Water District of Southern California for Union Station Partners. Document on file, South Central Coastal Information System.

Gumprecht, Blake. 1999. The Los Angeles River: Its Life, Death, and Possible Rebirth. John Hopkins University Press, Baltimore, MD.

Jackson, Robert H. 1999. Agriculture, Drought and Chumash Congregation in the California Missions (1782–1834). California Mission Studies Association Articles. May 1999 Newsletter.

Johnston, Bernice. 1962. California's Gabrielino Indians. Southwest Museum, Los Angeles, CA. Available at: https://www.google.com/books/edition/California_s_Gabrielino_Indians/w8VGAAAAMAAJ?hl=en&sa=X&ved=2ahUKEwiy2evg0az6AhVKLkQIHfiVB7oQiKUDegQIChAE

Kroeber, A. L. 1925. Handbook of Indians of California. Bureau of American Ethnology Bulletin 78, Smithsonian Institution, Washington, DC.

McCawley, William. 1996. The First Angelinos: The Gabrielino Indians of Los Angeles. Malki Museum Press, Banning, CA.

National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation (Washington D.C.: National Park Service, Department of the Interior, 1997), 7-8, 44-45.

National Register Bulletin #16: How to Complete the National Register Registration Form (Washington D.C.: U.S. Department of the Interior, 1997), 16.

National Register Bulletin #21: Defining Boundaries for National Register Properties Form (Washington D.C.: U.S. Department of the Interior, 1997), 12.

National Register Bulletin #38: Guidelines for Evaluating and Documenting Traditional Cultural Properties (Washington D.C.: U.S. Department of the Interior, 1992).

Reid, Hugo. 1939 [1852]. Letters on the Los Angeles County Indians. In A Scotch Paisano in Old Los Angeles, by Susanna Bryant Dakin, pp. 215–286. University of California Press, Berkeley, CA.

Robinson, W. W. 1979. Land in California: The Story of Mission Lands, Ranchos, Squatters, Mining Claims, Railroad Grants, Land Scrip, Homesteads. University of California Press, Berkeley, CA.

Title 14 California Code of Regulations § 4852 (c). 2022.

Title 36 Code of Federal Regulations Part 60. 2022.

3.19 Utilities Section

California Department of Water Resources. 2020. Urban Water Management Plan Guidebook. Appendix B: Changes to the California Water Code Since 2015 Urban Water Management Plan. Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans/Final-2020-UWMP-Guidebook/Appendix-B---UWMP-2020.pdf. Accessed April 2022.

California Department of Water Resources. 2021. Urban Water Management Plans. Available at: https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans. Accessed April 2022.

California Public Utilities Commission. 2021. Overview. Available at: https://www.cpuc.ca.gov/about-cpuc/cpuc-overview. Accessed April 2022.

CalRecycle. 2019. Solid Waste Information System. Facility/Site Activity Details for Sunshine Canyon City/County Landfill (19-AA-2000). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/259?siteID=4702. Accessed April 2022.

CalRecycle. 2021. Mandatory Commercial Recycling. Available at: https://www.calrecycle.ca.gov/recycle/commercial. Accessed April 2022.

CEC. 2019. Gas Consumption by County. Available at: https://ecdms.energy.ca.gov/gasbycounty.aspx. Accessed April 2022.

City of Los Angeles Mayor's Office. 2019. LA's Green New Deal Sustainable City pLAn 2019. Available at: https://plan.lamayor.org/. Accessed September 2022.

City of Los Angeles. Ordinance No. 181,288.

City of Los Angeles. Ordinance No. 183,833. Adopted November 2011 and amended September 2015.

County of Los Angeles Department of Public Works (LADPW). 1997. Countywide Integrated Waste Management Plan (CoIWMP).

LADWP. 2020. Briefing Book 2019-2020.

LADPW. 1997. Countywide Integrated Waste Management Plan (CoIWMP).

LADPW. 1997. Countywide Siting Element. Available at: https://dpw.lacounty.gov/epd/cse/docs/1997%20CSE/Volume%20I%20-%20The%20Element/LACCSitingElement_VolumeI_TheElement_061997.pdf. Accessed September 2022.

LADPW. 2020. CoIWMP: 2019 Annual Report. Available at: https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=14372&hp=yes&type=PDF. Accessed April 2022.

LADPW. 2020. CoIWMP: Five-Year Review Report.

LADPW. 2022. Final Draft Countywide Siting Element. Available at: https://dpw.lacounty.gov/epd/cse/docs/Final%20Draft%20Revised%20CSE.pdf. Accessed September 2022.

LADWP. 2022. LADWP News: Mayor Garcetti Announces New Water Restrictions for LADWP Customers. Available at: https://www.ladwpnews.com/mayor-garcetti-announces-new-water-restrictions-for-ladwp-customers. Accessed July 2022.

LADWP. 2020. Recycled Water Annual Report 2019-2020. Available at: https://www.ladwp.com/cs/groups/ladwp/documents/pdf/mdaw/nzmw/~edisp/opladwpccb730153.pdf?_afrLoop=264909380777697. Accessed April 2022.

LADPW. 1997. Siting Element.

LADWP. 2020. Urban Water Management Plan. Available at: https://www.ladwp.com/cs/groups/ladwp/documents/pdf/mdaw/nzyy/~edisp/opladwpccb762836.pdf. Accessed September 2022.

Los Angeles City Clerk. 2014. Ordinance No. 184248. Available at: http://clkrep.lacity.org/onlinedocs/2015/15-0458_ORD_184248_6-6-16.pdf. Accessed April 2022.

Los Angeles Department of City Planning and the Bureau of Sanitation. 1972. City of Los Angeles General Plan Infrastructure Services Element: City-Collected Refuse Disposal Plan. Available at: https://planning.lacity.org/odocument/c9dd48c1-d9ed-4569-a448-74216c30cfe1/Infastructure_Systems.pdf. Accessed April 2022.

Los Angeles Department of City Planning. 2001. City of Los Angeles General Plan Conservation Element. Accessed April 2022.

Los Angeles Department of City Planning. 2011. City of Los Angeles General Plan Framework Element: Chapter 9 Infrastructure and Public Services. Accessed April 2022.

Los Angeles Department of City Planning. 2022. Sunshine Canyon Landfill. Available at: https://planning.lacity.org/resources/sunshine-canyon-landfill. Accessed April 2022.

City of Los Angeles Department of City Planning, Silver Lake-Echo Park-Elysian Valley Community Plan. 2004. Available at: https://planning.lacity.org/plans-policies/community-plan-area/silver-lake-echo-park-elysian-valley. August 2004. Accessed April 2022.

Los Angeles Sanitation & Environment (LASAN). 2021. About One Water LA 2040 Plan. Available at: https://www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-owla/s-lsh-es-owla-au?_adf.ctrl-state=zf22b5gop_5&_afrLoop=15166652381721998#!. Accessed April 2022.

LASAN. 1998. City of Los Angeles Stormwater Program Ordinance. Available at: https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-wp/s-lsh-wwd-wp-ec/s-lsh-wwd-wp-ec-o?_afrLoop=15167753252276687&_afrWindowMode=0&_afrWindowId=null&_adf.ctrl-state=zf22b5gop_818#!%40%40%3F_afrWindowId%3Dnull%26_afrLoop%3D15167753252276687%26_afrWindowMode%3D0%26_adf.ctrl-state%3Dzf22b5gop_822. Accessed April 2022.

LASAN. 2013. City of Los Angeles Solid Waste Integrated Resources Plan – A Zero Waste Master Plan.

LASAN. 2022. Construction and Demolition Recycling. Available at: https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s/s-lsh-wwd-s-r/s-lsh-wwd-s-r-cdr. Accessed April 2022.

LASAN. 2022. Green Building and Sustainability. Available at: https://www.ladbs.org/services/green-building-sustainability. Accessed April 2022.

LASAN. 2022. Hyperion Water Reclamation Plant. Available at: https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-p/s-lsh-wwd-cw-p-hwrp. Accessed April 2022.

LASAN. 2018. One Water LA 2040 Plan.

LASAN. 2019. Sewer System Management Plan Version 3.0. Available at: https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdm1/~edisp/cnt035427.pdf. Accessed September 2022.

LASAN. 2022. Solid Resources. Available at: https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s?_adf.ctrl-state=tm7hsvn38_5&_afrLoop=1714306588080092#!. Accessed April 2022.

LASAN. 2022. Water Reclamation Plants: Los Angeles-Glendale Water Reclamation Plant. Available at: https://www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-lagwrp?_adf.ctrl-state=nkhkqbyio_5&_afrLoop=3070955396514702#!. Accessed April 2022.

Kimley-Horn. 2021. Review of Mollenhauer Survey.

Metro. 2020. Moving Beyond Sustainability: Sustainability Strategic Plan 2020. Available at: http://media.metro.net/2020/Moving-Beyond-Sustainability-Strategic-Plan-2020.pdf. Accessed April 2022.

Mollenhauer Group. March 2020. LA ART Utility Survey.

National Integrated Drought Information System. 2022. Drought Conditions for Los Angeles County. Available at: https://www.drought.gov/states/california/county/Los%20Angeles. Accessed April 2022.

SCJ Alliance Consulting Services. 2020. Utility Exhibits. December 2020.

Southern California Gas Company (SoCal Gas). 2013. Service Territory Fact Sheet. Available at: https://www.socalgas.com/documents/news-room/fact-sheets/ServiceTerritory.pdf. Accessed April 2022.

SoCal Gas. 2021. Company Profile. Available at: https://www.socalgas.com/about-us/company-profile. Accessed April 2022.

3.20 Wildfire Section

California Building Code. 2016. Chapter 7A [SFM] Materials and Construction Methods for Exterior Wildfire Exposure. Available at: https://up.codes/viewer/california/ca-building-code-2016/chapter/7A/sfm-materials-and-construction-methods-for-exterior-wildfire-exposure#7A. Accessed May 2022.

California Department of Fire and Forestry Protection (CAL FIRE). About Us. Available at: https://www.fire.ca.gov/about-us. Accessed May 2022.

CAL FIRE. February 2019. Community Wildfire Prevention & Mitigation Report. Available at: https://www.fire.ca.gov/media/5584/45-day-report-final.pdf. Accessed July 2022.

City of Los Angeles. City of Los Angeles 2018 Local Hazard Mitigation Plan. Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-03/2018_LA_HMP_Final_2018-11-30.pdf. Accessed May 2022.

City of Los Angeles Department of City Planning. 1995. City of Los Angeles General Plan Framework Element. Available at: https://planning.lacity.org/cwd/framwk/chapters/09/09.htm#police. Accessed July 2021.

City of Los Angeles Department of City Planning. 1996. General Plan Safety Element. Available at: https://planning.lacity.org/odocument/31b07c9a-7eea-4694-9899-f00265b2dc0d/Safety_Element.pdf. Accessed May 2022.

City of Los Angeles Department of Public Works, Bureau of Engineering. High Wind Area Map. Available at: http://navigatela.lacity.org/common/mapgallery/pdf/pcis/High%20Wind%20Area.pdf. Accessed May 2022.

City of Los Angeles Emergency Management Department. Emergency Plans and Annexes, Brush Fire Annex. Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-04/brush_fire_annex_2018_5.pdf. Accessed May 2022.

City of Los Angeles Emergency Operations Plan, Evacuation Functional Support Annex. 2018. Available at: https://emergency.lacity.org/sites/g/files/wph1791/files/2021-04/evacuation_annex_2018.pdf. May 2018. Accessed May 2022.

City of Los Angeles Fire Code. 2020. Available at: https://codes.iccsafe.org/content/CACLAFC2020P1. Accessed May 2022. Please note that this material is either covered under a NDA, otherwise confidential, and/or copywritten.

City of Los Angeles. Fire Hazard Severity Areas. Interactive map available at: https://geohub.lacity.org/datasets/lacounty::fire-hazard-severity-zones. Accessed May 2022.

City of Los Angeles. General Plan Safety Element. Available at: https://planning.lacity.org/odocument/31b07c9a-7eea-4694-9899-f00265b2dc0d/Safety_Element.pdf. Accessed July 2022.

City of Los Angeles Inter-Departmental Correspondence: Wildland-Urban Interface Hazard Mitigation Report. Available at: http://clkrep.lacity.org/onlinedocs/2018/18-1120_rpt_CLA_08-07-2019.pdf. Accessed May 2022.

City of Los Angeles Department of City Planning, Zoning Information and Map Access System (ZIMAS). 2012. Interactive map available at: http://zimas.lacity.org.

County of Los Angeles. Los Angeles County Operational Area Emergency Response Plan, June 2012.

County of Los Angeles. 2020. Office of Emergency Management. 2019 County of Los Angeles All-Hazards Mitigation Plan. Overall Summary of Vulnerability to Wildfires Table 4-38. Available at: http://file.lacounty.gov/SDSInter/lac/1062614_AHMPPublicDraft_Oct1.pdf. Accessed July 2021.

County of Los Angeles Public Works (LADPW). Disaster Routes. Available at: https://dpw.lacounty.gov/dsg/DisasterRoutes. Accessed May 2022.

Interagency Federal Wildland Fire Policy Review Working Group. 2001. Review and Update of the 1995 Federal Wildland Fire Management Policy. Available at: https://www.nifc.gov/sites/default/files/policies/FederalWildlandFireManagementPolicy.pdf. January 2001. Accessed May 2022.

International Fire Code. 2018. Available at: https://codes.iccsafe.org/content/IFC2018P4/preface. Accessed May 2022.

LACDPW. Disaster Route Maps. Available at: http://dpw.lacounty.gov/dsg/disasterRoutes/city.cfm. Accessed July 2021.

Los Angeles Fire Department (LAFD), Brush Clearance Requirements, Website: https://www.lafd.org/fire-prevention/brush/brush-clearance-requirements. Accessed May 2022.

LAFD. 2020. Fire Prevention and Public Safety Bureau. Requirement #07. Available at: https://issuu.com/lafd/docs/lafd_standards_for_construction_site_fire_safety_2?fr=sY2ViNTYwMjYy. Accessed May 2022.

Los Angeles County Department of Public Works. Disaster Route Maps. Available at: http://dpw.lacounty.gov/dsg/disasterRoutes/city.cfm. Accessed May 2022.

Los Angeles Department of Water and Power. 2021. Wildfire Mitigation Plan. Available at: https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/AboutUs-Power-Wildfire?_adf.ctrl-state=i6w13ozkx_4&_afrLoop=586279179934108. Accessed May 2022.

Los Angeles Police Department. 2014. Brushfire Response Guide. Available at https://lapdonlinestrgeacc.blob.core.usgovcloudapi.net/lapdonlinemedia/2021/09/2014_Brushfire-Response-Guide.pdf. Accessed May 2022.

Los Angeles Times. 2019. “How Do Wildfires Start and Spread?”. Available at: https://www.latimes.com/california/story/2019-10-29/how-do-wildfires-start. October 2019. Accessed May 2022.

Metro. 2019. Metro Climate and Adaptation Plan 2019. Available at: https://media.metro.net/projects_studies/sustainability/images/Climate_Action_Plan.pdf. Accessed: April 2022.

National Park Service. Wildland Fire Behavior. Available at: https://www.nps.gov/articles/wildland-fire-behavior.htm. Accessed May 2022.

NOAA. 2020. Local Climatological Data Annual Summary with Comparative Data, Los Angeles Downtown L.A./USC Campus (KCQT). Accessed July 2022.

Office of Governor Gavin Newsom. 2019. Wildfires and Climate Change: California’s Energy Future. Available at: https://www.gov.ca.gov/wp-content/uploads/2019/04/Wildfires-and-Climate-Change-California%E2%80%99s-Energy-Future.pdf. April 2019. Accessed July 2022.

Reax. Fire Hazard Assessment for Los Angeles Aerial Rapid Transit Project. September 2022.

State of California. 1982. Public Resources Code, Chapter 3. Mountainous, Forest-, Brush- and Grass-Covered Lands [4291 - 4299]. Available at: http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=4291. Accessed May 2022.

State of California. 1982. Public Resources Code, Article 9, Fire Hazard Severity Zones [4201 - 4204]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=4201. Accessed May 2022.

State of California. 1982. Public Resources Code, Article 2, Prohibited Activities [4421 - 4446]. Available at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=4442. Accessed May 2022.

State of California Executive Department. 2019. Executive Order N-05-19. Available at: https://www.gov.ca.gov/wp-content/uploads/2019/01/1.8.19-EO-N-05-19.pdf. January 2019. Accessed May 2022.

United States Department of Agriculture & United States Department of Interior. 1995. Federal Wildland Fire Management Policy. Available at: https://www.doi.gov/sites/doi.gov/files/migrated/pmb/owf/upload/1995-Federal-Fire-Policy.pdf. December 1995. Accessed May 2022.

U.S. Department of Agriculture & U.S. Department of Interior. 2001. Review and Updated of the 1995 Federal Wildland Fire Management Policy. Available at: https://www.doi.gov/sites/doi.gov/files/uploads/2001-wfm-policy-review.pdf. January 2001. Accessed May 2022.

U.S. Department of the Interior, Office of Wildland Fire. Fuels Management. Available at: https://www.doi.gov/wildlandfire/fuels. Accessed May 2022.

United States Department of Labor, Occupational Safety and Health Administration. 2021. Regulation 1926.24: Fire Protection and Prevention. Available at: https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.24 Accessed July 2021.

United States Geological Survey. 2018 Post-Fire Flooding and Debris Flow. Available at: https://www.usgs.gov/centers/ca-water/science/post-fire-flooding-and-debris-flow?qt-science_center_objects=0#qt-science_center_objects. Accessed May 2022.SW.

This page intentionally left blank.