

APPENDIX F

**ARCHAEOLOGICAL AND
PALEONTOLOGICAL RESOURCES ASSESSMENT**

**ARCHAEOLOGICAL AND
PALEONTOLOGICAL RESOURCES ASSESSMENT FOR THE
LOS ANGELES AERIAL RAPID TRANSIT PROJECT,
LOS ANGELES, CALIFORNIA**



Prepared for:

The Los Angeles Aerial Rapid Transit Draft Environmental Impact Report

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EXECUTIVE SUMMARY

This Archaeological and Paleontological Resources Assessment was prepared for the Los Angeles Aerial Rapid Transit Project (proposed Project) in compliance with provisions of the California Environmental Quality Act (CEQA). The Los Angeles County Metropolitan Transportation Authority (Metro) is identified as the lead agency for the proposed Project under CEQA.

The proposed Project would connect Los Angeles Union Station (LAUS) to the Dodger Stadium property via an aerial gondola system. The proposed Project would provide an aerial rapid transit (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 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 7 minutes. 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 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. 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.

The proposed Project is located in the City of Los Angeles, situated northeast of downtown Los Angeles. 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 right-of-way (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 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.

An Area of Direct Impacts was established to consider the potential impacts from the Project to archaeological, paleontological, or tribal cultural 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 pile cap for foundations and 125 feet for piles.

The Area of Direct Impacts established for archaeological and paleontological resources includes the maximum areas that may be potentially impacted by the Project.

AECOM conducted archival research to identify archaeological and paleontological resources within the Area of Direct Impacts; this was supplemented with Project area surveys in March and July 2020. AECOM conducted an archaeological records search at the South Central Coastal Information Center housed at California State University, Fullerton. The records search revealed that approximately 75 percent of the Area of Direct Impacts was previously studied. Nine archaeological resources had been identified within the Area of Direct Impacts as detailed in Table ES-1, below. Specific mitigation is recommended for those resources within the Area of Direct Impacts that appear eligible for inclusion in the California Register of Historical Resources (CRHR).

Table ES-1: Resources Within the Area of Direct Impacts and Proposed Treatment Recommendations

Primary Number (P-)	Description	Previous NRHP/ CRHR Status Recommendation	Project Component	Treatment Recommendation
19-000887	Spanish to American Period refuse and Zanja Madre segment	Recommended eligible for NRHP	Alameda Station	Prepare archaeological testing and data recovery plan in coordination with El Pueblo Historical Monument; Include in cultural resources monitoring and mitigation plan and worker training program
19-004320	Refuse deposit	Unevaluated, but originally recorded as isolates	Alameda Station	Prepare archaeological testing and data recovery plan in coordination with El Pueblo Historical Monument; Include in cultural resources monitoring and mitigation plan and worker training program
19-001575	Prehistoric cemetery; remains of historic canals, orphanage, red light district, and Chinatown	Eligible for NRHP	Alameda Station	Prepare archaeological testing and data recovery plan; include in cultural resources monitoring and mitigation plan and worker training program
19-004200	Vitrified brick paving of Alameda Street	Eligible for CRHR	Alameda Tower	Include in cultural resources monitoring and mitigation plan and worker training program; monitor pavement removal; document findings and consider reuse of brick

Primary Number (P-)	Description	Previous NRHP/ CRHR Status Recommendation	Project Component	Treatment Recommendation
19-004201	Naud Junction structure foundations and refuse deposits	Most features recommended not eligible for CRHR; one feature unevaluated	Alameda Tower	Include in cultural resources monitoring and mitigation plan and worker training program
19-004202	Southern Pacific Railroad Track Segments	Recommended not eligible for CRHR	Alameda Tower	None
19-186112	Southern Pacific Railroad	Found ineligible for NRHP through the Section 106 process Unevaluated for CRHR	Alameda Tower	Include in cultural resources monitoring and mitigation plan and worker training program
19-003120	Southern Pacific Railroad River Station	Listed Los Angeles Historic-Cultural Monument; recommended eligible for CRHR and NRHP	Chinatown/State Park Station	Prepare archaeological testing plan, include avoidance measures (other than station footprint), and prepare data recovery plan in coordination with State Parks; include in cultural resources monitoring and mitigation plan and worker training program
19-173073	Chavez Ravine	Unevaluated	Dodger Stadium Station	None

NRHP = National Register of Historic Places

* This information is from the record search described in this document

Undocumented buried archaeological resources may also be present in the Area of Direct Impacts. The Area of Direct Impacts is underlain by deep alluvial deposits dating to the last 10,000 years, and such deposits have the potential to contain significant archaeological resources. At the time of European contact, the Area of Direct Impacts was occupied by the Gabrielino, who maintained a large village, *Ya'angna*, in the vicinity. The area is also in the vicinity of the historic Pueblo of Los Angeles. From the Spanish period until today, the Area of Direct Impacts has been intensely utilized. Due to the long occupation of the Project area from prehistoric to modern times, undisturbed younger Quaternary alluvial deposits should be considered sensitive for archaeological resources. Avoidance/preservation of significant resources is the first choice, but where avoidance is not possible, other measures are necessary to minimize impacts. A Cultural Resources Monitoring and Mitigation Plan (CRMMP) should be developed by an archaeologist who meets the qualification standards set by the Secretary of the Interior for archaeology. The CRMMP will outline archaeological monitoring protocols for the Project during construction activities. These protocols will take into account information and recommendations from the AB 52 consultation process as appropriate. Approaches such

as avoidance, monitoring, and appropriate mitigation will reduce any potential impacts to cultural resources to a less-than-significant level under CEQA.

In addition, AECOM requested a records search at the Natural History Museum of Los Angeles County (NHM) of the Area of Direct Impacts and its vicinity to assess potential for paleontological resources. The NHM records search identified no fossil localities within the Area of Direct Impacts. Moreover, the search revealed that surface deposits throughout most of the Area of Direct Impacts consists of younger Quaternary alluvium, which is typically too young to contain significant fossil deposits. Shallow excavations within the Area of Direct Impacts are therefore unlikely to encounter fossils. Excavations are anticipated to reach a maximum depth of 10 feet, except at Dodger Stadium Station where the maximum depth would be 42 feet; piles would be drilled to a max depth of 125 feet. 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 Puente Formation, a marine rock formation which is anticipated to underlie the older Quaternary alluvium. The portion of the Area of Direct Impacts within Dodger Stadium property includes outcrops of the Monterey or Puente Formation.

Accordingly, buried paleontological resources may exist within the Area of Direct Impacts 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 Area of Direct Impacts, have the potential to contain significant vertebrate fossil remains. NHM recommends that any substantial excavations within the Area of Direct Impacts be monitored by a professional paleontologist. It is recommended that a qualified paleontologist prepare a Paleontological Monitoring and Mitigation Plan, which will outline paleontological resources monitoring of any ground-disturbing activities in potentially fossil-bearing deposits. Ground-disturbing activities from the contact between younger and older Quaternary alluvium down to final depth should be monitored for possible buried paleontological resources.

1 INTRODUCTION

This document presents the results of a Phase I archaeological and paleontological assessment conducted for the proposed Los Angeles Aerial Rapid Transit Project (proposed Project). The Los Angeles County Metropolitan Transportation Authority (Metro) is the lead agency under California Environmental Quality Act (CEQA).

This document was prepared in support of an Environmental Impact Report prepared in accordance with CEQA, Public Resources Code (PRC) Section 21000 et seq., and the State CEQA Guidelines, California Code of Regulations Section 15000 et seq.

1.1 REPORT ORGANIZATION

This report is organized following the *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format* guidelines (Office of Historic Preservation (OHP) 1990), provided through the California OHP. These guidelines provide a standardized format and suggested report content, scaled to the size of a project. This report first includes a project description, including project location and regulatory setting. Next, the environmental and cultural settings of the Area of Direct Impacts are presented. This is followed by a discussion of the archival research methods and results. In addition, the paleontological records search methods and the results are provided. Then, survey methodology and results are described. The final section summarizes the results of the cultural resources investigation and provides recommendations and conclusions for mitigation.

1.2 PROJECT DESCRIPTION

1.2.1 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 7 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.

1.2.2 Project Location

The proposed Project is located in the City of Los Angeles, situated northeast of downtown Los Angeles. Figure 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 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 2 provides an overview of the proposed Project location.

1.2.3 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.

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.

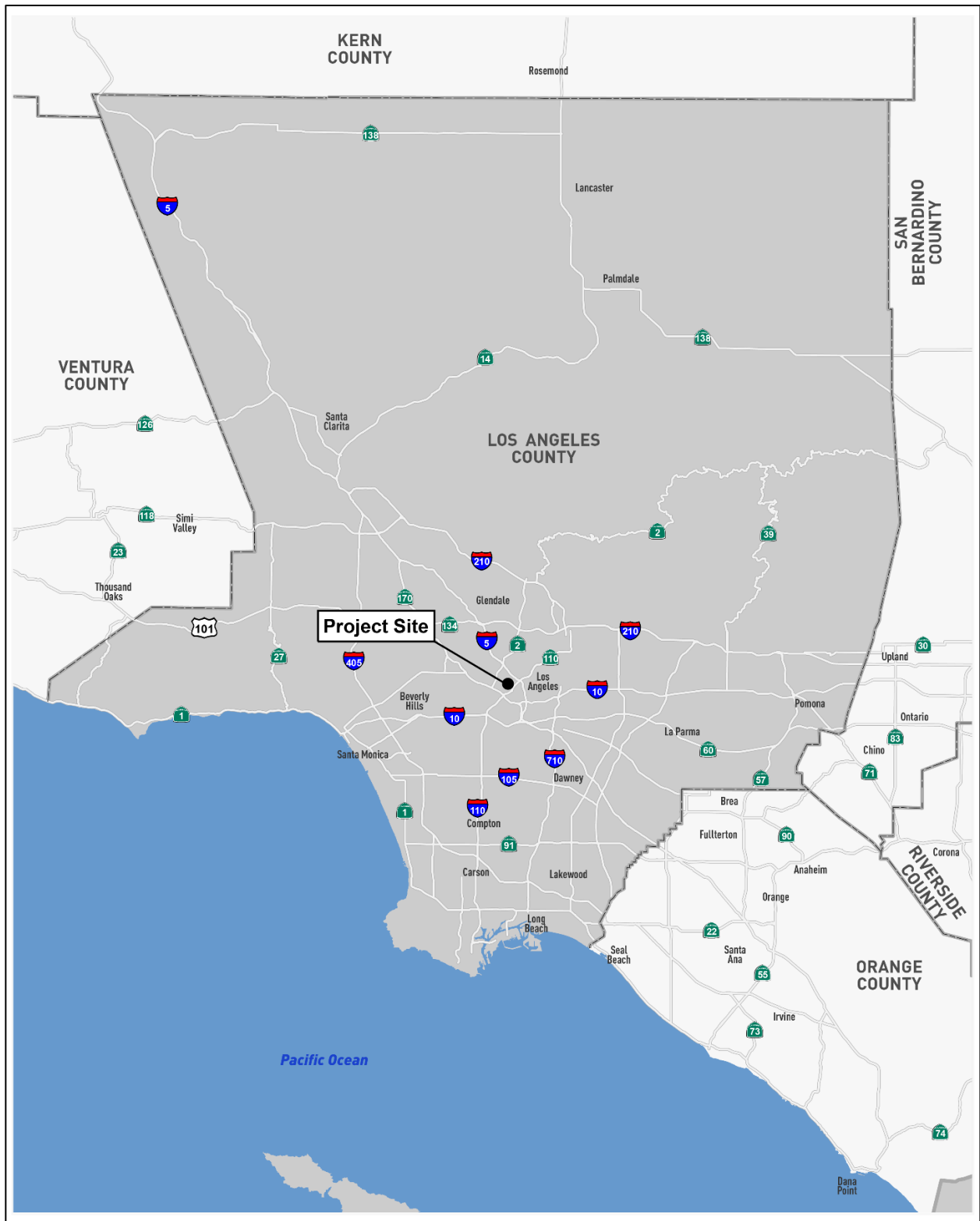


Figure 1: Regional Location Map

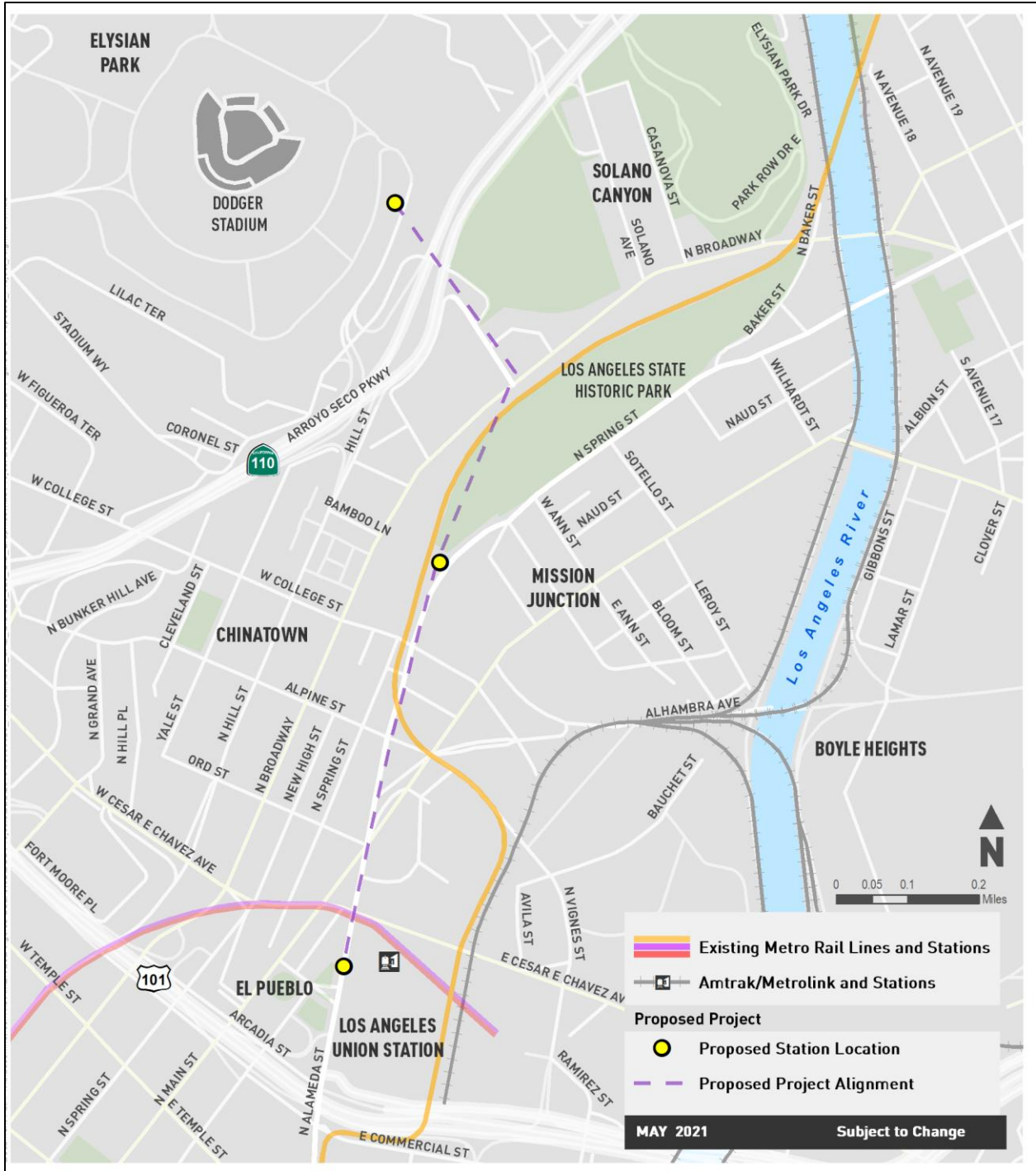


Figure 2: Proposed Project Location

1.2.3.1 Proposed Project Alignment

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.

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.

Figure 3 depicts the proposed Project alignment, including station locations, junction location, and tower locations. The proposed Project components are detailed below.

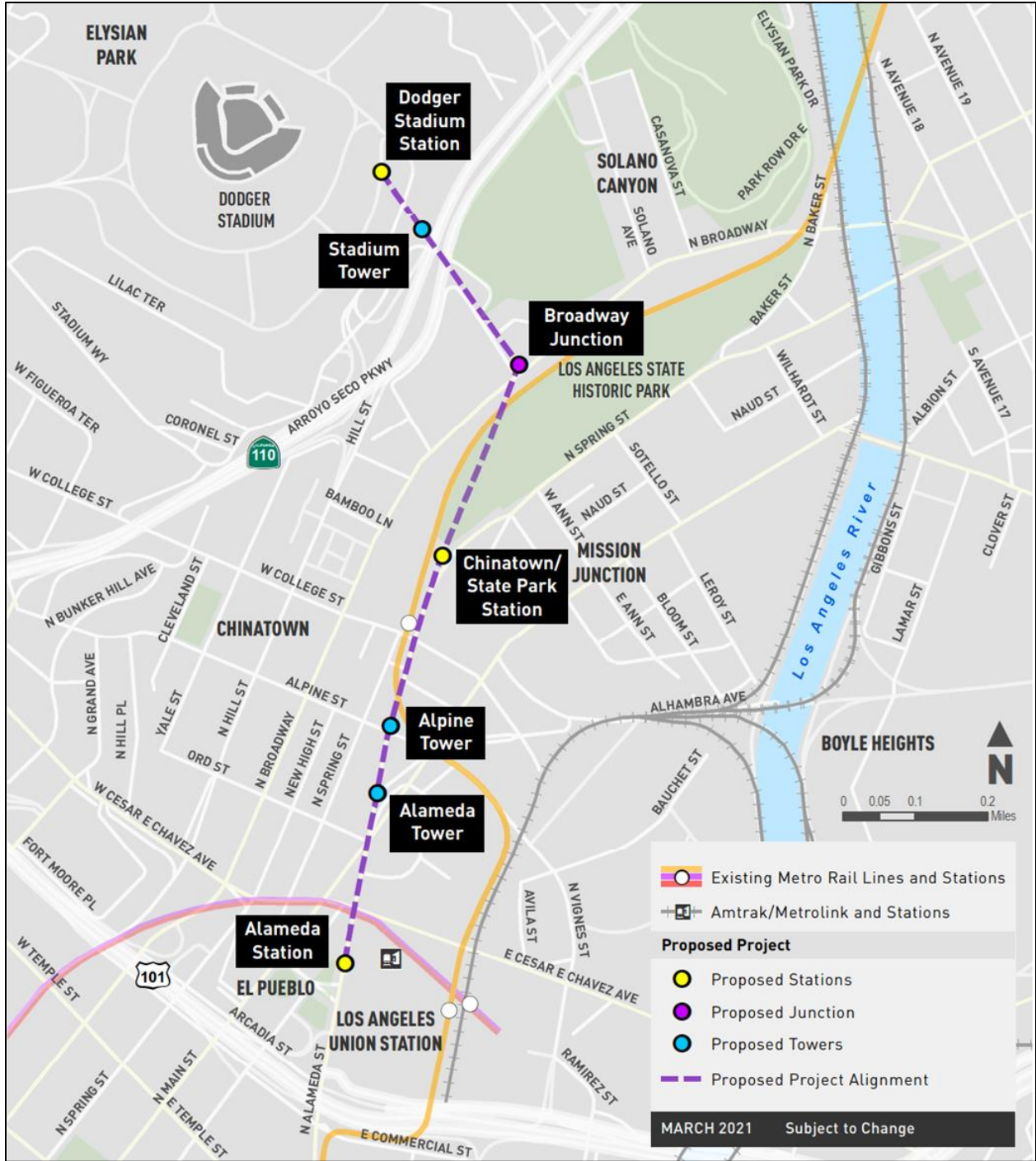


Figure 3: Proposed Project Alignment

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 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. 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.

1.2.4 System Operations

1.2.4.1 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.

1.2.4.2 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 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.

1.2.4.3 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.

1.2.4.4 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.

1.2.4.5 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 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.

1.2.4.6 Power Requirements

Operational power requirements can be separated into two categories: normal operations and emergency operations. Power requirements for one hundred percent of the power 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.

1.2.4.7 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.

1.2.5 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 the Draft 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 and will include discussions about archaeologically sensitive areas. Following utility relocations, construction would commence. Detailed information on utilities relocations is included in Appendix B to the Draft 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 1 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 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.

1.3 Area of Direct Impacts

For the purposes of archaeology, the Area of Direct Impacts was defined as the maximum Project footprint, including the limits of ground disturbance, including temporary ground disturbance, for the proposed Project.

1.4 PROJECT PERSONNEL

AECOM personnel involved in the cultural resources assessment are as follows: Marc Beherec, Ph.D., Registered Professional Archaeologist (RPA), served as report author and conducted archival research and the archaeological survey; Christy Dolan, M.A., RPA, performed the senior review; and Alec Stevenson, M.A., RPA, provided graphics and geographic information system support.

1.5 REGULATORY SETTING

Cultural and paleontological resources in California are protected by a number of state and local regulations, statutes, and ordinances. Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. Paleontological resources are not only fossils themselves, but also the associated rocks or organic matter and the physical characteristics of the fossils' context such as sediment matrix provide evidence of past life on the planet.

Although only CEQA applies to this Project, past projects have evaluated resources in the greater Los Angeles area in compliance with Section 106 of the National Historic Preservation Act or that have otherwise come under federal recognition or review. To understand previous evaluations of sites that may be directly or indirectly impacted by the Project, it is necessary to understand the eligibility requirement of both the National

Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR).

1.5.1 National Register of Historic Places

The National Register of Historic Places (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). The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. that 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. that have yielded, or may be likely to yield, information important in prehistory or history.

All resources or properties nominated for listing in the NRHP must retain integrity, which is the authenticity of a historic resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historic resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a resource is proposed for nomination.

1.5.2 California Environmental Quality Act

CEQA and its guidelines (California Natural Resources Agency 2016) require the evaluation of potential impacts to "historical resources" that are defined as resources listed in or eligible for listing in the California Register of Historical Resources (CRHR). Under California PRC Section 5024.1, the CRHR was established to serve as an authoritative guide to the state's significant historical and archaeological resources. 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 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.

Historical resources must also possess integrity, the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance, and must retain enough of this historic character or appearance to be recognizable as a historical resource and to convey the reasons for this significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

Historical resources may include built environment and archaeological resources as well as "unique paleontological resources" or "unique geologic features." In addition to historic properties listed in or eligible for listing in the NRHP that are automatically considered historical resources under CEQA, the CRHR includes designated California Historic Landmarks, California Points of Historical Interest, and certain locally identified historic resources (see below). CEQA also requires that mitigation measures to reduce or avoid impacts to historical resources be incorporated into a project, and a range of alternatives be considered that could substantially lessen significant impacts to historical resources.

Under CEQA, a project would result in a significant impact to 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 resolved with mitigation measures to avoid the impact or to reduce the impact to a level of less than significant.

Treatment of paleontological resources under CEQA is generally similar to treatment of cultural resources, requiring evaluation of resources in the Project area; assessment of potential impacts on significant or unique resources; and development of mitigation measures for potentially significant impacts, which may include monitoring, combined with data recovery excavation and/or avoidance.

The addition of Assembly Bill 52 (AB 52) to CEQA legislation requires that a lead agency must consult with interested California Native American tribes who request formal consultation regarding impacts to tribal cultural resources. Consultation with interested Native American groups is being managed by Metro.

1.5.3 Public Resources Code § 5001-5019.59

California PRC Sections 5001 to 5019.59 establish the State Parks system and direct its governance. PRC §5001.1 establishes the Director of Parks and Recreation. PRC §5001.2 requires 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 §5006.42 specifically creates an Advisory Committee to assist the state in the acquisition and creation of Cornfields State Park (now Los Angeles State Historic Park). PRC § 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.”

1.5.4 Public Resources Code § 5024 and 5024.5

PRC § 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 § 5024(f) and 5024.5, state agencies must provide notification and submit documentation to the 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 § 5024(f), state agencies request the SHPO’s comments on the project.

The proposed Project includes the Chinatown/State Park Station located within Los Angeles State Historic Park, which encompasses the state-owned historical resource P-19-003120, River Station.

1.5.5 Los Angeles Historic-Cultural Monuments

The Office of Historic Resources (OHR) in the Department of City Planning coordinates historic preservation activities of the City of Los Angeles. In Chapter 9, Department of City Planning, Article 1 Cultural Heritage Commission, Sec. 22.171.7 of the Los Angeles Administrative Code, a historical or cultural monument is any site (including significant trees or other plant life located thereon), building, or structure of particular historical or cultural significance to the City of Los Angeles, such as historic structures or sites:

- in which the broad cultural, political, economic, or social history of the nation, state, or community is reflected or exemplified; or
- which are identified with historic personages or with important events in the main currents of national, state, or local history; or
- which embody the distinguishing characteristics of an architectural-type specimen, inherently valuable for a study of a period, style, or method of construction; or

- which are a notable work of a master builder, designer, or architect whose individual genius influenced his or her age.

A proposed resource may be eligible for designation if it meets at least one of the criteria listed above.

2 PROJECT SETTING

2.1 ENVIRONMENTAL SETTING

The Project 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 of Direct Impact and its vicinity (located less than 0.5-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. Willow, cottonwood, and sycamore, and dense underbrush of alder, hackberry, and shrubs once lined the Los Angeles River as it passed near present-day downtown Los Angeles. 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.

2.2 GEOLOGIC SETTING

During the Miocene period, about 23 to 5.33 million years ago, what is known as Los Angeles today was covered by a marine embayment. The shallow bay was the home to a variety of now-extinct boney fish and sea mammals. Rivers from the nearby continental highlands brought large amounts of sediment into the basin, and during this period of what is now known as the Monterey or Puente Formation was deposited.

A small portion of the Project area, where the alignment ends at Dodger Stadium, is mapped as Tmss, a sandstone and silty shale associated with the Monterey Formation (Dibblee et al. 2006). In this location this formation is also known as the Puente Formation (McLeod 2019). The formation is a marine deposit dating to the middle and late Miocene epoch, deposited between approximately 17 million years and 5 million years ago (Hargreaves 2013). Deposits of the Monterey/Puente Formation in this location are characterized by tan to light gray, semi-friable arkosic sandstone with some interbedded silty shale (Dibblee et al. 2006).

During the late Miocene and Pleistocene, the sea subsided and tectonic activity raised the rock deposits. The Elysian Hills were formed during this period. Rivers continued to eat away at the highlands, now including the Miocene 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 located on the floodplain of the Los Angeles River and its tributaries, Cemetery Ravine and Chavez Ravine. This geologic unit is mapped Qa, or 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 (Dibblee et al. 2006). The sediments were deposited during the Holocene, within the last approximately 11,650 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.

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). In Los Angeles, the fossils of the epoch are particularly well-represented at the La Brea Tar Pits in the Wilshire District of western Los Angeles. However, Pleistocene fossils, generally less spectacularly preserved, are known throughout the Los Angeles Basin.

2.3 CULTURAL SETTING

This section summarizes the current understanding of major prehistoric and historic developments in and around Los Angeles. The brief overview provides a context within which the cultural resources that might be encountered in the Area of Direct Impacts may be considered and evaluated. The Project-specific context, discussing development of the Area of Direct Impacts over time, can be found in Chapter 3 (Archival Research).

2.3.1 Prehistory

Following the seminal work of Claude Warren (1968), the prehistory of the Southern California coastal region is typically divided into Early, Middle, and Late Periods, with an initial Paleo-Indian period dating to the late Pleistocene and early Holocene.

2.3.1.1 Paleo-Indian Period

The limited contextualized evidence of Paleo-Indian hunting technology observed in the California archaeological record and the more recent identification of early sites along the Pacific Coast of the United States indicates that the earliest people to colonize California likely arrived along the shores and settled into these rich coastal environments (Erlandson et al. 2007:53). 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 (Erlandson 2012:21).

These include the Arlington Spring and Daisy Cave sites, located on the Northern Channel Islands, which have produced human remains dating to 12,000 years in age and artifacts dating to around 9,500 cal B.C. Other mainland coastal sites adjacent to the northern Channel Islands have produced a number of deposits which date to around 8,000 and 7,000 years in age (Erlandson et al 2007:57). In the Los Angeles region, the

lower component of the Malaga Cove site has been estimated at approximately 8,000 years old (Glassow et al. 2007:192). 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. This period is characterized by small sites and assemblages with expedient stone tools, unifacial stone tools, leaf shaped or stemmed bifaces and projectile points, crescents, bone fish gorges, and spire removed Olivella beads, with no evidence of milling implements (Erlandson et al. 2007; Glassow et al. 2007).

2.3.1.2 Early Period (7,000 to 3,000 B.C.)

The first solid evidence of human occupation in the Los Angeles basin dates to roughly 7000 B.C. and is associated with a period known as the Early Period or the Millingstone Horizon (Warren 1968). Millingstone populations established permanent settlements that were located primarily on the coast and in the vicinity of estuaries, lagoons, lakes, streams, and marshes where a variety of resources, including seeds, fish, shellfish, small mammals, and birds, were exploited. Early Period occupations are typically identified by the presence of handstones (manos) and millingstones (metates). Sites from this time period typically contain shell middens, large numbers of milling implements, crude core and cobble tools, flaked stone tools, distinctive coggled stone implements, and infrequent side-notched dart points. The focus at inland sites appears to be in plant food processing and hunting. Along the coast, populations invested in maritime food gathering strategies, including close-shore and deep-sea fishing, as well as shellfish collection.

2.3.1.3 Middle Period (3000 B.C. to AD 1000)

Although many aspects of Millingstone culture persisted, by 3000 B.C., a number of socioeconomic changes occurred, as understood through changes in material culture (Erlandson 1994; ; Warren 1968). These changes are associated with the period known as the Middle Period or Intermediate Horizon. The mortar and pestle were introduced during this period, suggesting an increased reliance on hard plant foods such as acorns (Altschul and Grenda 2002). Increasing population size coincides with intensified exploitation of terrestrial and marine resources (Erlandson 1994). This was accomplished, in part, through use of new technological innovations such as the circular shell fishhook on the coast, and, in inland areas, use of the mortar and pestle to process an important new vegetal food staple, acorns, and the dart and atlatl, resulting in a more diverse hunting capability (Warren 1968). A shift in settlement patterns from smaller to larger and more centralized habitations is understood by many researchers as an indicator of increasingly territorial and sedentary populations (Erlandson 1994). During the Middle Period, specialization in labor emerged, trading networks became an increasingly important means by which both utilitarian and non-utilitarian materials were acquired, and travel routes were extended.

2.3.1.4 Late Period (AD 1000 to 1771)

The Late Prehistoric period, spanning from approximately AD 1000 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 Period is notable for a dramatic increase in the number of habitation and food processing sites. These sites include more bone tools, numerous types of Olivella shell beads, circular fishhooks, and occasional pottery vessels (Miller 1991). Between AD 1000 and 1250, bow and arrow technology was adopted along what is now the Southern California coast, indicated by small arrow-sized projectile points, of the Desert side-notched and Cottonwood triangular series (Altschul and Grenda 2002). 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. However, at many coastal and most Channel Island sites, interment remained the common practice (Moratto 1984).

Some researchers argue that the changes seen at the beginning of this period reflect the movement of Uto-Aztecan or Shoshonean speakers from the eastern deserts into the area that is now the Southern California coast. Other researchers, however, suggest that the movement of these desert-adapted peoples occurred as much as 2,000 years earlier (Bean and Smith 1978; Sutton 2009).

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 down to Aliso Creek (Kroeber 1925). The northern San Fernando Valley was the northernmost extent of the territory occupied by people who the Spanish referred to as the *Fernadeño*, whose name was derived from nearby Mission San Fernando. The *Fernadeño* 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 (Bean and Smith 1978; Shipley 1978).

The Gabrielino are reported to have been second only to their Chumash neighbors in terms of population size, regional influence, and degree of sedentism (Bean and Smith 1978). The Gabrielino are estimated to have numbered around 5,000 in the pre-contact period (Kroeber 1925). 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 (Bean and Smith 1978; McCawley 1996; Reid 1939[1852]).

Prehistoric subsistence consisted of hunting, fishing, and gathering. Small terrestrial game was hunted with deadfalls, rabbit drives, and by burning undergrowth, and larger game such as deer were hunted using bows and arrows. Fish were taken by hook and line, nets, traps, spears, and poison (Bean and Smith 1978; Reid 1939[1852]). The primary plant resources were the acorn, gathered in the fall and processed with mortars and pestles, and various seeds that were harvested in late spring and summer and ground

with manos and metates. The seeds included chia and other sages, various grasses, and islay or holly leafed-cherry (Reid 1939[1852]).

2.3.2 Ethnohistory

Spanish explorers made brief visits to Gabrielino territory in 1542 with the Cabrillo expedition and in 1602 with the Vizcaino Expedition. On both occasions the groups met with little hostility and exchanged items in trade. Sustained contact with Europeans did not commence until 1769 when Gaspar de Portolá and a small Spanish contingent began their exploratory journey along the California coast from San Diego to Monterey. The party crossed Gabrielino territory twice during its journey and was received warmly with gifts of antelope and rabbit meat (McCawley 1996:188). Spanish colonization began in earnest in 1771 with the establishment of Mission San Gabriel east of what is now Los Angeles.

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 creator-god *Chengiichngech* spread through much of Southern California and persisted through missionization (McCawley 1996).

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 (McCawley 1996:55). The community of *Ya’angna* was located somewhere in the vicinity of the Los Angeles Civic Center, and, as McCawley notes, “is popularly regarded as the Indian precursor of modern Los Angeles” (McCawley 1996: 57). *Ya’angna* is generally believed to be the unnamed settlement visited and described in 1769 by the Portolá expedition. At the time of Portolá’s visit, the village of *Ya’angna* is reported to have supported a population of at least 200 (Gumprecht 1999). *Ya’angna* was later reported to have contained anywhere from 500 to 1,500 huts, implying an even greater population (Reid 1939 [1852]). Jose Zalvidea, a Gabrielino informant of Kroeber and Harrington, stated that *Ya’angna* was the Pueblo of Los Angeles. The village was abandoned prior to 1836 and the exact location is unknown.

However, a cemetery and Native American artifacts found during construction work in 1996 Metropolitan Water District (MWD) of Southern California headquarters suggest that the village may have been located in the vicinity of today's Union Station (Goldberg et al. 1999). Finally, a settlement referred to as *Geveronga* is known to have been located adjoining the Pueblo of Los Angeles. A total of 31 occupants of *Geveronga* entered the mission system between 1788 and 1809 (McCawley 1996:75).

2.3.3 History

Early European exploration of the coastal and inland trade routes of what became California began in the 1500s, but more than a century passed before Spain mounted a concerted colonization effort. The historical era in California begins with Spanish colonization and is often divided into three distinctive chronological and historical periods: the Spanish or Mission Period (1542 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present).

2.3.3.1 Spanish Period (1542 to 1821)

Before direct Spanish settlement, more than two centuries of sporadic European exploration had spread disease and European goods throughout what became California, from the coasts and bays to the mountains and deserts. Introduced diseases reduced Native American populations in the area by as much as 75 percent (Larson et al. 1994).

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 (Johnston 1962). Passing through what is now the Los Angeles area, Portolá reached the San Gabriel Valley on August 2, 1769, and traveled west through a pass between two hills where they encountered the Los Angeles River and camped on its east bank near the present-day North Broadway Bridge. Father Juan Crespi, who was traveling with Portolá and documenting their travels, recorded that they “entered a spacious valley, well grown with cottonwoods and alders, among which ran a beautiful river. This plain where the river runs is very extensive and ... is the most suitable site for a large settlement” (The River Project 2011). Father Crespi goes on to describe this “green, lush valley,” its “very full flowing, wide river,” the “riot of color” in the hills, and the abundance of native grapevines, wild roses, grizzly, antelope, quail, and steelhead trout. Father Crespi observed that the soil was rich and “capable of supporting every kind of grain and fruit which may be planted.” The river was named *El Rio y Valle de Nuestra Senora la Reina de Los Angeles de la Porciuncula*.

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. Mission life promised the Native Americans security in a time when their traditional trade

and political alliances were failing, and epidemics and subsistence instabilities were increasing (Jackson 1999).

On September 4, 1781, 12 years after Crespi's initial visit, *El Pueblo de la Reina de los Angeles* was established, not far from the site where Portolá and his men camped. Watered by the river's ample flow and the area's rich soils, the original pueblo occupied 28 square miles 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 (Gumprecht 1999).

An irrigation system to carry water from the river to the fields and the pueblo was the community's first priority, and it was constructed almost immediately. The main irrigation ditch, the Zanja Madre (meaning Mother Ditch), was completed by the end of October 1781. It began at a dam and intake at the Los Angeles River in the area of present-day Elysian Park, located north of the Area of Direct Impacts. From there, it followed along the base of the Elysian Hills and along the north and west side of today's Los Angeles State Historic Park. It then passed between Broadway and Spring Street, turned southeast, and carried water south along present-day Alameda Street to the pueblo and beyond to the fields and orchards (Gumprecht 1999).

By 1786, the flourishing pueblo attained self-sufficiency, and funding by the Spanish government ceased. Fed by a steady supply of water and an expanding irrigation system, agriculture and ranching grew. By the early 1800s, the pueblo produced 47 cultigens. Among the most popular were grapes used for the production of wine. Vineyards blanketed the landscape between present-day San Pedro Street and the Los Angeles River. By 1830, an estimated 100,000 vines were being cultivated at 26 Los Angeles vineyards (Gumprecht 1999).

2.3.3.2 Mexican Period (1821 to 1848)

Alta California became a State of Mexico after it won its independence from Spain in 1821. Independence and the removal of economic restrictions attracted settlers to the town of Los Angeles, and it slowly grew in size and expanded to the south and west. The population nearly doubled during this period, increasing from 650 to 1,250 between 1822 and 1845 (Weber 1982:226). Until 1832, Los Angeles was essentially a military post, with all able-bodied males listed on the muster rolls and required to perform guard duty and field duty whenever circumstances required. The Mexican Congress elevated Los Angeles from pueblo to city status in 1835, declaring it the new state capital (Robinson 1979:238–239).

After independence, the authority of the Alta California missions gradually declined, culminating with their secularization in 1834. Although the Mexican government directed that each mission's lands, livestock, and equipment be divided among its converts, the majority of these holdings quickly fell into non-Indigenous hands. Mission buildings were abandoned and fell into decay. If mission life was difficult for Native Americans,

secularization was worse. After two generations of forced dependence on the missions, they were suddenly disenfranchised. After secularization, “nearly all of the Gabrielinos went north, while those of San Diego, San Luis, and San Juan overran this county, filling the Angeles and surrounding ranchos with more servants than were required” (Reid 1977 [1851]:104).

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 with their kin farther inland or to villages of neighboring tribes to the north or south (Kroeber 1925). Many others perished from disease and conflict with the invading Spanish, who established the Pueblo of Los Angeles in the middle of Gabrielino territory. 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 (Beherec 2019).

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 Alameda Street and Commercial Street from 1836 to 1845, when it was razed by the City (Robinson 1938; 1952: 16-17). Another rancheria, the history of which is less well-known, was visited by the Scottish Doctor Richard Den about 1844. It was said to have been located approximately one mile up-slope from the Los Angeles Plaza (Warren 1952: 316-317). A settlement of Pipimares, Gabrielinos from the Channel Islands, was also located near Los Angeles, but the exact location is not documented (Robinson 1938).

The first party of American immigrants arrived in Los Angeles in 1841, although Americans and Mexicans had previously been tied through commerce. As the possibility of a takeover of California by the United States loomed large, the Mexican government increased the number of land grants in an effort to keep the land in the hands of upper-class Californios, including the Domínguez, Lugo, and Sepúlveda families (Wilkman and Wilkman 2006:14–17). Mexican Governor Pío Pico and his predecessors made more than 600 rancho grants between 1833 and 1846, putting most of the State’s lands into private ownership for the first time (Gumprecht 1999). Having been established as a pueblo, property within Los Angeles could not be dispersed by the governor, and this task instead fell under the city council’s jurisdiction (Robinson 1979).

2.3.3.3 American Period (1848 to Present)

The United States took control of California after the Mexican-American War of 1846, and seized Monterey, San Francisco, San Diego, and the state capital, Los Angeles, with little resistance. Local unrest soon bubbled to the surface, and Los Angeles slipped from American control in 1847. Approximately 600 U.S. sailors, Marines, Army dragoons, and mountain men converged under the leadership of Colonel Stephen W. Kearney and Commodore Robert F. Stockton in early January of that year to challenge the California

resistance. Hostilities officially ended with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico \$15 million for the conquered territory, which included California, Nevada, and Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. The conquered territory represented nearly half of Mexico's pre-1846 holdings. California joined the Union in 1850 as the 31st state (Wilkman and Wilkman 2006:15).

The discovery of gold in Northern California in 1849 gave rise to the California Gold Rush, leading to an enormous influx of American citizens in the 1850s and 1860s. These "forty-niners" rapidly displaced the old rancho families, and Southern California's prosperity in the 1850s was largely a result of the increased demand for cattle, both for meat and hides, created by the Gold Rush. Southern California was able to meet this need, and the local ranching community profited handsomely (Bell 1881:26).

The 1850s witnessed a number of important changes for Los Angeles. An act of the state legislature incorporated the City on April 4, 1850, granting it all the rights, claims, and powers formerly held by the pueblo. In July of that year, the City elected a mayor, treasurer, assessor, and marshal, along with a seven-member Common Council. Six of the seven original members of the Common Council had been either native born or naturalized citizens of Mexico, prior to gaining American citizenship (Guinn 1915: 270–271). The Common Council voted to continue a number of the established laws of the Mexican City council (the *ayuntamiento*), and also put in place a number of new ordinances to address new problems and concerns.

Los Angeles' Water Supply and Zanja System

The Americans inherited the Spanish and Mexican zanja system as the City's only source of irrigation and drinking water beside the Los Angeles River and a few localized springs. One of the first priorities of Los Angeles' military-appointed alcalde, Stephen Foster, was to improve the zanja system. In 1849 Foster replaced the brush-and-earth dam, which had to be replaced every season, with a new pile dam that would last the next 13 years. Over the course of the late nineteenth century Los Angeles continued to maintain the existing Zanja Madre, and also added to the zanja system by digging new ditches that irrigated additional land. But the system increasingly served only irrigation purposes, as private companies developed a domestic water supply for the City. In the 1880s and 1890s, as the City developed and pollution of the zanja became a concern, the waters were diverted into brick and cement pipelines which were installed along the path of the zanja system. In 1888, at about the system's peak, the system consisted of approximately 92 miles of irrigation ditches and pipelines that irrigated approximately 11,136 acres of land both inside and outside City limits (Layne 1957:27). An important secondary use of the water was to power industrial mills, such as Searns' Mill (later Capitol Milling), near the location of today's Metro Chinatown Station. In 1904, as river water was increasingly diverted into the City's domestic water system at the expense of irrigation, the zanja system was finally abandoned, although some of the pipelines were repurposed in the twentieth century for storm drains (Layne 1957).

As a result of growing population and the increasing diversion of water, the once plentiful water supply provided by the Los Angeles River began to dwindle. The once extensive flood plain dried up, the lushly forested landscape had been cleared for construction materials and fuel, and the tens of thousands of head of cattle, horses, and sheep owned by ranchers had decimated the local grasses. With the arrival of the Southern Pacific Railroad (SPRR), discussed in further detail below, the demand became so great that the Los Angeles City Water Company began tapping the river's water supply before it even reached the surface. By 1902, the Los Angeles municipal government took back jurisdiction of its own water needs and purchased the existing water system, which consisted of seven reservoirs and 337 miles of pipe (Gumprecht 1999).

Not long after, under the direction of William Mulholland, the Los Angeles Bureau of Water Works and Supply constructed the 233-mile-long Los Angeles Aqueduct. This 5-year project, completed in 1913, employed the labor of thousands of men, and brought millions of gallons of water from the Owens Valley into the San Fernando (now Los Angeles) Reservoir. Land developers, drawn by cheap prices, began to purchase, subdivide, and sell off the old Ranchos to incoming Euro-American settlers. Southern California was being advertised as a paradise on earth, complete with year-round sunshine, perpetually ripe fruit, and flowers that bloomed in winter (Gumprecht 1999).

The Southern Pacific Railroad in Los Angeles

In the 1870s and 1880s, competing railroads worked to connect America's coasts. Los Angeles and San Francisco were the two main cities on the West Coast they sought to turn into railroad termini. One of the major railroads, the SPRR, established a major rail yard in what is today the Los Angeles State Historic Park in 1875 (California Department of Parks and Recreation 2005). The yard was reached by tracks that extended along San Fernando Street, which is today's North Spring Street. Los Angeles Junction as it was first known—later River Station—quickly grew, and by 1879 it included rails, a turntable and roundhouse, blacksmith shop, machine shop, transfer table, car shop, coal dock, ice house, maintenance sheds, freight platforms, a passenger depot and freight house, and even a restaurant and hotel (Plate 1). The rail yard continued in use until 1992. Facilities were constantly upgraded and maintained, but many of the site's 19th century railroad features were buried beneath artificial fill and preserved and have been found archaeologically (Dodds and Sampson 2012; Jaurequi 2019a, b; Mullaly and Petty 2002).

In 1878 a competitor, the Central Pacific Railroad, was the first to connect Los Angeles to northern rail lines. In 1883, the SPRR completed its second transcontinental railway, the Sunset Route from Los Angeles to New Orleans (Orsi 2005:137). The completion of a second transcontinental line in 1886 by the Santa Fe Railroad resulted in a fare war, which drove fares to an unprecedented low and population growth to an all-time high (Meyer 1981:45; Robinson 1979; Scott 2004:53; Wilkman and Wilkman 2006:33–34).

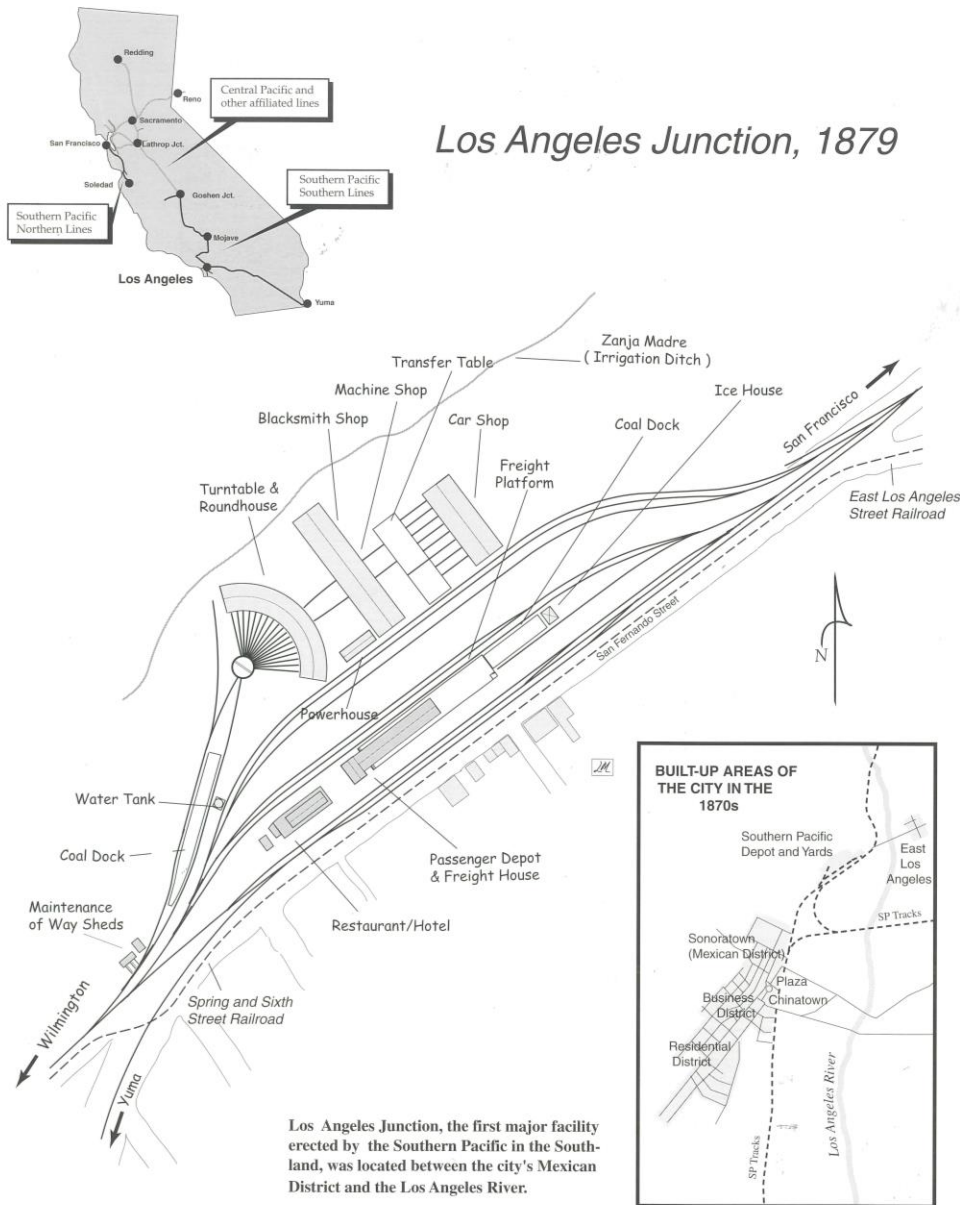


Plate 1: Los Angeles Junction (Later River Station) As It Existed in 1879 (Mullaly and Petty 2002:10)

Streets and Railroads

Transportation, especially rail transportation, continued to be improved in the vicinity of the Area of Direct Impacts through the first half of the 20th century. By 1876, the streets were laid out as they are today. As discussed more fully in the archival research below, railroad and streetcar tracks extended down most of these streets by the end of the nineteenth century.

Chinatown and Union Station

The first Chinese documented in Los Angeles were two domestic servants enumerated in the 1850 census. Over the course of the nineteenth century, the Chinese population grew exponentially to 1,871 in 1890. Many of these individuals were laborers brought to Southern California from Guangdong Province to build the railroads. However, the Chinese quickly moved into other sectors also, such as laboring in the Vineyards and orchards of Los Angeles County (Plate 2) They also established businesses such as laundries which were labor-intensive but required little start-up capital. By the winter of 1878-1879, the Chinese controlled the vegetable market to such a degree that, going on strike against anti-Chinese laws, they denied Angelenos fresh produce for weeks.

The Chinese initially settled in the aging adobes to the south and east of the old plaza. Because of anti-Chinese laws, many were legally not allowed to own property themselves, but they rented a large plot of land owned by Juan Apablaza upon which they constructed what is now known as Old Chinatown. Despite harsh anti-immigration laws, Los Angeles' Chinese population continued to grow to 3,009 in 1930 (Greenwood 1996:9).



VINTAGE AT SAN GABRIEL.

Plate 2: Chinese Laborers at Vintage Time in San Gabriel Valley, Illustration from *Harper's Magazine*, 1882 (Bishop and Newcomb 1976).

In the 1930s Los Angeles decided to follow in the path of most other major cities and consolidate its railroad passenger depots. The site chosen, east of the Los Angeles plaza, included large sections of Old Chinatown and the old red light district. The land was

acquired through eminent domain, and the homes and shops of its inhabitants were leveled. Vast amounts of fill soil, cut from Fort Moore Hill in order to straighten Broadway and Hill Street, was dumped over the ruins to level the property (Greenwood 1996).

The Chinese who were not scattered settled in two new developments. One was the short-lived China City, a tourism-based development that lasted only 11 years before it was destroyed by arson. New Chinatown has proven more enduring. Constructed around a Central Plaza located between Broadway and North Hill Street north of College Street, the community was developed by a group of Chinese-American businessmen led by Peter SooHoo, Sr., on land purchased from the Atchison, Topeka, and Santa Fe Railroad (Cho et al. 2011).

3 ARCHIVAL RESEARCH

Archival research for this Project was conducted in May, June and July 2019 at the South Central Coastal Information Center (SCCIC) housed at California State University, Fullerton and the Natural History Museum of Los Angeles County (NHMLAC). The research focused on the identification of previously recorded cultural and paleontological resources within the Area of Direct Impacts and within a 1/8-mile radius of the Area of Direct Impacts.

3.1 CULTURAL RESOURCES RECORDS SEARCH

The archaeological records search at SCCIC 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, California Historical Landmarks (CHL), and California Points of Interest, and the Los Angeles Historic-Cultural Monuments list were also reviewed to identify cultural resources within both the Area of Direct Impacts and study area vicinity. Approximately 75 percent of the Area of Direct Impacts has been previously surveyed and/or investigated. The records search revealed that 103 cultural resource investigations were previously conducted within 1/8-mile of the Area of Direct Impacts (Table 2).

Table 2: Previous Studies within 1/8-Mile of the Area of Direct Impacts

Report (LA-)	Author	Description	Date
850*	Costello, Julia G., and Larry R. Wilcoxon	An Archaeological Assessment of Cultural Resources in Urban Los Angeles, California -- La Placita de Dolores -- LAN-887	1977
1071	Singer, Clay A.	Preliminary Historic Archaeological Investigations at the Los Angeles Plaza Church	1981
1578	Anonymous	Technical Report Archaeological Resources Los Angeles Rapid Rail Transit Project Draft Environmental Impact Statement and Environmental Impact Report	1983
1642	Costello, Julia G.	Los Angeles Downtown People Mover Program Archaeological Resources Survey: Phase II Evaluation of Significance and Recommendations for Future Actions	1980
1643	Costello, Julia G.	Los Angeles Downtown People Mover Program Archaeological Resources Survey, Phase III	1981
2486*	Kaptain, Neal	Monitoring and Mapping: Union Station Utility Upgrade, CA-LAN-1575H	1991
2519	Owen, J. Thomas	The Church by the Plaza: A History of the Pueblo Church of Los Angeles	1960
2521	Chace, Paul G.	An Archaeological Research Design for the Sepulveda Block Restoration-Rehabilitation Project	1980

Report (LA-)	Author	Description	Date
2567	Chace, Paul G.	Assessment of an Archaeological feature Beneath the Merced Theatre Building, El Pueblo de Los Angeles State Historic Park	1979
2712*	Huey, Gene	Archaeological Survey Report for the El Monte Busway Extension in the City of Los Angeles, Los Angeles County, California	1978
2713*	Weitze, Karen J.	Aliso Street Historical Report, El Monte Busway Extension in the City of Los Angeles, 07-LA-101 P.M. 0 to .5 07202-417801	1980
2892*	Stone, David, and Robert Sheets	Phase I Archaeological Survey Report, Pacific Pipeline Project, Santa Barbara Coastal Reroutes Ethnohistoric Village Placement Locations	1993
2950*	Anonymous	Consolidated Report: Cultural Resource Studies for the Proposed Pacific Pipeline Project	1992
3103*	Greenwood, Roberta S.	Cultural Resources Impact Mitigation Program, Los Angeles Metro Red Line Segment 1	1993
3151*	Dillon, Brian D.	Alameda District Plan, Los Angeles, California: Prehistoric and Early Historic Archaeological Research	1994
3197	Gierke, Frederick James	Avila Adobe 1971 Excavation Potsherds	1976
3377	Foster, John M.	El Pueblo de Los Angeles State Historic Park	1996
3496	Anonymous	Draft Environmental Impact Report Transit Corridor Specific Plan Park Mile Specific Plan Amendments	Undated
3497*	Anonymous	Draft Supplemental Environmental Impact Report, Pasadena-Los Angeles Light Rail Transit Project	1994
3498*	Anonymous	Final Supplemental Environmental Impact Report, Pasadena-Los Angeles Light Rail Transit Project	1994
3498A	Saurenman, Hugh	Evaluation of Change in Noise Impacts, Proposed Blue Line Wayside Horn System	Undated
3501*	Dillon, Brian D.	Archaeological Record Search and Impact Evaluation for the Los Angeles Wastewater Program Management (NOS-NCOS) Project, Los Angeles, California	1990
3645*	Whitley, David S.	Phase I Archaeological Survey and Cultural Resources Assessment of the Metropolitan Water District Headquarters Study Area, Los Angeles, California	1995
3783*	White, Robert S., and Laura S. White	Archaeological Element of the Metropolitan Water District of Southern California Headquarters Facility Site Study Analysis	1993
3812	Chace, Paul G.	Archaeological Monitoring of the W-7 Ramp Project, Olvera St., El Pueblo de Los Angeles State Historic Park	1982
3813*	Anonymous	An Archival Study of a Segment of the Proposed Pacific Pipeline, City of Los Angeles, California	1992

Report (LA-)	Author	Description	Date
3906*	Costello, Julia G., and Larry R. Wilcoxon	[Duplicate of LA-850] An Archaeological Assessment of Cultural Resources in Urban Los Angeles, California -- La Placita de Dolores -- LAN-887	1977
3908	Frierman, Jay D.	Monitoring the Repaving of an Area in Front of the Trash Compactor Located on Parking Lot No. 2, El Pueblo de Los Angeles State Historic Park (at the Corner of Macy Street and North Main)	1983
3910	Frierman, Jay D.	Monitoring the Restoration and Rehabilitation of the Sepulveda Block, 622-624 North Main Street, El Pueblo de Los Angeles State Historic Park	1983
3986	Chace, Paul G.	A Cultural Resources Assessment of the Plaza, El Pueblo de Los Angeles State Historic Park	1981
4218	Lee, Portia	Seismic Retrofit of North Broadway Bridge Over the Los Angeles River, Bridge 53C0545	Undated
4383	Frierman, Jay D.	Cultural Resources Study, Chinatown Senior Citizens Housing Site	1980
4386*	Anonymous	Cultural Resources Overview, Los Angeles County Metropolitan Transportation Authority's Interstate Commerce Commission Abandonment Exemption, Pasadena-Los Angeles Light Rail Transit Project	1993
4447	Anonymous	Los Angeles County Demolition of Buildings Between Spring Street and New High Street	1999
4452*	Hatheway, Roger G.	Determination of Eligibility Report, Chinatown	1982
4834*	Ashkar, Shahira	Cultural Resources Inventory Report for Williams Communications, Inc., Proposed Fiber Optic Cable System Installation Project, Los Angeles to Anaheim, Los Angeles and Orange Counties	1999
4835*	Ashkar, Shahira	Cultural Resources Inventory Report for Williams Communications, Inc., Proposed Fiber Optic Cable System Installation Project, Los Angeles to Riverside, Los Angeles and Riverside Counties	1999
5129	Greenwood, Roberta S.	Archaeological Monitoring at La Golondrina Café, Olvera Street, Pueblo de Los Angeles State Historic Park	2000
5203	Foster, John M.	Archaeological Monitoring Report: Soil Test Pit Excavation for the Siqueiros Mural Project, El Pueblo de Los Angeles	2001
5410	Reinoeni, Gary	El Pueblo de Los Angeles State Historic Park Resource Management Plan	1978
5436	Greenwood, Roberta S.	Monitoring Report: El Pueblo de Los Angeles Historic Monument	2001
5437	Chace, Paul G.	An Archaeological Review and Tests for the Tree Planting Program, El Pueblo de Los Angeles State Historic Park	1980
5446	Savastio, Scott A.	Report for Monitoring: Sewer Pipe Repair at Alameda and Arcadia Streets, Los Angeles	2001

Report (LA-)	Author	Description	Date
5450	Savastio, Scott A.	Archaeological Monitoring Report: Los Angeles Web Host, 900 South Alameda Street, Los Angeles, California	2001
6085	Wlodarski, Robert J.	A Phase I Archaeological Study for the Proposed Eugene Obregon Congressional Medal of Honor Memorial Within Father Serra Park and El Pueblo de Los Angeles State Historic Park, City of Los Angeles, Los Angeles County, California	2003
6087*	Lisecki, Lee	The Metropolitan Water District of Southern California Headquarters Facility Project, Archival Documentation for the Southern Ramp and Service Wing at Union Station, Los Angeles	1996
6335*	Messick, Peter, Roberta S. Greenwood, and Alice Hale	Archaeological Monitor Report, Historic Cornfield Railroad Yard	2003
6336*	Foster, John M.	Archaeological Inventory for Soil Remediation, Cornfield Rail Yard Project, City of Los Angeles, California	2002
6343*	Foster, John M.	Archaeological Monitor Report: Sewer Line Trenching for the Avila Adobe Interpretive Center, El Pueblo de Los Angeles	2001
6359	Hale, Alice E.	Archaeological Monitor Report, The Los Angeles Gas Works, 513 North Main Street	2001
6360*	Dewitt, John	City of Los Angeles Cornfields Site EDA Grant Application	2000
6363	Flores, Xochi	Construction of the Homeboy Bakery, Los Angeles, Los Angeles	2000
6382*	Goldberg, Susan K., Bradley J. Adams, Carole Denardo, Scott A. Williams, Marilyn J. Wyss, Mark C. Robinson, Jill A. Onken, and Melinda C. Horne	The Metropolitan Water District of Southern California Headquarters Facility Project: The People of Yaanga? Archaeological Investigations at CA-LAN-1575H	1999
6386	Lee, Portia	Architectural Evaluation, Little Joe's Restaurant, 900 North Broadway, Los Angeles, California	2002
6841	Anonymous	Plaza d Cultura y Artes Environmental Impact Report Volume I, Draft EIR, Sch. No. 2001 101 167	2003
7544*	Foster, John M.	Archaeological Monitoring Program, Alameda Street/North Spring Street Arterial Redesign, Phase 1, California	2006
7545*	Slawson, Dana N.	Mitigation of Impacts on the Zanja Madre Archaeological Feature, La Placita	2006
7546*	Foster, John M.	Archaeological Monitoring Program Final Report, La Placita Renovation and Winery Restroom Project, Los Angeles	2006
7551	Foster, John M., and Lynn C. Kronzek	Mitigation of Impacts on an Archaeological Feature in the Winery, El Pueblo de Los Angeles Historical Monument	2006

Report (LA-)	Author	Description	Date
7552	Hale, Alice E.	Archaeological Monitor Report: Waste Line Trenching for the Cielito Lindo Restaurant, Olvera Street, El Pueblo de Los Angeles	2000
7556*	Slawson, Dana N.	Archaeological Monitoring Report, Earthquake Repair and Replacement Sewer Unit 338 (W.O. E2003260), El Pueblo de Los Angeles and Environs, Los Angeles, California	2006
7557*	Slawson, Dana N.	Archaeological Monitoring Report, Sewer Line Repair Project, El Pueblo de Los Angeles and Environs, Los Angeles, California	2006
7558*	Hale, Alice E., and Scott Savastion	Archaeological Monitor Report, Alameda Street Improvements	2004
7564	Greenwood, Roberta S.	Archaeological Status Report: Collections and Reports	1998
8026*	Carrico, Richard L.	Treatment Plan for Potential Cultural Resources Within Proposed Metro Rail Subway Station Locations in Metropolitan Los Angeles, California	1985
8252	Snyder, John W., Stephen Mikesell, and Diane Pierzinski	Request for Determination of Eligibility for Inclusion in the National Register of Historic Places/Historic Bridges in California: Concrete Arch, Suspension, Steel Girder, and Steel Arch	1986
8512*	Gust, Sherri, and Mari Prtichard Parker	Relationship of the Zanja Madre to MTA's Gold Line Property in River Station Yard, City of Los Angeles	2004
8519*	Various	The Metropolitan Water District of Southern California Headquarters Facility Project, Union Station, Los Angeles, California, Paleontologic Resource Impact Mitigation Program, Final Technical Report of Findings	1997
8525	Rehberger, Linda H., and Peter Messick	Archaeological Monitoring Report, Veteran Memorial, El Pueblo de Los Angeles, Los Angeles Street and Alameda Street, Los Angeles, California	2004
8530*	Hale, Alice E.	Supplemental Report: Archaeological Monitoring Program, Alameda Street/North Spring Street Arterial Redesign - Phase 1, California	2006
8532	Hale, Alice E., and Scott Savastion	Archaeological Monitor Report: The Plaza House, 507-511 North Main Street, Los Angeles, California	2004
8533	Hale, Alice E., and Scott Savastion	Archaeological Monitor Report: The California Endowment, Downtown Headquarters and Conference Center Project, Los Angeles, California	2004
8995	Howell-Ardila, Deborah, and Shannon Carmack	Historic American Buildings Survey (HABS) Documentation, Brunswig Annex, 502 New High Street and 111 Republic Street, El Pueblo de Los Angeles State Park, City and County of Los Angeles, California 90012	2007
9489*	Lee, Portia	Arroyo Seco Parkway Historic District	2003

Report (LA-)	Author	Description	Date
9661	Greenwood, Roberta S., Dana N. Slawson, and Alice Hale	Puestos Utility Upgrade Project, Olvera St., El Pueblo de Los Angeles	2009
9844*	Anonymous	Draft: Los Angeles Eastside Corridor, Revised Cultural Resources Technical Report, Final Supplemental Environmental Impact Statement/Final Subsequent Environmental Impact Report	2001
10397*	Berryman, Judy, and Craig Woodman	Draft Final Archaeological Monitoring Along the Pacific Pipeline	2001
10421	Ayvazian, Ani	Historic American Building Survey (HABS) for the Plaza House and Vickery-Brunswig Building in Support of La Plaza de Cultural y Artes Project	2010
10507*	Anonymous	Technical Report -- Historical/Architectural Resources -- Los Angeles Rail Rapid Transit Project "Metro Rail" Draft Environmental Impact Statement and Environmental Impact Report	1983
10543*	Gust, Sherri	Archaeological Initial Study Report and Mitigation Plan for the San Fernando Valley MRT Fiber Optic Line Project, Cities of Canoga Park, Burbank and Los Angeles, California	2003
10641*	Tang, Bai "Tom"	Preliminary Historical/Archaeological Resources Study, San Bernardino Line Positive Train Control Project, Southern California Regional Rail Authority, Counties of Los Angeles and San Bernardino	2010
10773*	Keck, David	Los Angeles State Historic Park General Plan and Final Environmental Impact Report	2005
10805*	Gust, Sherri, and Amy Glover	Cultural Resources Mitigation Compliance Report for the Metro Gold Line Eastside Extension, City of Los Angeles, California, for the Period 2004 to 2006	2009
10806*	Loftus, Shannon L.	Addendum -- Paleontological and Cultural Resource Compliance Monitoring Report, Los Angeles County Metropolitan Transit Authority, Eastside Gold Line Transit Corridor Project	2010
10856*	Glenn, Brian K., and Sherri Gust	Cultural Resource Monitoring and Mitigation Plan for the Los Angeles County Metropolitan Transportation Authority Eastside Gold Line Transit Corridor, Los Angeles, Los Angeles County, California	2004
10936*	Stewart, Noah	Historic Property Survey Report: 07-LA-101, 07-21870, 07-4776, 4S3000 -- Union Station, Los Angeles Plaza Historic District	2008
11048	Speed, Lawrence	American Recovery and Reinvestment Act (ARRA) Funded Security Enhancement Project (PRJ29112359) -- Improved Access Controls, Station Hardening, CCTV Surveillance System, and Airborne Particle Detection at Los Angeles Station and Maintenance Yard, Los Angeles, California	2009

Report (LA-)	Author	Description	Date
11115*	Costello, Julia G., Adrian Praetzellis, Mary Praetzellis, Erica S. Gibson, Judith Marvin, Michael D. Meyer, Grace H. Ziesing, Susan K. Goldberg, Sherri M. Gust, Madeline Hirn, William Marvin Mason, Elaine-Maryse Solari, and Suzanne B. Stewart	Final Report: Historical Archaeology at the Headquarters Facility Project Site, the Metropolitan Water District of Southern California	1999
11141	Foster, John M.	Positive Archaeological Survey Report, Plaza Substation Transportation Museum El Pueblo de Los Angeles, California	2003
11142	Anonymous	Historic Structures Report -- Plaza Substation, Olvera Street, El Pueblo de Los Angeles Historic Monument	1992
11165	Carnevale, Mike	Draft -- Environmental Impact Statement, United States General Services Administration, GSA Document Number ZCA81642/1999, Los Angeles U.S. Courthouse, Los Angeles, California	2001
11242*	Johnson McAvoy, Christy	Los Angeles Union Station, TEA-21 Improvements Section 106 Review, FTA Project Number CA-03-0504-01	2001
11651	Hackel, Steven	Digging Up the Remains of Early Los Angeles: The Plaza Church Cemetery	2011
12061	Slawson, Dana, and Michael Kay	Cultural Resources Monitoring Report for the Siqueiros Mural Shelter, Viewing Platform, and Interpretive Center Project	2012
12244	Carey, Alice, and Hisahi Sugaya	Draft Cultural Resources Technical Report, Antique Block, El Pueblo de Los Angeles Historic Monument, Los Angeles, California	2003
12421	Sorenson, John	Terminal Annex, Los Angeles, California	2000
12865	Dietler, John, and Samantha Murray	Historic Properties Management Plan for the La Plaza de Cultura y Artes Property, Los Angeles County, Los Angeles, California	2015
12866	Dietler, John, Samantha Murray, Heather Gibson, Sara Dietler, Steven Treffers, and Benjamin Vargas	Los Angeles Plaza Church Cemetery: Technical Report for the La Plaza de Cultura y Artes Project, Los Angeles, California	2015
12867	Dietler, John, and Sara C. Ferland	Testing to Protect Historic Cemetery Resources for the La Plaza de Cultura y Artes Project, Los Angeles, California	2015
12868	Murray, Samantha, and John Dietler	Archaeological Monitoring Report for the La Plaza de Cultura y Artes Project Memorial Garden and Fence Installation, Los Angeles, California	2015
13146	Furnis, Lynn, and Sherri Gust	Archaeological Monitoring Compliance Report for the Blossom Plaza Project, City of Los Angeles, Los Angeles County, California	2015

Report (LA-)	Author	Description	Date
13219	Roland, Jennifer	Phase I Investigation for the Crown Castle TMT LA107 LA-107-00 Tower Installation Project, Los Angeles, Los Angeles County, California	2016
13239*	Gust, Sherri	Extent of the Zanja Madre	2017

* Indicates study overlapping with Project Area.

Additional reports, which were not on file with SCCIC, were obtained from LASHP staff and were used to inform the study regarding work done relating to Resource 19-003120. They include the following: Becker (2008), Buxton et. al (2015), Dallas (2006), Larson (2004), Stringer-Bowsher et. al (2014) and Tejada (2008).

The records search also indicated that 51 cultural resources have been previously recorded within 1/8 mile of the Area of Direct Impacts (see Table 3). A map book showing the locations of the previously-recorded resources is included in confidential Appendix A. Table 3 summarizes these resources and their eligibility for the NRHP and/or CRHR.

Table 3: Previously Recorded Cultural Resources within 1/8-Mile of the Area of Direct Impacts– Eligibility Status

Primary Number (P-)	Permanent Trinomial (CA-)	Description	Age/Year Constructed	Eligibility determination
19-000007	LAN-0007H	Zanja Madre segment, refuse deposits, privy, building foundations, Native American and Chinese artifacts	Prehistoric/Ca. 1850s-1890s	Eligible for listing in CRHR and NRHP
19-000887*	LAN-0887H	La Placita; Zanja Madre segment, refuse deposits, building foundations	19 th -early 20 th century	Contributor to a district listed in NRHP
19-001112	LAN-1112H	Old Plaza Church (<i>La Iglesia de Nuestra Señora la Reina de los Ángeles</i>), rectory foundations, and Cemetery	1818	Contributor to a district listed in NRHP
19-001575*	LAN-1575H	Prehistoric/Contact period cemetery and lithic reduction site; Old Chinatown; 19th to 20th Century agricultural and habitation remains	Prehistoric/Ca. 1880s-1939	Eligible for listing in CRHR and NRHP
19-002791	LAN-2791H	Pico-Garnier Block; buildings and refuse deposit	1818-1932	Contributor to a district listed in NRHP
19-002928	LAN-2928H	Building foundations of Gas Works and Brunswig Warehouse and refuse deposits	Ca. 1867-1912	Unevaluated

Primary Number (P-)	Permanent Trinomial (CA-)	Description	Age/Year Constructed	Eligibility determination
19-002929	LAN-2929H	Pelanconi House and refuse deposit	1947	Contributor to a district listed in NRHP
19-003102	LAN-3102H	Brick foundation and artifact concentration	Historic	Unevaluated
19-003103	LAN-3103H	Zanja Madre segment	Historic	Eligible for NRHP and CRHR
19-003120*	LAN-3120H	Cornfield/River Station; railroad tracks, turntable, building foundations and refuse deposits	Ca. 1875-recent	Eligible for NRHP and CRHR
19-003169	LAN-3169H	Railroad or trolley track	Historic	Unevaluated
19-003181	LAN-3181H	Foundation and refuse deposit	Ca. 1840-1900	Unevaluated
19-003549	LAN-3549H	El Pueblo de Los Angeles Winery archaeological deposit	Ca. 1880s-1920s	Eligible for NRHP and CRHR as part of a historic district
19-003650	LAN-3650H	Bovine cranial fragments	Historic	Not eligible for CRHR or NRHP
19-004182	LAN-4182H	North Spring Street railroad segment	Historic	Unevaluated
19-004183	LAN-4183H	College Street pavement	Ca. 1887-1914	Eligible for CRHR
19-004196	LAN-4196	Hammel Building artifacts and Zanja Madre segment	Ca. 1880s-1909	Contributor to a district listed in NRHP
19-004200*	LAN-4200	Alameda Street pavement	1887-1914	Eligible for CRHR
19-004201*	LAN-4201	Naud Junction foundations, manhole, wooden box, and refuse deposits	Historic	Some features eligible for CRHR
19-004202*	LAN-4202	Southern Pacific Railroad segment on North Alameda Street	Historic	Not eligible for inclusion in CRHR
19-004218	LAN-4218H	Los Angeles Plaza Cemetery	Ca. 1820-1844	Contributor to a district listed in NRHP
19-004320	LAN-4320H	Refuse deposit	Ca. 1860s-1920s	Unevaluated
19-004601	LAN-4601H	Refuse deposits, foundations	Ca. 1880s-1960s	Unevaluated
19-004741	LAN-4741H	Refuse deposits, granite paved road, building foundations, Zanja No. 6-1 segment	Ca. 1830-1919	Some features eligible for CRHR
19-004845	LAN-4845H	Refuse deposits, building foundations, utility pipes, concrete flume, cobble floor	Ca. 1880s-1930s	Unevaluated

Primary Number (P-)	Permanent Trinomial (CA-)	Description	Age/Year Constructed	Eligibility determination
19-004882	LAN-4882H	Hall of Justice wall segments, manhole, drainage channel, concrete piers	Ca. 1914-Post 1945	Associated building eligible for NRHP and CRHR; archaeological site unevaluated
19-100446	None	Wall segment, nail and ceramic fragment	Historic	Unevaluated
19-100515	None	Refuse deposit	1813-1947	Unevaluated
19-100881	None	Refuse deposit	Historic	Unevaluated
19-120014	None	Refuse deposit	Historic	Eligible for CRHR and NRHP
19-167017	None	Los Angeles Plaza	Historic	Contributor to a district listed in NRHP
19-167020	None	El Pueblo de Los Angeles State Historic Park District	Historic	Listed in CRHR and NRHP
19-167106	None	First Cemetery Site	Ca. 1823-1844	Contributor to a historic district listed in NRHP and CRHR
19-170956	None	Charles B. Wellman Residence	1894	Individual property determined eligible for NR by a consensus through Section 106 process. Listed in the CR
19-170957	None	Stearns Mill / Eagle Mills / Capitol Milling Company	1855;1883-1884; 1889	Individual property determined eligible for NRHP by Consensus through the Section 106 Process; listed in CRHR
19-170973	None	Post Office Terminal Annex	1938	Individual property listed in NRHP and CRHR
19-171159	None	Union Station	1939	Individual property listed in NRHP and CRHR
19-171556	None	Hammel Building	1909	Contributor to a historic district listed in NRHP and CRHR
19-171574	None	Chevron Station	1970	Unevaluated
19-171578	None	Flora's, 120 Ord Street	1939	Unevaluated

Primary Number (P-)	Permanent Trinomial (CA-)	Description	Age/Year Constructed	Eligibility determination
19-171605	None	Brunswig Drug Company— Laboratory	1925	Contributor to a historic district listed in NRHP and CRHR
19-171606	None	Beaudry Building	1871	Contributor to a historic district listed in NRHP and CRHR
19-171611	None	Brunswig Drug Company— Packing and Warehouse	1907	Contributor to a historic district listed in NRHP and CRHR
19-171613	None	Brunswig Annex	Ca. 1897	Contributor to a historic district listed in NRHP and CRHR
19-173073*	None	Site of Chavez Ravine	1880s-1950s	Unevaluated
19-173140	None	<i>La Iglesia de Nuestra Señora la Reina de los Ángeles</i>	1818	CHL
19-179645	None	Arroyo Seco Parkway Historic District	1938-2007	Listed in NRHP and CRHR
19-186112*	None	Union Pacific Railroad/Southern Pacific Railroad	1870s-present	Found ineligible for NRHP through the Section 106 process; unevaluated for CRHR
19-187085	None	Mojave Road	Ca. 1858	California Historic Landmark
19-190309	None	Zanja Madre segment	Ca. 1884-1888	Nominated for NRHP, but not confirmed by Keeper; withdrawn from consideration
19-192470*	None	Basso Auto Building, 1201 North Broadway	1924	Found ineligible for NR, CR or Local designation

* Indicates site located in the Area of Direct Impacts

Following are descriptions of resources located within, or adjacent to, the Area of Direct Impacts, listed from south (LAUS) to north (Dodger Stadium). Nine resources were identified within the Area of Direct Impacts. Five resources adjacent to the Area of Direct Impacts also deserve special note and are described below. Maps showing site features and other components are included in confidential Appendix A. Department of Parks and Recreation 523 forms for each of the resources described below are included in confidential Appendix B.

3.1.1 19-000887

Resource 19-000887 overlaps approximately 500 square feet of the Area of Direct Impacts at the western location of the proposed Alameda Station (Appendix A, Figure 2). The resource consists of a collection of nineteenth and early-twentieth-century building foundations and refuse deposits yielding over 25,000 artifacts, as well as a segment of the Zanja Madre. Because the site was excavated during archaeological excavations prior to the construction of La Placita de Dolores, the site boundary was drawn to reflect the boundaries of La Placita de Dolores. Additional archaeological deposits likely extend beyond the mapped resource's boundaries and outside the existing physical boundaries of Placita de Dolores.

When the archaeological site was tested in 1978, Test Area 14 was located closest to the future station location (Appendix A, Figure 2).

Test Area 14 revealed a midden containing numerous fragments of faunal bone, glass, metal, and handmade brown ware pottery in loamy soil. The brown ware pottery is often called Mission Ware, because similar pottery, made by Native Americans, is frequently found in association with California's missions. The artifacts were encountered from a depth of approximately 4 inches below the ground surface to approximately 12 inches below the ground surface, beneath which sterile alluvium was encountered. The artifacts are believed to date from the Spanish and Mexican use of the plaza area, possibly including the use of the nearby Avila Adobe and other habitations (Costello and Wilcoxon 1978:99–103).

Within the boundaries of 19-000887, the Zanja Madre consists of a circular brick conduit installed circa 1884–1888. The conduit is 56 inches in exterior diameter. A 54-foot-long segment of the zanja was uncovered within the site in 1978 (Plate 3). In many places the conduit was collapsed or partially removed by past construction activities. 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.

Three segments of the Zanja Madre were re-excavated during renovations to La Placita de Dolores in 2005-2006. Because of the deep layer of fill dumped upon the site in 1978 the top of the Zanja Madre was encountered approximately 5 feet, 3 inches below the plaza surface in 2005-2006 (Slawson 2006:4).

Other segments of the Zanja Madre are also located within El Pueblo Historic Monument but outside the limits of 19-000887. An exposed segment of the Zanja Madre is located within the Avila Adobe interpretive center. An additional exposed segment is located within the Hammel Building. Neither of these exposed segments of the Zanja Madre are currently accessible to the public, although there are plans to include the Hammel Building segment in a future permanent public exhibit.

Resource 19-000887 has been recommended as eligible for inclusion in the NRHP. In 1978, a large amount of fill was placed on top of the site as a means of protecting it.



Plate 3: Zanja Madre segment excavated within La Placita de Dolores (19-000887) in 1978 (Security Pacific National Bank Photo Collection. Los Angeles Public Library 1978).

There is no overlap between the known locations of the Zanja Madre within El Pueblo and the proposed ground disturbance for the Alameda Station.

3.1.2 19-004320

Site 19-004320 consists of a collection of disturbed artifacts without association. The artifacts were encountered during the Alameda Street Improvement Project in a strip of land approximately 12 meters wide along the west side of Alameda Street between North Los Angeles Street and West Cesar Chavez Avenue, at depths ranging from near the surface to approximately 48 inches. The artifacts included 27 ceramic sherds, 22 bottle shards, 3 other glass shards, 7 metal fragments, more than 285 faunal bone fragments, and vitrified clay pipe fragments. It was estimated the artifacts ranged in age from 1797 to 1958, “with a more conservative range from the 1860s to the 1920s” (Cordner 2006).

No archaeological features were identified, and, because of the excavation methods, no clear context was recorded for any of the artifacts.

This resource overlaps the Area of Direct Impacts at the proposed Alameda Station, where it also partially overlaps site 19-000887.

This resource was not formally evaluated, but was initially recorded as an isolate in the CRHR.

3.1.3 19-167020

This resource consists of El Pueblo de Los Angeles State Historic Park District, also known as the Los Angeles Plaza Historic District. As most recently defined the historic district consists of 21 contributing buildings, 1 contributing structure, and 1 contributing site. Additional archaeological sites known to exist within or adjacent to the boundaries of the historic district were not included in the evaluation. The resource is located adjacent to the Area of Direct Impacts of the proposed Alameda Station.

This resource is listed on the NRHP.

Because this resource is adjacent to but not within the Area of Direct Impacts, treatment of this resource is discussed in the Historical Resource Technical Report for this Project.

3.1.4 19-001575

Resource 19-001575 is a large multicomponent archaeological site located under and around Union Station (Appendix A, Figure 2). 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 Union Station was constructed in 1939, the buildings in the vicinity were razed and 3 to 12 feet of fill deposited over the remains, sealing and preserving the building foundations, irrigation canals, wells, and other features, some of which have since been rediscovered.

During the construction of the Metropolitan Water District (MWD) Headquarters building, approximately 500 feet southeast of the Area of Direct Impacts, a prehistoric and contact period cemetery included at least 14 internments, 5 cremations, and scattered human remains as well as associated artifacts were encountered (Goldberg et al. 1999). Construction of the MWD building also led to the excavation of portions of the former Los Angeles red light district, including long, narrow foundations of stall-like buildings called cribs that were used specifically for prostitution. Archaeological remains associated with Matthew Keller's winery, including irrigation ditches fed by the city's zanja system, were also uncovered (Costello et al. 1999; Meyer et al. 2005).

During additions to Union Station for Metro's Red Line subway system, as well as Catellus Corporation 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 Old Chinatown were uncovered (Greenwood 1996; Warren 2005).

Archaeological testing prior to the construction of the Mozaic at Union Station Apartments (formerly known as the Union Station Village Apartments) led to the discovery of foundations, refuse deposits, a well, and wood-lined irrigation ditches associated with the early 19th century home of Benjamin Davis Wilson, which later became the Sisters of Charity Orphan Asylum (Warren 2005). Artifacts included early British ceramics, shell and glass buttons and slate pencils. These features were encountered approximately 200 feet north of the Area of Direct Impacts.

The only documentation filed at the SCCIC documenting the work closest to the Area of Direct Impacts for Alameda Station, at the Mozaic at Union Station Apartments and the Catellus Headstart construction, consists of a six page site DPR form update (Warren 2005). The update does not include maps of archaeological feature locations. No final monitoring and excavation reports were prepared due to a lack of funding by the construction contractor. Field records are on file at Applied EarthWorks, Inc. Hemet, California.

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 for Alameda Station.

This resource is eligible for inclusion in the NRHP.

3.1.5 19-004200

This resource consists of vitrified brick paving of Alameda Street, encountered beneath approximately 5.5 inches of asphalt beneath the street's eastern shoulder (Appendix A, Figure 3). Several of the bricks were marked "L.A.P.B.Co," the mark of the Los Angeles Pressed Brick Company, which operated between 1887 and 1926. This resource partially overlaps the Area of Direct Impacts at the proposed Alameda Tower.

This resource was evaluated eligible for inclusion in the CRHR. However, within much of the Area of Direct Impacts, it was impacted and partially destroyed by past construction. To mitigate these 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 reused bricks have lost their integrity of location and are no longer considered a historical resource under CEQA.

3.1.6 19-004201

This resource consists of the historic site of Naud Junction, including the intersection of North Main Street and Alameda Street and the triangular parcel between them (Appendix A, Figure 3). 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 (*Los Angeles Times* 1913).

A total of five features with 10 associated artifacts, as well as 249 artifacts not associated with features, were recorded in this location. They include a brick manhole, brick wall segments, and a wooden box or trough. The wooden feature (Feature 3) was not evaluated because it was not fully excavated and was preserved in place, while the other excavated features were recommended not to be eligible for inclusion in the CRHR.

This resource overlaps the Area of Direct Impacts at the proposed Alameda Tower (Appendix A, Figure 3).

Two of the documented features, Feature 1 and Feature 2, are located within the Area of Direct Impacts, north of the proposed Alameda Tower. Both these features are brick foundations. One was interpreted by the excavators to be the foundation of a shed or outbuilding, and the other, more substantial foundation appeared to be that of a portion of the Naud Junction warehouse (Gibson and Dietler 2011). Both features were evaluated and found not to be eligible for inclusion in the CRHR.

This resource overlaps sites 19-003103, 19-004200, and 19-004202.

3.1.7 19-004202

This resource consisted of four railroad track segments encountered within Alameda Street and North Main Street. All four tracks were set on a seven-foot-deep concrete foundation. The tracks were identified as portions of the SPRR.

The SPRR is also recorded under primary number 19-186112, and was recommended eligible for inclusion in the NRHP under Criteria A and B (Ashkar 1999). However, the OHP Built Environment Resources Directory (BERD) indicates that the resource was found ineligible for listing in the NRHP by consensus through the Section 106 process. It has been found ineligible for the CRHR.

This resource partially overlaps the Area of Direct Impacts at the proposed Alameda Tower (Appendix A, Figure 3). However, the excavated portions of the resource were removed for construction in 2007. No documented portion of the resource is anticipated to exist within the Area of Direct Impacts.

3.1.8 19-186112

This resource consists of a segment of the historic SPRR, the currently functional portions of which are now owned by the Union Pacific Railroad. 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. The resource continues to Salt Lake City, but the recordation terminates arbitrarily in San Bernardino. 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, and is discussed under 19-004202, above.

The SPRR was recommended eligible for inclusion in the NRHP under Criteria A and B (Ashkar 1999). However, the BERD indicates that the resource was found ineligible for listing in the NRHP by consensus through the Section 106 process. It has not been evaluated for the CRHR.

3.1.9 19-003103

This resource consists of several exposures of the brick conduit of the Zanja Madre. The Zanja Madre is the main irrigation ditch originally constructed in 1781, during the Spanish period, to serve the Pueblo de Los Angeles. At that time the resource consisted of an open ditch. In the 1880s a brick conduit was constructed to convey the irrigation water along approximately the same alignment that had continued to be used and maintained since the Spanish period. The system was finally abandoned in 1904, after the City of Los Angeles regained control of its domestic water system and the irrigation water system was considered obsolete (Layne 1957).

The exposures documented under this primary number are located along a length extending from a point northwest of Los Angeles State Historic Park near the intersection of North Broadway and Bishops Road in the north to exposures along the west side of Alameda Street north of Ord Street in the south, although the resource is known or suspected to extend both north and south of these limits.

The northernmost exposures of the Zanja Madre are that located northwest of Los Angeles State Historic Park. The resource is represented by two features in this location. One is a concrete and brick basin, while the other is an approximately 75-foot-long brick conduit. The conduit is currently exposed.

From this point, the zanja continues south, approximately following the 300-foot contour, onto private property. An exposure has been documented on private property located between a parking garage and the Metro maintenance yard west of the intersection of North Broadway and Bernard Street (Gust 2007:6).

Continuing south, the resource was documented again during construction monitoring of the Blossom Plaza, northwest of the intersection of College Street and North Spring Street (Furnis and Gust 2015).

A 1914 *Plan and Profile of a Storm Sewer in Alameda Street* shows the zanja, which by that time had already been abandoned (Plate 4). The zanja exits the Blossom Plaza property, crosses College Street, turning, and proceeds southeast between Alameda Street and today's Spring Street (then called San Fernando Street). The plan notes, "Zanja Manhole to have outlet and inlet blocked up watertight with concrete and to be filled with earth thoroughly compacted, after top has been removed" (Hamlin 1914). This zanja segment appears to be a short distance to the west of the Area of Direct Impacts for the Alameda Tower (Appendix A, Figure 3). The Zanja Madre is also mapped approximately 300 feet south and west of the Chinatown/State Park Station (Appendix A, Figure 4).

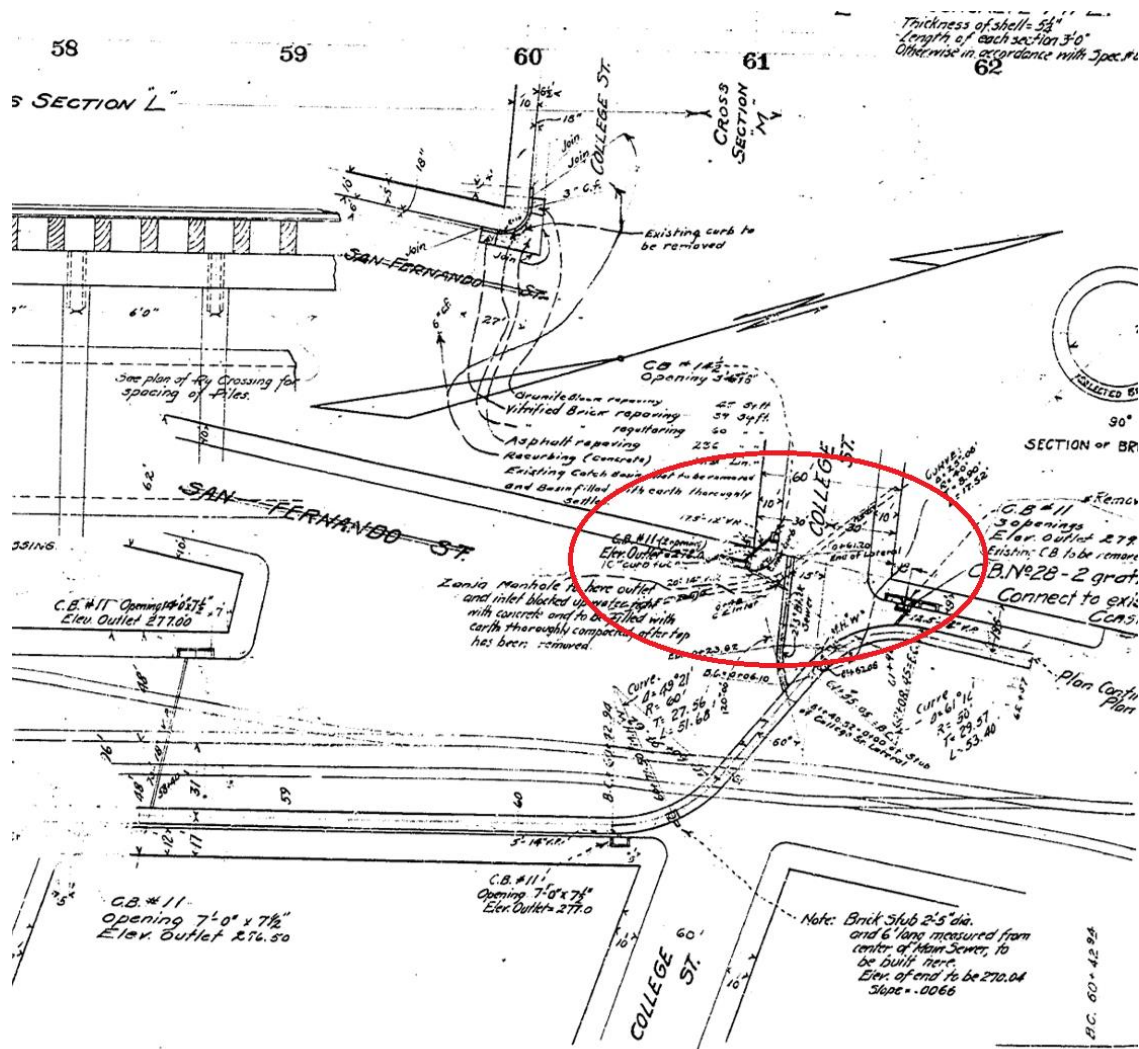


Plate 4: The Zanja Madre, Circled, In a Plan and Profile of a Storm Sewer in Alameda Street (Hamlin 1914).

Further south, 19-003103 was observed beneath the sidewalk west of Alameda Street north of Ord Street (Gibson and Dietler 2011).

The segment of the Zanja Madre recorded north of Ord Street is the southernmost portion of the resource recorded under this primary number. As recorded the resource is located adjacent to, but not within, the Area of Direct Impacts. Exposed segments are visible beneath the Hammel Building and beneath the Avila Adobe interpretive center. An additional segment of the brick conduit of the Zanja Madre was excavated within the boundaries of 19-000887 (see above). The identified segments of the Zanja Madre all indicate that the resource is located entirely outside the Area of Direct Impacts.

This resource has been recommended as eligible for inclusion in the NRHP and the CRHR.

3.1.10 19-003120

This resource 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, when most of the functions of the River Station were transferred to a newly constructed facility in Lincoln Heights.

Extensive archaeological work, including ground penetrating radar studies and archaeological excavations, have been conducted at the site. Excavated features include portions of a depot and hotel including restroom structure, ice house, paint and varnishing shop, railroad car turn table, and refuse deposits (Dodds and Sampson 2012; Jaurequi 2019; Stringer-Bower et. al 2014). GIS data showing the locations of archaeological features within the park were transmitted to AECOM from California State Parks on July 7, 2020.

Maps made utilizing California State Parks' GIS data indicate that no archaeological features are recorded within the Area of Direct Impacts, although limited work has been done in those areas (Appendix A, Figures 5 and 6). A remote sensing (Ground Penetrating Radar) grid done in 2008 near the current concession stand in the southeastern portion of the park where the pavers are, gave some indication of a feature being present in that area. However, the instrument could have just been picking up the pavers or asphalt in those readings and the broken-up nature of the signature was interpreted as possibly representing a "high degree of disturbance" (Becker 2008:4). Historic Sanborn Fire Insurance Maps show the Southern Pacific Railroad Offices and Freight House partially located within the Area of Direct Impacts both inside and outside the park (Plate 5).

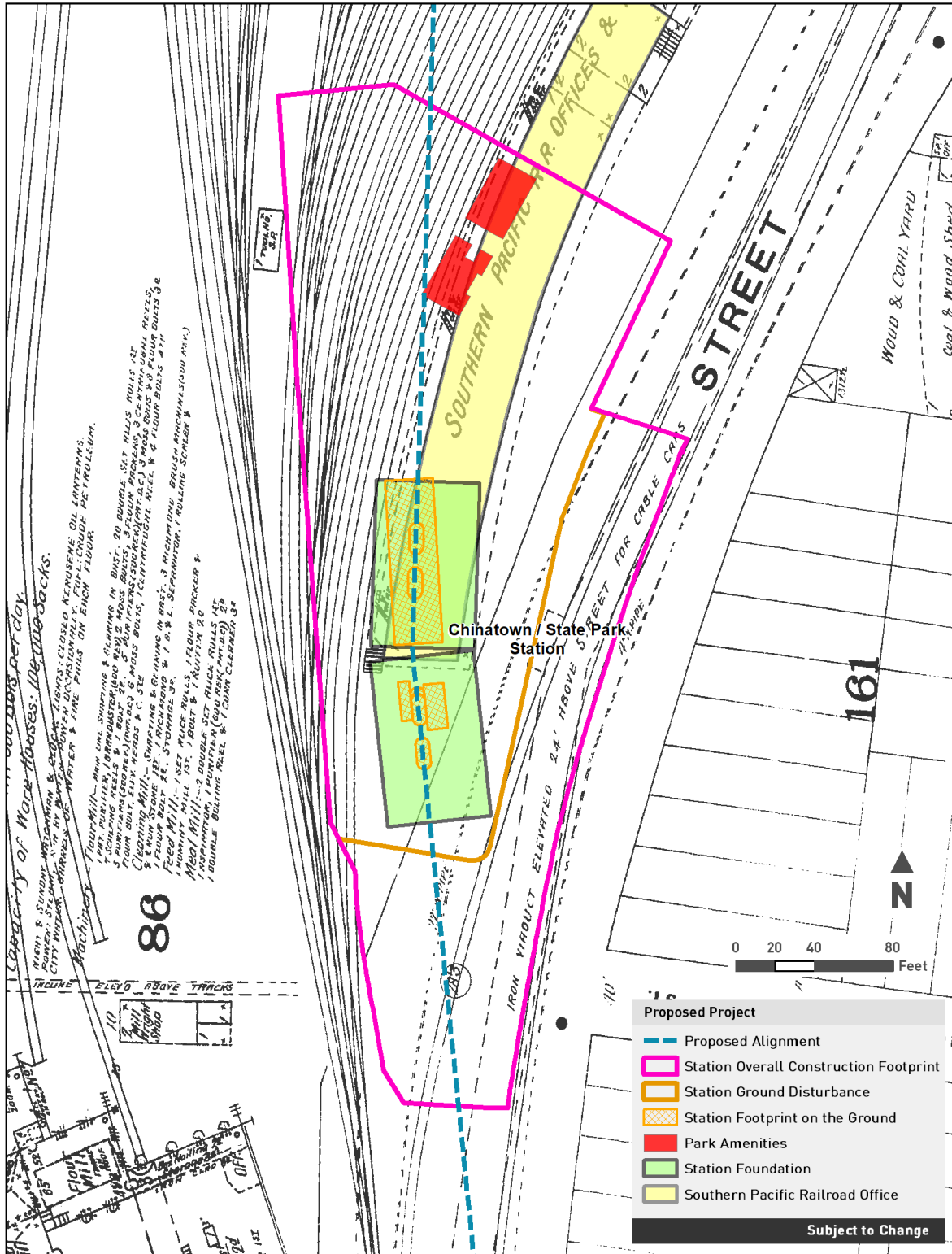


Plate 5: Chinatown/State Park Station in Relation to Los Angeles State Historic Park (Sanborn 1906)

Based on this past archaeological work, California State Parks developed an archaeological sensitivity map of Los Angeles State Historic Park (California State Parks 2020:9). This sensitivity map identifies “LASHP Areas of Lower Probability of Subsurface Cultural Resources.” All parts of the park not identified as having lower probability are presumed to have a higher sensitivity for the subsurface cultural resources (California State Parks 2020). When the Chinatown/State Park Station construction footprint (including staging areas) is overlaid on this map, it appears that the station is primarily located in an area of higher sensitivity (Appendix A, Figure 5).

This resource is Los Angeles Historic-Cultural Monument 82. This resource has been recommended as eligible for inclusion in the CRHR and the NRHP.

3.1.11 19-190309

This resource consists of the 70-foot-long segment of the brick Zanja Madre conduit that is currently exposed and located northwest of Los Angeles State Historic Park near the intersection of North Broadway and Bishops Road (See 19-003103).

This portion of the Zanja Madre was nominated to the NRHP. It was suggested that the Zanja Madre as a whole is ineligible for NRHP inclusion because of its poor integrity. However, it was argued that the Zanja Madre would be eligible for the NRHP under Criterion C, and that this segment is eligible as the best-preserved and longest representative segment of the Zanja Madre as a whole. The California OHP responded that the applicant failed to substantiate that this is the longest surviving or best representative segment of the Zanja Madre, and stated, “In this case, the nomination must establish the segment as the only or best surviving element of the system and demonstrate that the segment retains the essential physical features necessary to convey historic character of the resource. A discussion of all of the components that made up the Zanja Madre system, including the underground linear features, structures, and buildings associated with the system, and an analysis of the existing conditions of extant components would be necessary to understand the rarity of the segment” (Toffelmier 2009). The OHP suggested resubmittal of the application with additional documentation; however, this was not completed. The nomination is considered withdrawn.

3.1.12 19-192470

This resource consists of the Basso Auto Building, located at 1201 North Broadway. The building was first constructed in 1924, and was expanded in 1937 and 1946. This building is located on the location of the proposed Broadway Junction.

This resource was recommended not eligible for inclusion in the CRHR.

Because it is considered a part of the built environment, treatment of this resource is discussed in the Historical Resource Technical Report for this Project.

3.1.13 19-179645

This resource consists of the Arroyo Seco Parkway Historic District. The parkway was dedicated in 1940, and the district consists of both the parkway and associated structures such as bridges, ramps, walls, lamp standards, the Arroyo Seco Flood Control Channel, and landscaping. The Project passes over this resource, but no Project component would be constructed within the boundaries of the resource itself.

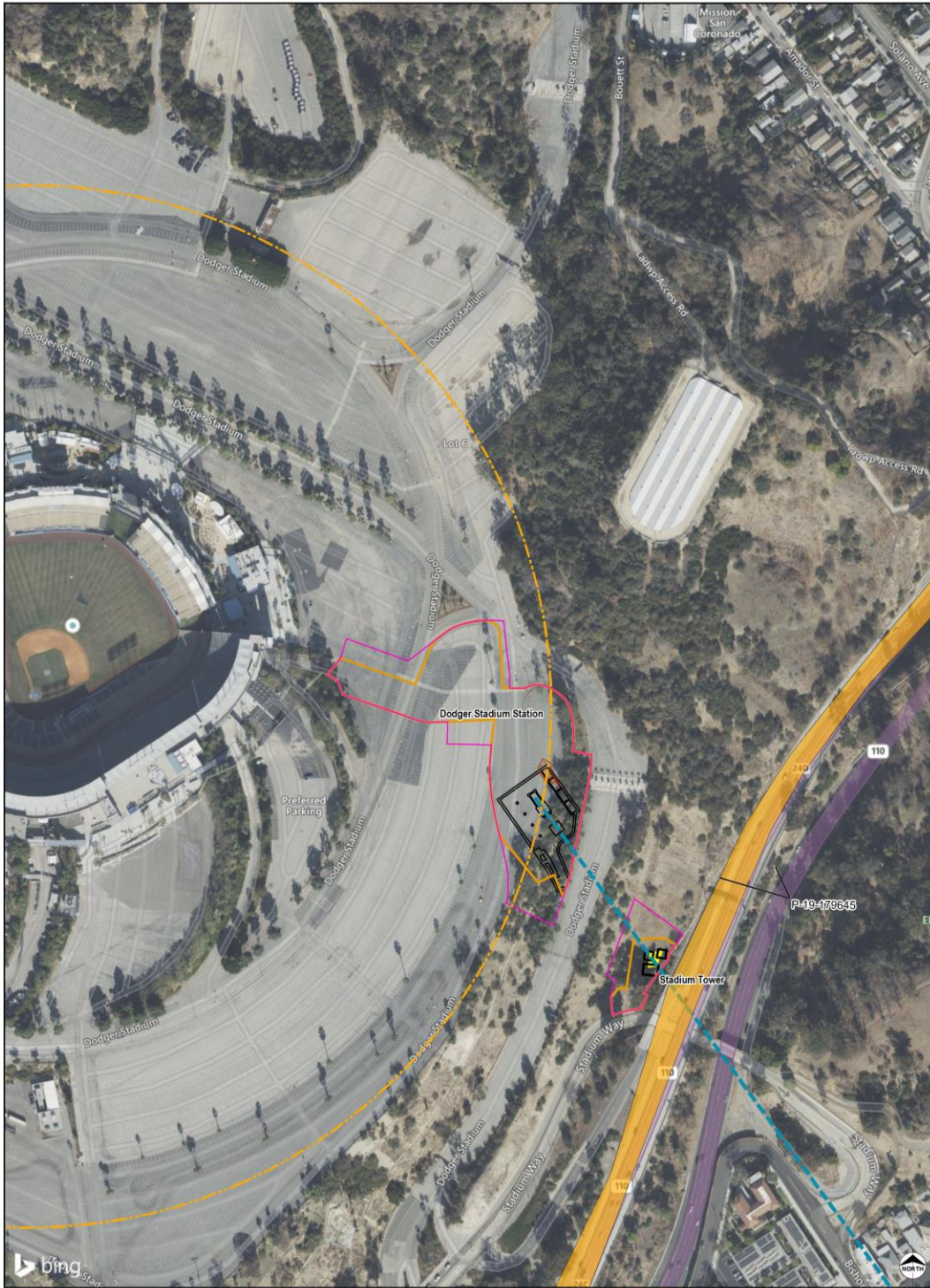
This resource is listed on the NRHP. Because this resource is generally within the alignment but not within the Area of Direct Impact, treatment of this resource is discussed in the Historical Resource Technical Report for this Project.

3.1.14 19-173073

This resource consists of the former site of the community of Chavez Ravine, which is currently occupied by Dodger Stadium (Plate 6). The location of the proposed Dodger Stadium Station is within formerly undeveloped Tract No. 3201 (Plate 7). The resource documented under 19-173073 is the 352 acres upon which Dodger Stadium and the parking lots for Dodger Stadium are now built (Castaneda and Pitti 1980). However, the record was completed after the demolition of Chavez Ravine, and no archaeological or built environment resources are documented in the site record. Therefore, while the mapped area of the Dodger Stadium property designated as 19-173073 overlaps the Project area, no resources associated with Chavez Ravine are anticipated to exist within the Area of Direct Impacts.

The City of Los Angeles acquired Chavez Ravine in the early 1950s through the process of eminent domain, with the intention of building new public housing on the site (Normark 1999; Podair 2017). However, due to a moratorium on the construction of public housing (Laslett 2015; Parson 2005), this housing was never constructed.

The property was transferred to the Dodgers in 1957 to build a stadium in Chavez Ravine; the contract provided that the City would have to prepare the property prior to transfer. Already in the early 1950s, in preparation to build the new public housing on the site, which ultimately failed, the City began removing existing houses; they were either demolished outright or sold and moved off the property.



Legend	
P-19-173073 Site Boundary	Ground Disturbance (Tower)
P-19-179645 Site Boundary	Foundation (Station/Junction)
Alignment Centerline	Foundation (Tower)
Overall Construction Footprint (Station/Junction)	Tower Footprint
Overall Construction Footprint (Tower)	
Footprint on the Ground	
Ground Disturbance (Station/Junction)	

Los Angeles Aerial Rapid Transit Project

Cultural Resource Dodger Stadium Station and Stadium Tower

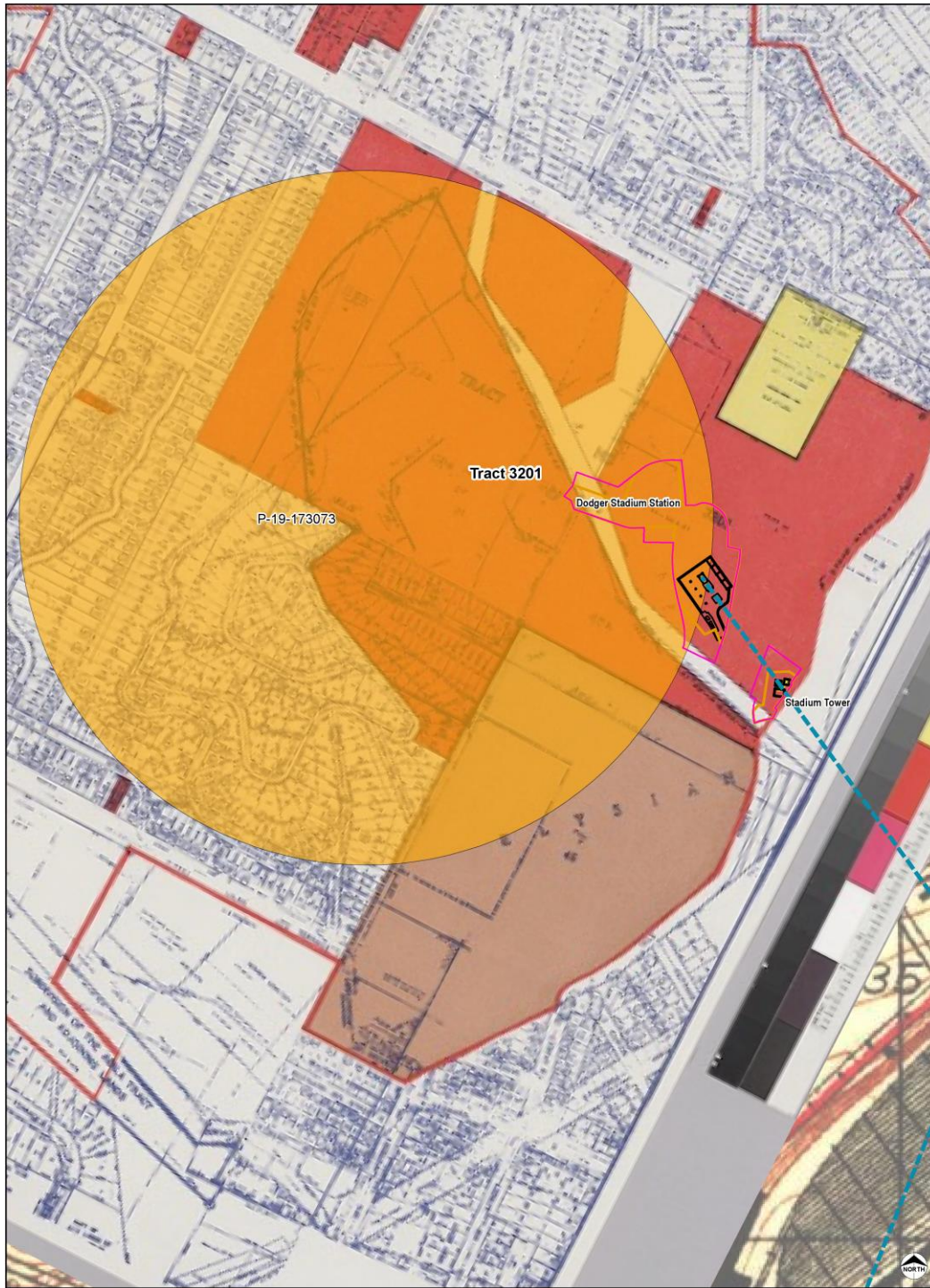
Date: 3/28/2022

AECOM

Scale 1:2,400
1 inch = 200 feet

0 400 Feet

Plate 6: Cultural Resources near Dodger Stadium Station and Stadium Tower



<p>Overview Map</p> <p>Los Angeles</p>	<p>Legend</p> <ul style="list-style-type: none"> — Alignment Centerline SCCIC Record Search Results Polygon (P-19-173073) Overall Construction Footprint (Station/Junction) Overall Construction Footprint (Tower) Footprint on the Ground Park Amenities Ground Disturbance (Station/Junction) Ground Disturbance (Tower) Foundation (Station/Junction) Foundation (Tower) Tower Footprint Reservoir Property Land Not Yet Acquired by the City, Ca. 1959 Park land 	<p>Los Angeles Aerial Rapid Transit Project</p> <p>Chavez Ravine in Relation to Dodger Stadium</p> <p>Date: 3/28/2022</p> <p>AECOM</p>
<p><small>This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility and denies any liability whatsoever to any party that modifies this drawing without AECOM's express written consent.</small></p>		<p>Scale 1:3,600 1 inch = 300 feet</p> <p>0 600 Feet</p>

Plate 7: Chavez Ravine in Relation to Stadium Tower and Dodger Stadium Station

To construct the stadium and parking, cuts were required in some locations and filling in others. Portions of the community at lower elevations may have been buried beneath fill, and debris from houses may have been incorporated into the fill. But any cultural deposits that might survive would likely be deeply buried in filled portions of the Dodger Stadium property.

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 today the Dodger Stadium property and surrounding area were not developed prior to the construction of Dodger Stadium (Plate 8). 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 No. 3201 (Plate 9). No resources associated with the community of Chavez Ravine are anticipated to have ever existed within the Area of Direct Impacts.

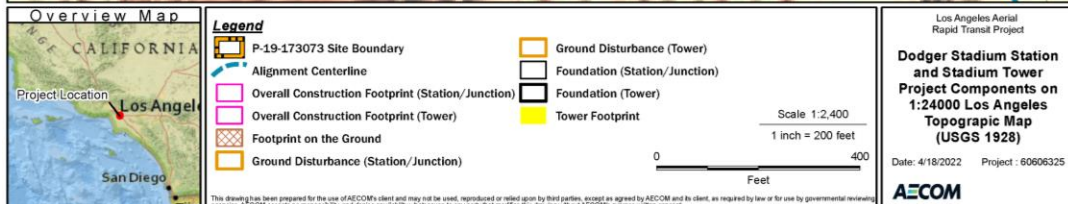


Plate 8: Cultural Resources near Dodger Stadium Station and Stadium Tower

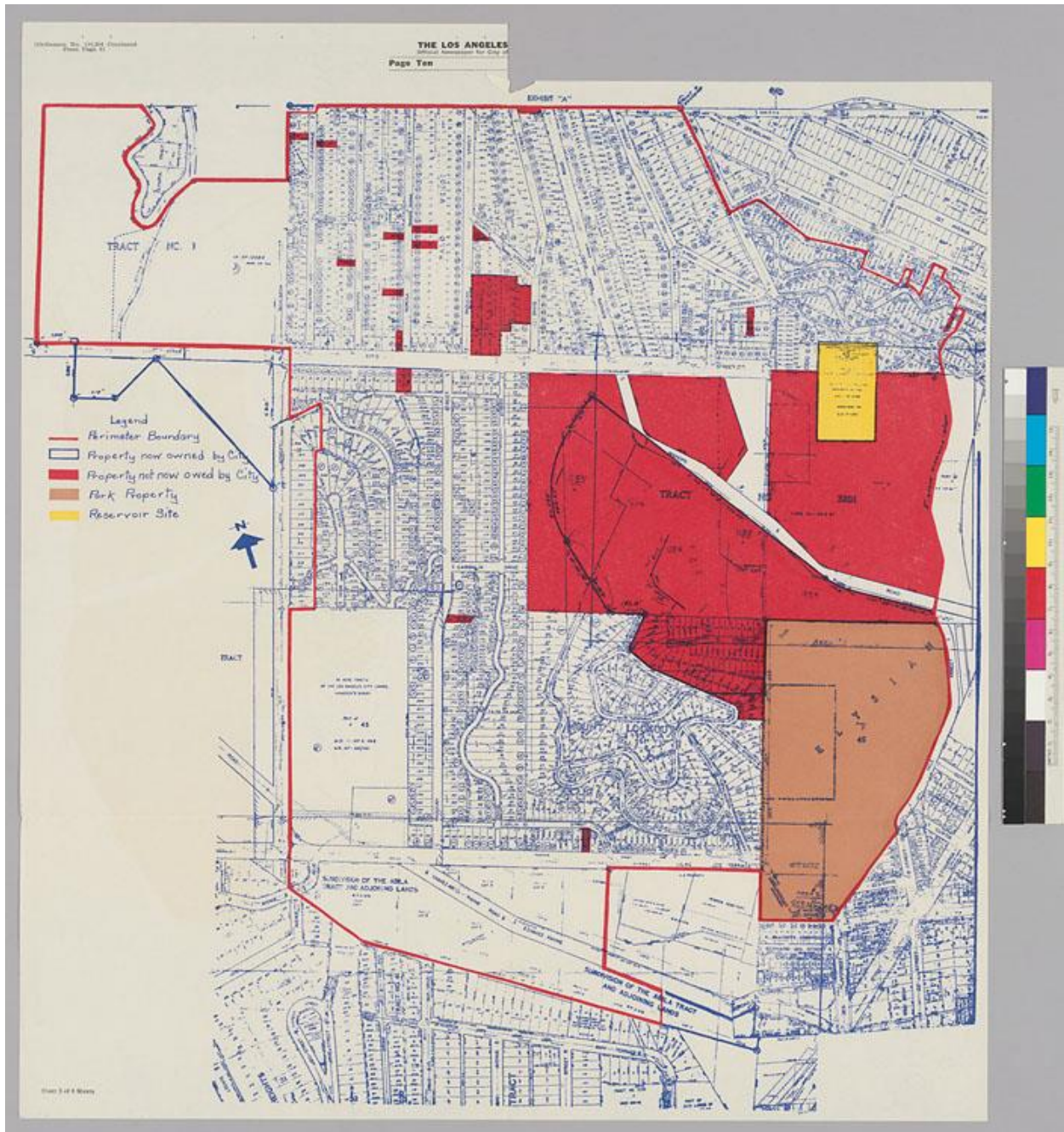


Plate 9: Map of Chavez Ravine and Surrounding Tracts, Ca. 1959. Proposed Project Area is Located in Undeveloped Property Along East Margin of Map Marked in Red (Online Archive of California 1959).

3.2 Historic Property Data File

The Directory of Properties in the Historic Property Data File for Los Angeles County, maintained by the OHP, was consulted to identify historical resources within the Area of Direct Impacts (OHP 2012). A total of 147 properties were identified within 1/8-mile of the Area of Direct Impact. None of these historic properties are located within the Area of Direct Impacts (Table 4).

Table 4: Previously Identified Historic Properties

Address	OHP Property Number	Description	Year	Eligibility Determination
None	172542	Zanja Madre	1781	Submitted to OHP for action – withdrawn.
Alameda Street	020925	West Temple Apartments, The Rochester	1887	Appears eligible for NRHP as an individual property through survey evaluation
Alameda Street	167505	Furlong Tract Residential Site	1905	Identified in reconnaissance level survey – Not evaluated
841 Alameda Street	025564	El Paseo Inn	1914	Identified in reconnaissance level survey – Not evaluated
411 Bernard Street	024931	Phillip Fritz Residence	1886	Individual property determined eligible for the NRHP by the Section 106 process. Listed in CRHR.
415 Bernard Street	024932	Samuel M. Storer Residence	1888	Individual property determined eligible for the NRHP by the Section 106 process. Listed in CRHR.
1263 Bishops Road	097765	Cathedral High School	-	Individual property determined eligible for the NRHP and CRHR by the Section 106 process.
Broadway	024881	Chinatown East of Hill Street	1937	Identified in reconnaissance level survey – Not evaluated
Broadway	026759	Broadway Street Clock	1910	Individual property that is eligible for local listing or designation.
Chung King Court	024929	Chinatown West of Hill Street	1940	Identified in reconnaissance level survey – Not evaluated
502 Chung King Court	024882	-	-	Identified in reconnaissance level survey – Not evaluated
503 Chung King Court	024883	-	-	Identified in reconnaissance level survey – Not evaluated
504 Chung King Court	024884	-	-	Identified in reconnaissance level survey – Not evaluated
506 Chung King Court	024885	-	-	Identified in reconnaissance level survey – Not evaluated
507 Chung King Court	024886	-	-	Identified in reconnaissance level survey – Not evaluated
508 Chung King Court	024887	-	-	Identified in reconnaissance level survey – Not evaluated

Address	OHP Property Number	Description	Year	Eligibility Determination
930 Chung King Road	024888	-	-	Identified in reconnaissance level survey – Not evaluated
931 Chung King Road	024889	-	-	Identified in reconnaissance level survey – Not evaluated
932 Chung King Road	024890	-	-	Identified in reconnaissance level survey – Not evaluated
933 Chung King Road	024891	-	-	Identified in reconnaissance level survey – Not evaluated
935 Chung King Road	024892	-	-	Identified in reconnaissance level survey – Not evaluated
936 Chung King Road	024893	-	-	Identified in reconnaissance level survey – Not evaluated
938 Chung King Road	024894	-	-	Identified in reconnaissance level survey – Not evaluated
939 Chung King Road	024895	-	-	Identified in reconnaissance level survey – Not evaluated
942 Chung King Road	024896	-	-	Identified in reconnaissance level survey – Not evaluated
943 Chung King Road	024897	-	-	Identified in reconnaissance level survey – Not evaluated
944 Chung King Road	024898	-	-	Identified in reconnaissance level survey – Not evaluated
945 Chung King Road	024899	-	-	Identified in reconnaissance level survey – Not evaluated
949 Chung King Road	024900	-	-	Identified in reconnaissance level survey – Not evaluated
953 Chung King Road	024901	-	-	Identified in reconnaissance level survey – Not evaluated
955 Chung King Road	024902	-	-	Identified in reconnaissance level survey – Not evaluated
957 Chung King Road	024903	-	-	Identified in reconnaissance level survey – Not evaluated
959 Chung King Road	024904	-	-	Identified in reconnaissance level survey – Not evaluated
961 Chung King Road	024905	-	-	Identified in reconnaissance level survey – Not evaluated
962 Chung King Road	024906	-	-	Identified in reconnaissance level survey – Not evaluated
963 Chung King Road	024907	-	-	Identified in reconnaissance level survey – Not evaluated
966 Chung King Road	024908	-	-	Identified in reconnaissance level survey – Not evaluated
967 Chung King Road	024909	-	-	Identified in reconnaissance level survey – Not evaluated
969 Chung King Road	024910	-	-	Identified in reconnaissance level survey – Not evaluated
970 Chung King Road	024911	-	-	Identified in reconnaissance level survey – Not evaluated
971 Chung King Road	024912	-	-	Identified in reconnaissance level survey – Not evaluated
972 Chung King Road	024913	-	-	Identified in reconnaissance level survey – Not evaluated

Address	OHP Property Number	Description	Year	Eligibility Determination
974 Chung King Road	024914	-	-	Identified in reconnaissance level survey – Not evaluated
975 Chung King Road	024915	-	-	Identified in reconnaissance level survey – Not evaluated
978 Chung King Road	024916	-	-	Identified in reconnaissance level survey – Not evaluated
405 Gin Ling Way	024852	-	-	Identified in reconnaissance level survey – Not evaluated
428 Gin Ling Way	024853	-	-	Identified in reconnaissance level survey – Not evaluated
432 Gin Ling Way	024854	-	-	Identified in reconnaissance level survey – Not evaluated
437 Gin Ling Way	024855	-	-	Identified in reconnaissance level survey – Not evaluated
459 Gin Ling Way	024856	-	-	Identified in reconnaissance level survey – Not evaluated
463 Gin Ling Way	024857	-	-	Identified in reconnaissance level survey – Not evaluated
475 Gin Ling Way	024858	-	-	Identified in reconnaissance level survey – Not evaluated
483 Gin Ling Way	024859	-	-	Identified in reconnaissance level survey – Not evaluated
486 Gin Ling Way	024860	-	-	Identified in reconnaissance level survey – Not evaluated
487 Gin Ling Way	024861	-	-	Identified in reconnaissance level survey – Not evaluated
491 Gin Ling Way	024862	-	-	Identified in reconnaissance level survey – Not evaluated
495 Gin Ling Way	024863	-	-	Identified in reconnaissance level survey – Not evaluated
443 Jung Jing Road	024868	-	-	Identified in reconnaissance level survey – Not evaluated
453 Jung Jing Road	024869	-	-	Identified in reconnaissance level survey – Not evaluated
454 Jung Jing Road	024870	-	-	Identified in reconnaissance level survey – Not evaluated
456 Jung Jing Road	024871	-	-	Identified in reconnaissance level survey – Not evaluated
441 Lei Min Way	024872	-	-	Identified in reconnaissance level survey – Not evaluated
443 Lei Min Way	024873	-	-	Identified in reconnaissance level survey – Not evaluated
Los Angeles Street	021041	Site of Los Angeles Star	-	Listed in CRHR
Los Angeles Street	025581	Los Angeles Massacre Site	1871	Identified in reconnaissance level survey – Not evaluated
Los Angeles Street	025579	Chinese Store	-	Identified in reconnaissance level survey – Not evaluated
Los Angeles Street	090056	Lugo Adobe Site	1840	State Historic Landmark; Needs to be Reevaluated Using Current Standards
932 Mei Ling Way	024874	-	-	Identified in reconnaissance level survey – Not evaluated

Address	OHP Property Number	Description	Year	Eligibility Determination
935 Mei Ling Way	024875	-	-	Identified in reconnaissance level survey – Not evaluated
951 Mei Ling Way	024876	-	-	Identified in reconnaissance level survey – Not evaluated
945 Mei Ling Way	024877	-	-	Identified in reconnaissance level survey – Not evaluated
800 North Alameda Street	025156	Los Angeles Union Station	1939	Individual property listed in NRHP by Keeper; listed in CRHR
900 North Alameda Street	024956	Los Angeles Post Office Terminal Annex	1938	Individual property listed in NRHP by Keeper; listed in CRHR
901 North Alameda Street	025585	Chevron Station	1970	Identified in reconnaissance level survey – Not evaluated
North Broadway	090604	Portola Trail Campsite	-	State Historic Landmark; Needs to be Reevaluated Using Current Standards
North Main Street	025582	Chinese American Community, El Pueblo	1880	Identified in reconnaissance level survey – Not evaluated
314 North Main Street	021046	Bella Union Hotel Site	1835	State Historic Landmark; Needs to be Reevaluated Using Current Standards
416 North Main Street	021047	Masonic Hall	1858	Contributor to a district or multiple resource property listed in NRHP by the Keeper. Listed in the CRHR
418 North Main Street	025577	Merced Theatre	1869	Contributor to a district or multiple resource property listed in NRHP by the Keeper. Listed in the CRHR
419 North Main Street	020947	Garnier Block / Garnier Building	1890	Contributor to a district or multiple resource property listed in NRHP by the Keeper. Listed in the CRHR
424 North Main Street	025583	Pico House / Pico Hotel	1869	Contributor to a district or multiple resource property listed in NRHP by the Keeper. Listed in the CRHR
500 North Main Street	020952	Plaza Area / Plaza Park	1815	Contributor to a district or multiple resource property listed in NRHP by the Keeper. Listed in the CRHR
501 North Main Street	025618	Vickrey / Brunswig Building	1888	Contributor to a district determined eligible for NRHP by the Keeper. Listed in the CRHR.
507 North Main Street	025619	Plaza House	1883	Contributor to a district determined eligible for NRHP by Part I Tax Certification. Listed in the CRHR.

Address	OHP Property Number	Description	Year	Eligibility Determination
521 North Main Street	021048	First Los Angeles Cemetery Site	1823	Identified in reconnaissance level survey – Not evaluated
522 North Main Street	025558	Plaza / Plaza Bandstand. Kiosk	-	Identified in reconnaissance level survey – Not evaluated
535 North Main Street	025621	Plaza Church Rectory and Offices	1965	Identified in reconnaissance level survey – Not evaluated
535 North Main Street	027204	<i>La Iglesia de Nuestra Señora la Reina de los Ángeles</i>	1822	Contributor to a district determined eligible for NRHP by the Keeper. Listed in the CRHR.
600 North Main Street	025572	New Standard Concentrator Company Bank	1898	Identified in reconnaissance level survey – Not evaluated
608 North Main Street	025571	Jones Building	1885	Identified in reconnaissance level survey – Not evaluated
620 North Main Street	025570	Casa California	1910	Identified in reconnaissance level survey – Not evaluated
622 North Main Street	020950	Sepulveda Block / Sepulveda House	1887	Contributor to a district determined eligible for NRHP by the Keeper. Listed in the CRHR.
630 North Main Street	025568	La Golondrina / Main Street Façade	1910	Identified in reconnaissance level survey – Not evaluated
634 North Main Street	025567	Casa de Souza / Old Machine Shop	1915	Identified in reconnaissance level survey – Not evaluated
650 North Main Street	025566	Italian Hall	1908	Appears eligible for NRHP both individually and as a contributor to a NRHP eligible district through survey evaluation.
701 North Main Street	025586	Shell Station	1965	Identified in reconnaissance level survey – Not evaluated
737 North Main Street	025587	Carne Asada	1908	Identified in reconnaissance level survey – Not evaluated
739 North Main Street	025588	Mexico de Oro	1915	Identified in reconnaissance level survey – Not evaluated
312 North Spring Street	027293	United States Post Office and Court	1937	Individual property listed in NRHP by the Keeper. Listed in the CRHR
524 North Spring Street	025616	Brunswig Drug Company Laboratory	-	Identified in reconnaissance level survey – Not evaluated
631 North Spring Street	025601	Moctezuma Inn	1915	Identified in reconnaissance level survey – Not evaluated
635 North Spring Street	025602	China Town Teen Post	1945	Identified in reconnaissance level survey – Not evaluated
638 North Spring Street	025600	-	1922	Identified in reconnaissance level survey – Not evaluated
639 North Spring Street	025603	King San Company	1915	Identified in reconnaissance level survey – Not evaluated

Address	OHP Property Number	Description	Year	Eligibility Determination
640 North Spring Street	025599	Macy Liquor / El Ya Qui Restaurant	1915	Identified in reconnaissance level survey – Not evaluated
643 North Spring Street	025604	Y Sing Seafood / Sing Lee Hotel	1914	Identified in reconnaissance level survey – Not evaluated
646 North Spring Street	025598	New Spring Grocery Company	1908	Identified in reconnaissance level survey – Not evaluated
649 North Spring Street	025605	Sing Lee Theatre	1965	Identified in reconnaissance level survey – Not evaluated
652 North Spring Street	025597	China Commercial Company	1895	Identified in reconnaissance level survey – Not evaluated
653 North Spring Street	025606	Magic Dragon Gift Shop	1890	Identified in reconnaissance level survey – Not evaluated
658 North Spring Street	025596	Solaris Restaurant	1938	Identified in reconnaissance level survey – Not evaluated
665 North Spring Street	025607	International Grocery Company	1928	Identified in reconnaissance level survey – Not evaluated
670 North Spring Street	025595	Sam Sing Company	1960	Identified in reconnaissance level survey – Not evaluated
672 North Spring Street	025594	G W Market	1959	Identified in reconnaissance level survey – Not evaluated
674 North Spring Street	025593	Lim Kee Restaurant	1886	Identified in reconnaissance level survey – Not evaluated
675 North Spring Street	025608	L A Trade Company Market	1966	Identified in reconnaissance level survey – Not evaluated
677 North Spring Street	025609	Sunshine Company / Mon Kee Restaurant	1915	Identified in reconnaissance level survey – Not evaluated
680 North Spring Street	025592	Kwong On Lung Importers	1963	Identified in reconnaissance level survey – Not evaluated
684 North Spring Street	025591	Shanghai Pastry	1915	Determined ineligible for NRHP pursuant to Section 106 without review by SHPO.
688 North Spring Street	025590	Yee Mee Loo	1924	Identified in reconnaissance level survey – Not evaluated
720 North Spring Street	098192	-	-	Determined ineligible for NRHP by consensus through Section 106 process – Not evaluated for CRHR or Local Listing.
808 North Spring Street	175716	-	1916	Determined ineligible for NRHP pursuant to Section 106 without review by SHPO.
1231 North Spring Street	024935	Stearns Mill / Eagle Mills / Capitol Mill	1855	Individual property determined eligible for NRHP by a consensus through Section 106 process. Listed in the CRHR.
1635 North Spring Street	166232	-	1953	Determined ineligible for NRHP pursuant to Section 106 without review by SHPO.
1701 North Spring Street	166231	-	1894	Determined ineligible for NRHP pursuant to Section 106 without review by SHPO.

Address	OHP Property Number	Description	Year	Eligibility Determination
1709 North Spring Street	166230	-	1895	Determined ineligible for NRHP pursuant to Section 106 without review by SHPO.
500 New High Street	025624	Los Angeles Gas Company, Brunswig	1897	Contributor to a district determined eligible for NRHP by Part I Tax Certification. Listed in the CRHR.
501 New High Street	025617	Beaudry Building	1871	Identified in reconnaissance level survey – Not evaluated
510 New High Street	025622	Brunswig Drug Co-Packing & Warehouse	1907	Determined ineligible for the NRHP by State Historical Resources Commission or Keeper
612 New High Street	025614	Cathay Realty	1925	Identified in reconnaissance level survey – Not evaluated
618 New High Street	025613	-	1908	Identified in reconnaissance level survey – Not evaluated
638 New High Street	025612	-	1958	Identified in reconnaissance level survey – Not evaluated
648 New High Street	025611	-	1890	Identified in reconnaissance level survey – Not evaluated
656 New High Street	025610	-	1960	Identified in reconnaissance level survey – Not evaluated
Olvera Street	025560	La Placita de Dolores	1979	Identified in reconnaissance level survey – Not evaluated
Olvera Street	025565	Olvera Street, Olvera Street Stalls	1940	Identified in reconnaissance level survey – Not evaluated
10 Olvera Street	021127	Plaza Substation MTA Building	1903	Contributor to a district listed in NRHP and CRHR. Individual property listed in NRHP by the Keeper. Listed in the CRHR.
14 Olvera Street	020954	Avila Adobe	1818	Contributor to a district or multiple resource property listed in NRHP by the Keeper. Listed in the CRHR.
14 Olvera Street	025563	Avila Annex	1974	Identified in reconnaissance level survey – Not evaluated
17 Olvera Street	020953	Pelanconi House	1855	Contributor to a district or multiple resource property listed in NRHP by the Keeper. Listed in the CRHR.
120 Ord Street	025589	Floras	1939	Identified in reconnaissance level survey – Not evaluated
437 Savoy Street	024936	Charles B. Wellman Residence	1894	Individual property determined eligible for NRHP by a consensus through Section 106 process. Listed in the CRHR
Spring Street	020955	Los Angeles Plaza Historic District	1815	Individual property listed in NRHP by the Keeper. Listed in the CRHR.

Address	OHP Property Number	Description	Year	Eligibility Determination
Spring Street	115002	Bridge #53C-859 / Spring Street Viaduct	1928	Individual property determined eligible for NRHP by a consensus through Section 106 process. Listed in the CRHR
931 Sun Mun Way	024878	-	-	Identified in reconnaissance level survey – Not evaluated
937 Sun Mun Way	024879	-	-	Identified in reconnaissance level survey – Not evaluated
943 Sun Mun Way	024880	-	-	Identified in reconnaissance level survey – Not evaluated

3.2.1 California Historical Landmarks

CHLs are buildings, structures, sites, or places that have been determined to have statewide historical interest. A search of CHLs revealed there are 11 landmarks within 1/8-mile of the Area of Direct Impacts (Table 5). None of these resources are located within the Area of Direct Impacts.

Table 5: California Historical Landmarks within 1/8-Mile of the Area of Direct Impacts

Landmark Number	Location	Name
144	535 North Main Street	<i>La Iglesia de Nuestra Señora la Reina de los Ángeles</i>
145	Olvera Street, El Pueblo de Los Angeles Historic Monument	Avila Adobe
156	500 Block of North Main Street, El Pueblo de Los Angeles Historic Monument	Los Angeles Plaza
159	400 Block of North Main Street, El Pueblo de Los Angeles Historic Monument	Pico House Hotel
171	420 North Main Street, El Pueblo de Los Angeles Historic Monument	Merced Theatre
301	Southeast corner of Los Angeles Street and Alameda Street, El Pueblo de Los Angeles Historic Monument	Lugo Adobe (Site Of)
655	Elysian Park Entrance, Northwest Corner of North Broadway and Elysian Park Drive	Portola Trail Campsite (I)
656	Fletcher Bowron Square, 300 Block North Main Street	Bella Union Hotel Site
730	501 North Los Angeles Street, El Pueblo de Los Angeles Historic Monument	Old Plaza Firehouse
789	Fletcher Bowron Square, 300 Block North Main Street	Site of the Los Angeles Star
963	From Drum Barracks in Wilmington to where State Route 66 crosses the Los Angeles County Line	Mojave Road

3.2.2 Los Angeles Historic-Cultural Monuments

Los Angeles Historic-Cultural Monuments (LAHCMs) are sites in the City of Los Angeles that have been designated by the Los Angeles Cultural Heritage Commission (Office of Historic Resources, City of Los Angeles 2016). A search of the LAHCM found seven monuments within 1/8 mile-of the Area of Direct Impacts, summarized in Table 6. Two of these resources are located within the Area of Direct Impacts.

Table 6: Los Angeles Historic-Cultural Monuments within 1/8 Mile of the Area of Direct Impacts

Monument Number (LAHCM-)	Address	Description
3	535 North Main Street	<i>La Iglesia de Nuestra Señora la Reina de los Ángeles</i>
26	521 North Main Street	First Cemetery of Los Angeles
64*	Bounded by Cesar Chavez Avenue to the north, Main Street to the west, Los Angeles Street to the east, and Plaza Street to the south	Plaza Park
82*	Bounded by North Broadway to the west, North Spring Street to the east, Los Angeles River and Elysian Park to the north, and the site of the Capital Milling Company Building to the south	River Station Area – Southern Pacific Railroad (The Cornfield)
101	800 North Alameda Street	Los Angeles Union Station Passenger Terminal and Grounds
211	Bruno Street between Alameda Street and North Main Street	Granite Block Paving
900	North Spring Street between Aurora Street and South Avenue 18	North Spring Street Bridge

* Indicates site located in the Area of Direct Impacts

3.2.2.1 LAHCM 64

LAHCM 64 is the Los Angeles Plaza Park, which overlaps the western part of the proposed Alameda Station (vertical circulation and queuing area and staging area) located within La Placita de Dolores. This resource is discussed more fully under CHRIS primary numbers 19-000887 and 19-167020, above.

The property north of Main Street is owned by Los Angeles County and is not included in the City HCM. As such, the boundaries for the National Register district, described under primary number 19-167020, and HCM resource differ slightly.

3.2.2.2 LAHCM 82

LAHCM 82 is the River Station Area, most of which is located within present-day Los Angeles State Historic Park. This resource is recorded with CHRIS under the primary number 19-003120 and is described under its primary number above.

3.2.3 Other Archival Research

Online sources consulted include online historic newspapers, the Los Angeles Public Library (online photo collection and Sanborn fire insurance maps), the USGS map database TopoView, and the Calisphere, the University of California's Digital Library.

The Area of Direct Impacts appears in 1850s maps as undeveloped and agricultural lands. The first official American map of Los Angeles, E. O. C. Ord's 1849 *Plan de la Ciudad de Los Angeles*, shows the portion of the Area of Direct Impacts near El Pueblo at the base of a bluff. The future site of Union Station is planted with vines. Alameda Street does not yet exist; instead, irrigation ditches and tufts of vegetation, not identified in the map's key and apparently scrub, occupy the Project area. Although they are City lands, the majority of the Area of Direct Impacts is located on the Los Angeles River floodplain and is not platted for city streets and house parcels. What is today North Broadway is labeled Eternity Street, and extends only to Cavalry Cemetery. The 100-square-vara Cavalry Cemetery was established on All Soul's Day, November 2, 1844, due to overcrowding in the churchyard of the Plaza Church, although it would not be officially named until 1866 (Carpenter 1973:13-15). The map ends at the edge of the hills on which Dodger Stadium would later be constructed.

By 1876, when H. J. Stevenson produced his *Map of the City of Los Angeles*, most of the City's infrastructure is in place. The Zanja Madre is labeled and follows the route it would follow the remainder of its useful existence; it is not located in the Area of Direct Impacts. The streets now known as Alameda Street, North Broadway, and North Spring Street follow their current paths, and railroad tracks are visible on both streets. The Southern Pacific Railroad Depot is shown in the location of today's Los Angeles State Historic Park, although at this early date it occupies only the center of today's park. The future site of Union Station is occupied by lands owned by Matthew Keller, Cayetano Apablaza, and the Sisters of Charity. The future site of Bishop Road marks the northern edge of Cavalry Cemetery. The northwest end of the alignment, which today is Dodger Stadium, is located within Cemetery Ravine (Stevenson 1876).

In the 1888 Sanborn Fire Insurance map, the proposed location of the Alameda Station is mostly undeveloped. On the east side of Alameda Street, the station location is a vacant lot bounded by the Los Angeles Orphan Asylum to the north and brothels and Chinese tenements to the south. On the west side of Alameda Street is a vacant lot bounded by brothels to the south, structures associated with the Pironi and Slati Winery and Brandy Distillery to the north, and the Hotel d'Italia Unita to the west. Chinese quarters also stand nearby to the south (Sanborn 1888: Vol. 1, Sheet 10). A shed associated with the winery may partially extend into the Area of Direct Impacts. Alameda Street and today's North Spring Street follows its present alignment, with a line of railroad tracks running down it. As one follows it from south to north, it is labeled Alameda Street, North Alameda Street, and San Fernando Street (Sanborn 1888: Vol. 1, Sheet 5, 6, 7, 8). Today's Los Angeles State Historic Park is densely occupied by buildings and structures associated with the SPRR, which is bordered to the north by the wide channel of the Zanja Madre and then the bluff along which North Broadway runs (Sanborn 1888: Vol. 1, Sheet 5). Today's North

Broadway and the northwestern part of the Area of Direct Impacts do not appear in the 1888 Sanborn maps.

By the time the 1894 Sanborn maps were made, Los Angeles Street was extended through what is today La Placita de Dolores, requiring the demolition of a corner of the winery (Sanborn 1894: Volume 1, Sheet 12). The east side of the proposed Alameda Station is vacant, bounded on the north by the former Los Angeles Orphan Asylum and on the south and east by Chinese quarters (Sanborn 1894: Volume 1, Sheet 18). Alameda Street and North Spring Street (then still San Fernando Street) follows its present alignment, with railroad tracks (Sanborn 1894: Volume 1, Sheets 12, 19, and 22). Today's Los Angeles State Historic Park is entirely occupied by railroad tracks and a few railroad buildings. The Zanja Madre is no longer visible. Dwellings stand at the northwest corner of Bishop Road and today's North Broadway (then Buena Vista Street) (Sanborn 1894: Volume 1, Sheet 23). There is no coverage of the northeast Area of Direct Impacts.

In Pierce's 1894 Birdseye Map of Los Angeles, Alameda Street is lined with brick buildings in the vicinity of the planned Alameda Station. Alameda Street and North Main Street (labeled San Fernando Street) follow their modern alignments, and railroad tracks are visible on both streets. The Southern Pacific Railroad River Yard is at its height, including at least seven building complexes and many rail structures. North Broadway is labeled Buena Vista Street. Bishop Road follows its modern path, marking the north side of Cavalry Cemetery and terminating at the edge of the Elysian Hills.

By 1906, the east side of the proposed Alameda Station location is occupied by a lumber yard and associated structures, including railroad tracks (Sanborn 1906: Volume 3, Sheet 304). The rest of the alignment remains much as it was in 1894.

The 1910, 1914, and 1921 Baist Real Estate Atlases show the western part of the Alameda as part of Los Angeles Street. The eastern part, on today's Union Station grounds, is occupied by railroad tracks of the SPRR, with buildings labeled "Chinese Quarters" immediately to the southeast. Railroad tracks extend up Alameda Street to the Southern Pacific River Yard, which is occupied mostly by tracks. Dwellings stand at the northwest corner of Bishop Road and what is today North Broadway (then still Buena Vista Street). In the 1910 map, Bishop Road continues up into the Elysian Hills, among what are sparsely occupied tracts. Over the period 1910-1921, the tracts along Bishop Road, which are owned by the Los Angeles Valley Improvement Company, and H.W. Keller, are gradually built up with large structures. By 1921, the K & K Brick Company occupies a large segment of what will become the north side of Dodger Stadium.

3.3 NATIVE AMERICAN CONSULTATION

Metro is in the process of conducting Native American consultation pursuant to AB 52. The results of that consultation will be included in a separate document (including the Tribal Cultural Resource section of the EIR and notes taken during consultation), some of which may be confidential if it contains sensitive information shared by Native American consultants.

3.4 PALEONTOLOGICAL RECORDS SEARCH

On June 26, 2019, AECOM requested that staff from the Natural History Museum of Los Angeles County (NHM) conduct a search of its paleontological records and holdings. The request was accompanied by a project description and a map of the Area of Direct Impacts. The search was intended to identify any previously recorded paleontological fossils or other localities in the Area of Direct Impacts or vicinity, and to determine the level of paleontological sensitivity within the Area of Direct Impacts. Dr. Samuel A. McLeod responded on behalf of the NHM in a letter dated July 10, 2019 (Appendix D).

The results of the records search, shown in Table 7, indicated that there are no known NHM vertebrate fossil localities within the Area of Direct Impacts. Moreover, the majority of the Area of Direct Impacts, consisting of surficial deposits of younger Quaternary alluvium, is not anticipated to contain significant fossil remains in its uppermost layers because the sediment is too young to contain such fossils.

Table 7: Los Angeles County Museum of Natural History Fossil Localities Near the Project Area

Locality (LACM-)	Location	Age/Formation	Findings
1023	Workman Street and Alhambra Avenue, unrecorded depth	Quaternary older alluvium	<i>Meleagris californicus</i> (turkey); <i>Smilodon fatalis</i> (sabre-toothed cat.); <i>Equus</i> (horse); <i>Odocoileus</i> (deer)
2032	Mission Road and Daly Street, 20-35 feet below surface	Quaternary older alluvium	<i>Clemmys marmorata</i> (pond turtle); <i>Paramylodon harlani</i> (ground sloth); <i>Mammot americanum</i> (mastodon); <i>Mammuthus imperator</i> (mammoth); <i>Equus</i> (horse); <i>Camelops</i> (camel)
5961	North of Temple Street between Broadway and Spring Street, unspecified depth	Puente (Miocene)	<i>Cyclothone</i> (bristlemouth fish)
7990	North of Temple Street between Broadway and Spring Street, unspecified depth	Puente (Miocene)	Bony fish: <i>Alepocephalidae argentinus</i> , <i>Argentinidae</i> (slickheads); <i>Bathylagidae</i> (deep sea smelts); <i>Chauliodus</i> (viperfish); <i>Clupeidae</i> (herring); <i>Gadiformes</i> (cod); <i>Gonostomidae</i> (bristlemouths); <i>Scombridae</i> (mackerel); <i>Stomiidae</i> (dragonfish)
7507	North San Fernando Road and Humboldt Street, 100 feet below surface	Puente (Miocene)	<i>Thyrsoctes kriegeri</i> (snake mackerel)
4967	Elysian Park	Puente (Miocene)	<i>Clupea tiejei</i> (extinct herring)
3882	Lincoln Heights)	Puente (Miocene)	<i>Mixocetus elysius</i> (baleen whale)
1880	East of the Los Angeles River and north of the Pasadena Freeway (I-110) between Figueroa Street and Cypress Avenue	Puente (Miocene)	Bony fish: <i>Argyropelecus bullockii</i> (hatchetfish); <i>Cyclothone</i> (bristlemouth); <i>Etringus</i> (herring); <i>Scorpaenidae</i> (rockfish); <i>Chauliodus</i> (extinct deep-sea fish); <i>Alepocephalidae</i> (slickheads); <i>Eclipes</i> (cod); <i>Lompoquia</i> (croaker)

However, there are fossil localities nearby in older Quaternary alluvial deposits. Older Quaternary alluvium is anticipated to exist at varying depths below the younger Quaternary alluvium and may be encountered during the Project's deeper excavations. Older Quaternary alluvium dated to the Pleistocene has yielded significant fossils in the Los Angeles Basin. 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 Area of Direct Impacts. 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 20-35 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. Both fossil collections were scientifically important and resulted in publications.

There are also significant fossil deposits in the Miocene Puente Formation near the Area of Direct Impacts. Northeast of the Area of Direct Impacts, near the intersection of North San Fernando Road and Humboldt Street, a fossil snake mackerel (*Thyrsocles kriegeri*) was recovered from locality LACM 7507 a depth of approximately 100 feet below surface. At locality LACM 4967, just outside the Project area in Elysian Park, an extinct fossil herring (*Clupea tiejei*) was recovered. Fossil fish and marine mammals are commonly found at localities in the Puente Formation, which is considered to have a high sensitivity for significant fossil remains.

4 ARCHAEOLOGICAL SURVEY

4.1 METHODS

A field survey of the Area of Direct Impacts was conducted by Marc Beherec, Ph.D., RPA on March 18, 2020. An additional field survey was conducted on July 15, 2020 to capture additional portions of the Project area, particularly within the Los Angeles State Historic Park. Fieldwork within Los Angeles State Historic Park was conducted in compliance with DPR Permit 20-29. The survey was conducted to identify archaeological resources within the Area of Direct Impacts. Field notes and photographs documenting observations were taken during the survey.

The entire Area of Direct Impacts was walked over. Where the proposed Project right-of-way consists of paved street surfaces, the surveyor walked the sidewalks on both sides of the right-of-way but not within the street. The archaeological survey focused on undeveloped spaces in the Area of Direct Impacts that provided exposed ground surfaces. These were sparse and predominantly consisted of small landscaping features such as planters and street tree wells along Alameda Street.

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.

The locations of the nine cultural resources identified within the Area of Direct Impacts during the records search were revisited in the course of the survey.

4.2 RESULTS

The site surveys revealed that the Area of Direct Impacts is almost entirely paved over, with the exception of that 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 location, 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 are discussed below in relationship to the Project components and documented archaeological sites. Project components are ordered based on their location on the proposed Project alignment from the southern terminus (LAUS) to the northern terminus (Dodger Stadium).

4.2.1 Alameda Station—19-004320, 19-000887 and 19-001575

The proposed Alameda Station location overlaps three documented archaeological sites.

The proposed station location occurs within Alameda Street. The area is currently a paved and active roadway. No cultural resources are visible in this area.

4.2.1.1 19-004320

Resource 19-004320 occupies the area beneath the western sidewalk of Alameda Street, extending from North Los Angeles Street in the south to Cesar Chavez Avenue in the north (Plate 10). The site overlaps the western portion of the Area of Direct Impacts (Appendix A, Figure 2). The site consisted of a collection of disturbed artifacts without association. The only exposed soil in the site boundaries is located in tree wells along Alameda Street, none of which are located within the Area of Direct Impacts. The portion of the site within the Area of Direct Impacts is entirely paved over with concrete sidewalk. No cultural resources are visible either in the tree wells along Alameda Street or in the portion of the site that overlaps the Area of Direct Impacts.



Plate 10: Site 19-004320, Just North of and Outside the Area of Direct Impacts, View North.

4.2.1.2 19-000887

The western portion of the proposed Alameda Station location overlaps site 19-000887. The Area of Direct Impacts is located within El Pueblo de Los Angeles Historical Monument but is located outside the limits of the Los Angeles Plaza Historic District as it is currently defined by the National Register.

Proposed Project construction would occur in paved parking spaces. The majority of archaeological site 19-000887 is obscured by fill that was imported to cap the site and by the paving.

The location of where a portion of the Zanja Madre was discovered during archaeological excavations in 1978 is denoted by a decorative pavement (Plate 11). This pavement is located outside the Area of Direct Impacts, and indicates that the buried Zanja Madre will not be impacted by the Project.



Plate 11: Site 19-000887, Overview Showing Zanja Madre Monument Pavement, View East.

4.2.1.3 19-001575

The portion of the Area of Direct Impacts that overlaps site 19-001575 is located within Union Station boundaries, in Union Station's northwest visitor parking lot (Plate 12). The only unpaved portion of the Area of Direct Impacts in this location consists of hedgerows and planters that separates the parking lot from the sidewalk of Alameda Street and another planter measuring approximately 30 feet wide at the east end of the Area of Direct Impact. These planters appear to be filled with imported soil, and no cultural resources were visible within them.



Plate 12: Union Station Northwest Parking Lot, Including East End of Project Area Overlapping Site 19-001575, View West.

4.2.2 Alameda Tower—19-004200, 19-004201, 19-004202, and 19-186112

The proposed Alameda Tower location overlaps three documented archaeological sites, one of which is also a built resource (Plate 13). That portion of the Area of Direct Impacts that falls within the public ROW is unpaved and was walked over in transects spaced 10 meters apart during the survey.



Plate 13: Proposed Alameda Tower Location, View Northeast.

4.2.2.1 19-004200

Site 19-004200 consists of a historic brick paved surface within Alameda Street. The entire road surface is currently paved with asphalt blacktop, and no part of the in situ archaeological site was visible during the survey.

The portion of the resource encountered during construction in 2007 was uncovered, removed, and reused as paving in the nearby triangular property (Plate 14). A portion of the relocated pavement also overlaps the Area of Direct Impacts at the proposed Alameda Tower location.



Plate 14: Brick Pavement Taken from Site 19-004200 and Reused Within 19-004201.

4.2.2.2 19-004201

Site 19-004201 consists of Naud Junction, which consists of the Alameda Street and North Main Street roadways and the triangular property separating them (Plate 15). The majority of the archaeological site is contained within the public ROW, which was the location of Naud's warehouse, and is where all the recorded site features are located. The site includes isolated artifacts located within the roadways, as well as the Alameda Street pavement and SPRR tracks. No evidence of the site is visible on the surface.



Plate 15: Naud Junction, Resource 19-004201, View South. Note Circular Pavement of Pavers Salvaged from Resource 19-004200.

4.2.2.3 19-004202

Site 19-004202 consists of abandoned segments of the SPRR tracks. The track segments were encountered beneath and embedded within asphalt. The encountered segments were documented and removed during road construction in 2007. No evidence of the site is visible on the surface. It is presumed that the entirety of the site within the Area of Direct Impacts was destroyed, although portions of the railroad tracks may still exist beneath the pavement.

4.2.2.4 19-186112

Site 19-186112 consists of the SPRR. The portion of 19-186112 that overlaps the Project area is included within resource 19-004202. See above.

4.2.3 Alpine Tower

The Alpine Tower would be located on a City-owned parcel at the northeast corner of Alameda Street and Alpine Street, adjacent to the Metro L Line (Gold). No resources are documented within the footprint of Alpine Tower. This location is currently paved, with no ground visibility.

4.2.4 Chinatown/State Park Station—19-003120

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 State park at its southern entrance on State-owned land. The station footprint is entirely located within the boundary of resource 19-003120. The area is paved, but bordered by small landscaped areas (Plate 16). The only resource that could be seen were granite pavers that were originally on the side of the freight house that faced what was then called Alameda Street. Some of these have been repositioned and some are in their original location.

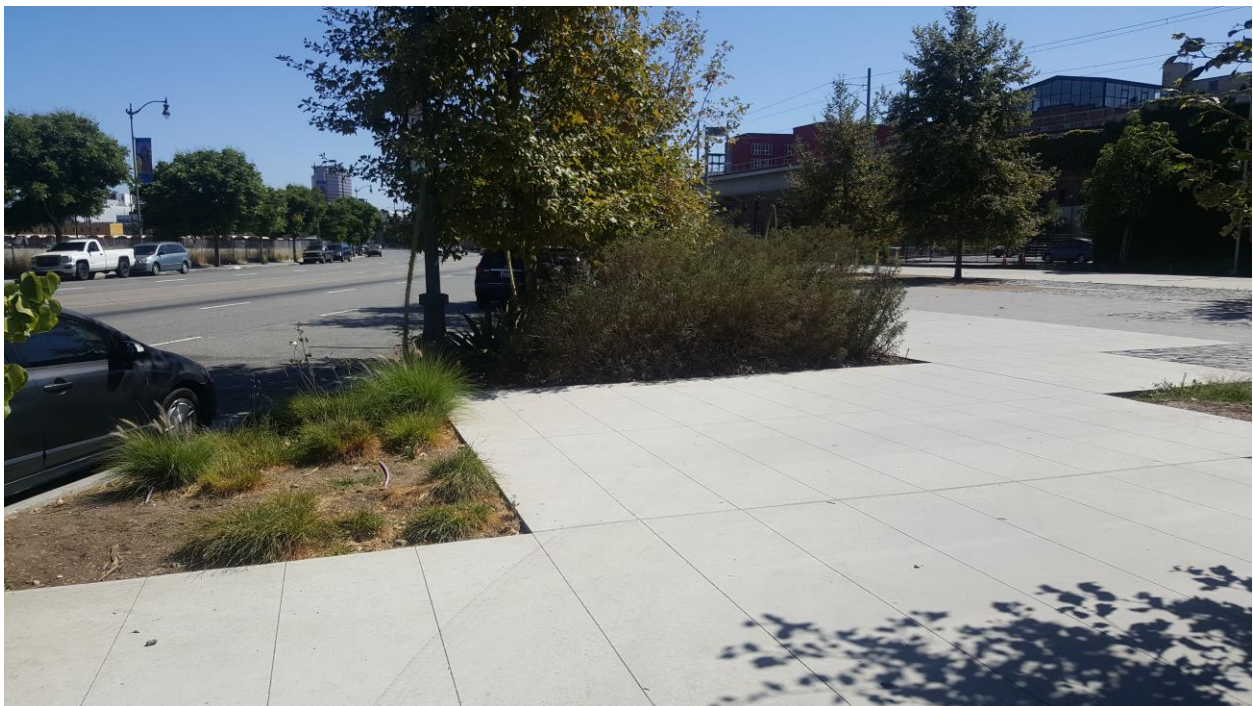


Plate 16: Proposed Chinatown/State Park Station Location, View Southeast.

4.2.5 Broadway Junction

The Broadway Junction is located at 1201 North Broadway, partially cantilevering the intersection of North Broadway and Bishop Road (Plate 17). (As discussed in the Historical Resource Technical Report for this Project, 1201 North Broadway is recorded as resource 19-192470 and was found ineligible.) The majority of the location is currently paved over or built-upon. The parcel behind the 1201 North Broadway building is excavated from the hillside to the west. The ground surface at the time of visit was heavily obscured by imported gravel, vegetation, and parked automobiles. Visibility was approximately 5-10 percent. No archaeological artifacts or features were observed.



Plate 17: Proposed Broadway Junction Location, Including Resource 19-192470, View Northwest.

4.2.6 Stadium Tower

The proposed Stadium Tower location is located on an undeveloped parcel located between the Arroyo Seco Parkway and Dodger Stadium.

Visibility in the proposed Stadium Tower location ranged from approximately 5 percent to roughly 30 percent (Plate 18). The ground was densely covered by low grasses, and those areas that were visible were disturbed by animal activity. A small Los Angeles Department of Water and Power facility occupies a portion of the proposed Project area (Plate 19). The Area of Direct Impacts appears to also be disturbed by past construction associated with the Arroyo Seco Parkway and Dodger Stadium. Recent trash, but no archaeological resources, were observed in this area.



Plate 18: Proposed Stadium Tower Location, View Southeast.



Plate 19: Proposed Stadium Tower Location, View North.

4.2.7 Dodger Stadium Station—19-173073

The proposed location of the Dodger Stadium Station is currently occupied by a paved parking lot and landscaped areas (Plate 20). Unpaved ground surface was only visible on the edge of the lot, where the visible soil appeared to be artificial fill.

The pedestrian connections from the potential mobility hub at the Dodger Stadium Station to Elysian Park and Solano Canyon were visited and are both entirely covered in asphalt paving with no visible ground surface.



Plate 20: Proposed Dodger Stadium Station Location, Including a Portion of 19-173073, View North.

4.2.7.1 19-173073

As it is mapped, the proposed Dodger Stadium Station overlaps resource 19-173073. However, as discussed in the archival research section above, the Area of Direct Impacts is located on what was a large undeveloped tract. No artifacts or archaeological features have been documented within this location. Any surviving remains of the community of Chavez Ravine are anticipated to exist deeply buried elsewhere on the Dodger Stadium property, and the resource is not anticipated to be impacted by this Project.

4.3 SUMMARY

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. Each of these sites was revisited during the

archaeological survey. However, the archaeological sites are currently paved over and were not encountered during the survey. The pedestrian survey did not reveal any new surface-visible archaeological resources in the Area of Direct Impacts.

5 MANAGEMENT RECOMMENDATIONS

5.1 PREVIOUS RESOURCE EVALUATIONS

No new resources were documented during the site surveys.

Because the archaeological resources documented at the SCCIC were built or paved over, they could not be evaluated during the survey. However, most of these resources were evaluated when they were documented by previous investigators monitoring construction or testing prior to construction, as detailed in the Records Search section above and in Table 8 below. These previous investigations have demonstrated the potential for archaeological deposits to remain intact beneath pavement, greenscape and hardscape.

Table 8: Cultural Resources Identified in the Survey of the Area of Direct Impacts

Primary Number (P-)	Description	Previous NRHP/ CRHR Status Recommendation	Project Component	Recommended Mitigation
19-000887	Spanish to American Period refuse	Recommended eligible for NRHP	Alameda Station	Prepare an archaeological testing and data recovery plan in coordination with El Pueblo Historical Monument; include in cultural resources monitoring and mitigation plan and worker training program
19-004320	Refuse deposit	Unevaluated, but originally recorded as isolates	Alameda Station	Include in cultural resources monitoring and mitigation plan and worker training program
19-001575	Prehistoric cemetery; remains of historic canals, orphanage, red light district, and Chinatown	Eligible for NRHP	Alameda Station	Prepare archaeological testing and data recovery plan; include in cultural resources monitoring and mitigation plan and worker training program
19-004200	Vitrified brick paving of Alameda Street	Recommended eligible for CRHR	Alameda Tower	Include in cultural resources monitoring and mitigation plan and worker training program; monitor pavement removal; document findings and consider reuse of brick
19-004201	Naud Junction structure foundations and refuse deposits	Most features recommended not eligible for CRHR; one feature unevaluated	Alameda Tower	Include in cultural resources monitoring and mitigation plan and worker training program

Primary Number (P-)	Description	Previous NRHP/ CRHR Status Recommendation	Project Component	Recommended Mitigation
19-004202	Southern Pacific Railroad Track Segments	Recommended not eligible for CRHR	Alameda Tower	None
19-186112	Southern Pacific Railroad	Found ineligible for NRHP through the Section 106 process Unevaluated for CRHR	Alameda Tower	Include in cultural resources monitoring and mitigation plan and worker training program
19-003120	Southern Pacific Railroad River Station	Listed Los Angeles Historic-Cultural Monument; recommended eligible for NRHP	Chinatown/State Park Station	Prepare archaeological testing and data recovery plan in coordination with State Parks cultural division and SHPO in accordance with PRC 5024.5; Outline where avoidance/preservation is possible (for the park amenities only). Include in cultural resources monitoring and mitigation plan and worker training program
19-173073	Chavez Ravine	Unevaluated	Dodger Stadium Station	None

NRHP = National Register of Historic Places

Whenever possible, preservation of significant historical resources is the preference under CEQA. However, if preservation is not possible, impacts to significant resources must be mitigated. Recommendations for impact mitigations for each resource are given below.

5.1.1 19-000887

This resource consists of structural remains, refuse deposits, and a segment of the Zanja Madre.

The proposed Alameda Station has been designed so that it will not overlap with the segment of the Zanja Madre within this resource as it is currently recorded. Nearby excavations conducted in 1978 found a midden containing Spanish to American period artifacts ranging in depth from 4 to 12 inches below the ground surface [where; in the vicinity of the Station?].

In 1978, fill was placed on top of the resource. Unfortunately, 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 recovery or evaluation of what may be present.

It is recommended that, in consultation with El Pueblo de Los Angeles Department of the City of Los Angeles, an archaeological testing and data recovery plan for the Area of Direct Impacts be prepared and implemented. The testing plan will 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 plan will outline excavation locations and methods, such as where and in what soils mechanical excavations may or may not be employed, 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, data recovery excavations will be required, and a data recovery plan should 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 how to determine an appropriate sample size of the site to be excavated and will describe the specific tools, screening size, and methods to be used. The sample size can include 100% of a given feature where warranted. The plan will describe how structural remains, if any, will be exposed and mapped. Laboratory studies planned for the analysis of the finds will also be described.

After the completion of test and data recovery excavations, it is recommended that a Cultural Resources Monitoring and Mitigation Program (CRMMP) be prepared prior to construction and implemented that considers the sensitivity of resource 19-000887. The CRMMP should specify construction techniques designed to uncover this resource with minimum impact. The CRMMP will include resource-specific treatment for known archaeological resources within the Project area. Although the segment of the Zanja Madre within this resource will be avoided, this CRMMP should lay out protocols for unexpected discoveries of previously unrecorded resources. The CRMMP will describe the required documentation and treatment of resource 19-004320, which partially overlaps with 19-004320, during its excavation and removal.

Additionally, construction workers would be required to attend a worker training program, developed and conducted by a qualified archaeologist with input and participation from El Pueblo staff. The presentation will 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 will be temporarily halted in the vicinity of the find and the Construction Contractor will contact the qualified archaeologist to examine and evaluate the resource in accordance with the provisions of CEQA.

5.1.2 19-004320

This resource consists of a diffuse scatter of out-of-context artifacts beneath the west sidewalk of Alameda Street. Although the resource was not formally evaluated when it was documented, it was recorded as a collection of isolated artifacts. By their nature, isolated artifacts are generally not considered to be significant resources, and therefore are not eligible for inclusion in the CRHR. However, the resource overlaps 19-000887, an

NRHP-eligible resource, but includes no contributing significant features. The deposit was exposed in a narrow trench and the context could not be fully explored. In other areas of 19-000887, midden has been identified so it has the potential to be present in this area. Due to impacts to that portion of the resource that overlaps 19-000887, it is recommended that, in consultation with El Pueblo de Los Angeles Department of the City of Los Angeles, an archaeological testing and data recovery plan for the Area of Direct Impacts be prepared and implemented, as described above for Resource 19-000887.

It is recommended that a CRMMP be prepared and implemented that considers the sensitivity of 19-004320 for archaeological deposits. The CRMMP should specify construction techniques designed to uncover this resource with minimum impact. The CRMMP will include resource-specific treatment for archaeological resources within the Project area. The CRMMP will describe the required documentation and treatment of resource 19-004320 during its excavation and removal.

Additionally, construction workers would be required to attend a worker training program, developed and conducted by a qualified archaeologist. The presentation will 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 will be temporarily halted in the vicinity of the find and the Construction Contractor will contact the qualified archaeologist to examine and evaluate the resource in accordance with the provisions of CEQA.

5.1.3 19-001575

This resource 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 resource boundary is roughly coterminous with the LAUS property boundary. That portion of the Area of Direct Impacts that enters LAUS property overlaps the site.

The Native American cemetery is located approximately 500 feet east of the Area of Direct Impacts, and is unlikely to be impacted by construction.

It is recommended that an archaeological testing and data recovery plan for the Area of Direct Impacts be prepared and implemented. The testing plan will propose limited archaeological excavations of a portion of the site overlapping the Area of Direct Impacts. If significant archaeological remains are encountered during the test excavations, data recovery excavations will be required, and a data recovery plan should be prepared and implemented.

After the completion of test and data recovery excavations, it is recommended that a CRMMP be prepared and implemented that considers the sensitivity of 19-001575 for archaeological deposits. The CRMMP should specify construction techniques designed to uncover this resource with minimum impact. The CRMMP will include resource-specific

treatment for archaeological resources within the Project area. The CRMMP will describe the required documentation and treatment of resource 19-001575.

Additionally, construction workers would be required to attend a worker training program, developed and conducted by a qualified archaeologist. The presentation will 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 will be temporarily halted in the vicinity of the find and the Construction Contractor will contact the qualified archaeologist to examine and evaluate the resource in accordance with the provisions of CEQA.

5.1.4 19-004200

This resource 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 documented and recommended 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 recommended that a CRMMP be prepared and implemented that considers the sensitivity of 19-004200 for additional archaeological deposits. The CRMMP should specify construction techniques designed to uncover this resource with minimum impact. The CRMMP will include resource-specific treatment for archaeological resources within the Project area. The CRMMP will describe the required documentation and treatment of resource 19-004200 during its excavation and removal. Adaptive reuse of the building materials in the vicinity of the proposed Alameda Tower may be considered.

Additionally, construction workers would be required to attend a worker training program, developed and conducted by a qualified archaeologist. The presentation will 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 will be temporarily halted in the vicinity of the find and the Construction Contractor will contact the qualified archaeologist to examine and evaluate the resource in accordance with the provisions of CEQA.

5.1.5 19-004201

This resource consists of the remains of Naud Junction. As documented, the site includes both Naud Junction itself (which is the triangular parcel between Alameda and North Main Streets) and the adjacent streets, overlapping resources 19-004200 and 19-004202. 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.

It is recommended that a CRMMP be prepared and implemented that considers the sensitivity of 19-004201 for archeological deposits. The CRMMP should specify

construction techniques designed to uncover this resource with minimum impact. The CRMMP will include resource-specific treatment for archaeological resources within the Project area. The CRMMP will describe the required documentation and treatment of resource 19-004201.

Additionally, construction workers would be required to attend a worker training program, developed and conducted by a qualified archaeologist. The presentation will 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 will be temporarily halted in the vicinity of the find and the Construction Contractor will contact the qualified archaeologist to examine and evaluate the resource in accordance with the provisions of CEQA.

5.1.6 19-004202

This resource consists of segments of the SPRR tracks located within Alameda and North Main Streets. The tracks were observed, recorded, and removed in 2007. The observed portion of the tracks were found not to be significant.

No further work is recommended for 19-004202.

5.1.7 19-186112

This resource consists of the SPRR, which in the vicinity of the Area of Direct Impacts is documented as resource 19-004202. This resource has been evaluated and found not to be eligible for inclusion in the NRHP by the Section 106 process. No further work is recommended for 19-186112.

Nonetheless, a CRMMP would be prepared and implemented to identify unknown archaeological resources within the Area of Direct Impacts and mitigate potential impacts to them. The CRMMP will 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 archaeological sites), data recovery (including halting or diverting construction so that archaeological resources can be evaluated and recovered in a timely manner), artifact and feature treatment, procurement (including a curation plan), and reporting.

Additionally, construction workers would be required to attend a worker training program, developed and conducted by a qualified archaeologist. The presentation will 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 will be temporarily halted in the vicinity of the find and the Construction Contractor will contact the qualified archaeologist to examine and evaluate the resource in accordance with the provisions of CEQA.

5.1.8 19-003120

This resource consists of the Southern Pacific Railroad River Station. Its boundaries include all of Los Angeles State Historic Park as well as the location of the Chinatown/State Park Station. An abundance of archaeological features has been found within the site.

It is recommended that in consultation with State Parks an archaeological testing and data recovery plan for that portion of the Area of Direct Impacts that overlaps the archaeological site be prepared and implemented. The testing plan will propose limited archaeological excavations of a portion of the site overlapping the Area of Direct Impacts. If significant archaeological remains are encountered during the test excavations, data recovery excavations will be required, and a data recovery plan should be prepared and implemented. In the case of the Park amenities (e.g., the concessions and restrooms) at the Chinatown/State Park Station, should significant archaeological remains be found in that area, a redesign will be undertaken to reposition those structures to avoid impacts as feasible.

After the completion of testing and data recovery excavation, it is recommended that a CRMMP be prepared and implemented that considers the sensitivity of 19-003120 for archaeological deposits. Under PCR 5024.5, as a state-owned historic resource, any impacts to it will require SHPO consultation. The CRMMP should specify construction techniques designed to uncover this resource with minimum impact. The CRMMP will include resource-specific treatment for archaeological resources within the Project area. The CRMMP will describe the required documentation and treatment of resource 19-003120.

Additionally, construction workers would be required to attend a worker training program, developed and conducted by a qualified archaeologist. The presentation will 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 will be temporarily halted in the vicinity of the find and the Construction Contractor will contact the qualified archaeologist to examine and evaluate the resource in accordance with the provisions of CEQA. It is also possible, depending on the testing results, that monitoring by a qualified archaeologist will be necessary.

5.1.9 19-190309

This resource consists of the 70-foot-long segment of the brick Zanja Madre conduit that is currently exposed and located northwest of Los Angeles State Historic Park near the intersection of North Broadway and Bishops Road (See 19-003103).

This portion of the Zanja Madre will not be directly impacted by construction. Indirect impacts to the resource would be less than significant. The Project will create impacts to the setting surrounding the Zanja Madre. However, the resource's setting has already

been substantially altered from its historic state. The resource, which is meant to be buried, is now exposed. The area surrounding the zanja is no longer either the rural agricultural setting it was originally built to serve nor the railroad yard that occupied what is now Los Angeles State Historic Park. The integrity of setting of the resource has been lost.

5.1.10 19-173073

This resource consists of the former site of the community of Chavez Ravine. As it is currently documented, the resource consists of the entirety of the Dodger Stadium property. However, as detailed in the archival research above, the Area of Direct Impacts was an undeveloped parcel. The community of Chavez Ravine was located south, west, and east of the Project area, beneath other portions of today's Dodger Stadium property, but did not overlap the Area of Direct Impacts.

In the 1950s, the City of Los Angeles demolished the buildings within Chavez Ravine with the exception of some that were purchased and moved off the site. To construct the stadium and parking, cuts were required in some locations and filling in others. House debris and artifacts may be mixed in the fill soil; however, any artifacts found in the fill soil would lack context and therefore, scientific value. Any intact cultural deposits that might survive would be deeply buried elsewhere on the Dodger Stadium property, outside the Project area. The location of the proposed Dodger Stadium Station is within formerly undeveloped Tract No. 3201. The resource documented under 19-173073 is 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. Therefore, while the mapped area of the Dodger Stadium property designated as 19-173073 overlaps the Project area, no resources associated with Chavez Ravine are anticipated to exist within the Area of Direct Impacts.

No further work is required for resource 19-173073.

5.2 ARCHAEOLOGICAL SENSITIVITY AND RECOMMENDATIONS FOR PROJECT COMPONENTS THAT DO NOT OVERLAP KNOWN ARCHAEOLOGICAL SITES

The background research and survey indicate a probability for buried archaeological resources and tribal cultural resources within the Area of Direct Impacts. There are nine resources identified within the Area of Direct Impacts, and there may be additional buried deposits in the vicinity. A review of the ethnographic literature indicates that the Area of Direct Impacts is in the general vicinity of the Gabrielino settlement Ya'angna. The Area of Direct Impacts is also located on the floodplain of the Los Angeles River, an important water source used by communities living in the area through time. The Los Angeles River was subject to frequent flood events prior to being channelized in the 20th century, which possibly resulted in the presence of deeply buried archaeological resources in the Area of Direct Impacts. In addition, the Area of Direct Impacts is located adjacent to the Los

Angeles Plaza Historic District, the historic heart of “El Pueblo de Nuestra Señora la Reina de los Angeles.” Further, the area has been intensively used since the late 18th century, and many of the structures in the Project vicinity date to the first half of the 20th century. A review of historic maps suggests that portions of the Area of Direct Impacts incorporated buildings and structures that have since been demolished. Remnants of these historic buildings and structures may still be present beneath the paved-over portions of the Area of Direct Impacts.

The areas of archaeological sensitivity for the Project includes the locations of sites 19-000887, 19-004320, 19-001575, 19-004200, 19-004201, and 19-003120. In addition, that part of Alameda Street that overlaps the construction footprint for the proposed Alameda Station is sensitive. It is recommended that archaeological monitoring be conducted during ground-disturbing activities for project components located within these sensitive locations.

Due to the sensitivity of the Project area, it is recommended that a Project-specific CRMMP be developed in consultation with stakeholders. The CRMMP will identify where avoidance or minimization of impacts might be possible. The monitoring plan will identify what activities require monitoring, describe monitoring procedures, and outline the protocol to be followed in the event of a find. Criteria thresholds will be outlined, and triggers identified when further consultation is required for the treatment of a find. Key staff will be identified, and the process of notification and consultation will be specified within the CRMMP. A curation plan will also be outlined within the CRMMP. All work should be conducted under the direction of a qualified archaeological Principal Investigator who meets the Secretary of the Interior’s standards for archaeology (36 CFR § 61). If, in the course of monitoring, the Principal Investigator determines that monitoring is unnecessary, particularly due to the disturbed nature of the site or lack of archaeological remains encountered, monitoring may be reduced or eliminated at the discretion of the lead agency.

Metro has engaged in AB 52 consultation, and specific mitigation measures related to tribal cultural resources may be identified during that process. If any Native American cultural material is encountered within the Area of Direct Impacts, further consultation with interested Native American parties should be conducted to apprise them of any such findings and solicit any comments they may have regarding appropriate treatment and disposition of the resources. This is discussed further in Section 3.18 of the Draft EIR, pertaining to Tribal Cultural Resources.

As will be further outlined in the CRMMP, if human remains are discovered, work in the immediate vicinity of the discovery will be suspended and the Los Angeles County Coroner will be contacted. If the remains are deemed to be Native American in origin, the County Coroner will contact the NAHC, which will identify a Most Likely Descendant pursuant to PRC Section 5097.98 and California Code of Regulations 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.

Upon completion of monitoring of ground-disturbing activities associated with the identified segments of this Project, an Archaeological Resources Monitoring Report will be prepared documenting construction activities observed. If discoveries are made during ground-disturbing activities, the report will also document the associated cultural materials and the methods of treatment as determined appropriate by the archaeologist. The report will be placed on file at the SCCIC upon its completion.

5.3 PALEONTOLOGICAL RECOMMENDATIONS

Surface deposits in the majority of the Area of Direct Impacts and surrounding area consist of younger Quaternary alluvium deposited by the Los Angeles River. These deposits are younger than 10,000 years old and have a low probability of yielding scientifically significant fossils. Nevertheless, an assessment of paleontological resources in the Project vicinity indicated that older Quaternary alluvium is expected to be present at differential depths within the Project Area. Planned Project excavation is anticipated to reach up to 10 feet, except at Dodger Stadium Station where the maximum depth would be 42 feet, and piles would be drilled to a max depth of 125 feet; therefore, Project construction may encounter paleontological deposits. In addition, that portion of the Area of Direct Impacts located on Dodger Stadium property includes outcrops of the Monterey 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 significant vertebrate fossils in the Los Angeles Basin in the past. A Paleontological Resources Monitoring and Mitigation Plan (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 found. 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 one year of completion of the fieldwork. A copy of the report shall be submitted to the Los Angeles County Natural History Museum

The areas of paleontological sensitivity include all locations where undisturbed Older Quaternary alluvium or the Monterey/Puente Formation may be impacted by the Project. The identification of exact locations to be monitored would be guided in part by geotechnical boring for the Project.

5.4 SUMMARY OF RECOMMENDATIONS

In summary, the following measures are recommended to reduce impacts to cultural resources to a less than significant level:

1: To mitigate impacts to resources 19-000887 and 19-004320, an NRHP-eligible archaeological site, an archaeological testing plan and data recovery plan for the Area of Direct Impacts, which is located north of the Placita de Dolores, will 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 therefore also be included in the testing and discovery plan. The testing plan shall be prepared in consultation with El Pueblo de Los Angeles Historical Monument Authority.

The testing plan will 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 site's NRHP and CRHR eligibility during the test excavations, the first approach will be to see if they can be avoided. If avoidance is not possible, data recovery excavations will be required, and the data recovery plan shall be implemented. The data recovery plan shall detail the treatment of the surviving archaeological remains, if testing identifies any. The data recovery plan shall specify a describe ways to arrive at an appropriate sample size for the site to be excavated and will

describe the specific tools, screening size, and methods to be used. It shall also identify where a 100% recovery might be warranted. The plan shall describe how structural remains, if any, will be exposed and mapped. Laboratory studies planned for the analysis of the finds will also be described.

2: 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 will 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 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, data recovery excavations shall be required, and the data recovery plan shall be implemented. The data recovery plan shall specify a sample size of the site to be excavated (depending on what is found) 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.

3: Due to the sensitivity of Resource 19-003120, impacts related to construction of the 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, an archaeological testing plan should 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 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. 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, during testing, archaeological remains 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, a redesign for those structures should be attempted 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.

4: To identify unknown archaeological resources within the Area of Direct Impacts and mitigate potential impacts to them, including potentially eligible resources within known archaeological sites, a Cultural Resources Monitoring and Mitigation Plan shall be prepared for the Project prior to construction. Specifically, the CRMMP shall be applicable to all ground-disturbing activities extending into native soils within known archaeological sites and other areas of high sensitivity. 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 timely 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 California Register 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 shall be specified within the CRMMP. All work should be conducted under the direction of a qualified archaeological Principal Investigator who meets the Secretary of the Interior's standards for archaeology.

If the discovery proves significant under CEQA, the archaeologist shall also be required to curate specimens in a repository (as specified by LASHP staff for finds on the LASHP property) 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.

5: To mitigate unknown archaeological resources within the Area of Direct Impacts and mitigate potential impacts to them, the qualified archaeologist shall develop and conduct a worker training program for the Project 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. The training shall provide information to construction workers about the known locations of cultural resources and potential areas that may be sensitive for archaeological resources associated

with the Project. 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.

6: To mitigate impacts to potentially significant fossils, particularly within older Quaternary alluvial deposits and Miocene Puente formation deposits known to exist within the Area of Direct Impacts, a Paleontological Resources Monitoring and Mitigation Plan (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 found. 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 one year of completion of the fieldwork. A copy of the report shall be submitted to the Los Angeles County Natural History Museum.

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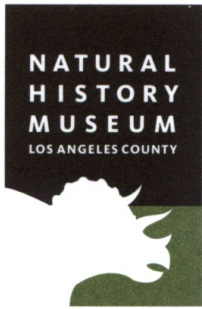
APPENDIX A
Cultural Resources Map Book
Confidential

APPENDIX B
Department of Parks and Recreation Resource Forms
Confidential

APPENDIX C
Paleontological Records Search

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org



Vertebrate Paleontology Section
Telephone: (213) 763-3325

e-mail: smcleod@nhm.org

10 July 2019

AECOM
300 South Grand Avenue, Suite 200
Los Angeles, CA 90071

Attn: Marc A. Beherec, Ph.D., Archaeologist

re: Paleontological resources for the proposed LA AART Project, AECOM Project # 60606325, in the City of Los Angeles, Los Angeles County, project area

Dear Marc:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for the proposed LA AART Project, AECOM Project # 60606325, in the City of Los Angeles, Los Angeles County, project area as outlined on the portion of the Los Angeles USGS topographic quadrangle map that you sent to me via e-mail on 26 June 2019. We do not have any vertebrate fossil localities that lie directly within the proposed project area boundaries, but we do have localities nearby from the same sedimentary deposits that occur in the proposed project area.

Most of the proposed project area, the less elevated terrain, has surficial deposits of younger Quaternary Alluvium, derived as fluvial deposits from the flood plain of the Los Angeles River that currently flows in a concrete channel just to the east. These younger Quaternary deposits usually do not contain significant fossil vertebrates, at least in the uppermost layers, but the underlying older sedimentary deposits found at varying depths may well contain significant vertebrate fossils.

Our closest vertebrate fossil locality from the older Quaternary deposits is LACM 2032, east of the southern portion of the proposed project area near the intersection of Mission Road and Daly Street around the Golden State Freeway (I-5), that produced fossil specimens of pond turtle, *Clemmys mamorata*, ground sloth, *Paramylodon harlani*, mastodon, *Mammuthus americanum*, mammoth, *Mammuthus imperator*, horse, *Equus*, and camel, *Camelops*, at a depth of 20-35 feet

below the surface. The pond turtle specimens from locality LACM 2032 were figured in the scientific literature by B.H. Brattstrom and A. Sturn (1959. A new species of fossil turtle from the Pliocene of Oregon, with notes on other fossil *Clemmys* from western North America. Bulletin of the Southern California Academy of Sciences, 58(2):65-71). At our locality LACM 1023, just north of locality LACM 2032 near the intersection of Workman Street and Alhambra Avenue, excavations for a storm drain recovered fossil specimens of turkey, *Meleagris californicus*, sabre-toothed cat, *Smilodon fatalis*, horse, *Equus*, and deer, *Odocoileus*, at unstated depth. A specimen of the turkey, *Meleagris*, from this locality was published in the scientific literature by D. W. Steadman (1980. A Review of the Osteology and Paleontology of Turkeys (Aves: Meleagridinae). Contributions in Science, Natural History Museum of Los Angeles County, 330:131-207).

In the southwestern-most portion of the proposed project area, and in the elevated terrain in the northern portion of the proposed project area around Broadway and around the Pasadena Freeway (Highway 110), there are exposures of the marine late Miocene Puente Formation (also may be referred to as the Monterey Formation or even an Unnamed Shale in this area), that also may occur at depth in nearby portions of the proposed project area.

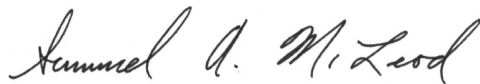
Our Puente Formation locality LACM 7990, just outside the southwestern-most portion of the proposed project area north of Temple Street between Broadway and Spring Street, produced fossil fish including slickheads, Alepocephalidae, argentinids, Argentinidae, deep sea smelts, Bathylagidae, viperfish, *Chauliodus*, herring, Clupeidae, cod, Gadiformes, bristlemouths, Gonostomidae, mackerel, Scombridae, and dragonfish, Stomiidae. A little further to the west-southwest, almost due west of the southern-most portion of the proposed project area north of Temple Street between Broadway and Spring Street, our Puente Formation locality LACM 5961, discovered during excavation for the Metrorail station at unknown depth, produced a specimen of the fossil bristlemouth fish, *Cyclothone*.

Just northeast of the northeastern-most portion of the proposed project area, near the intersection of North San Fernando Road and Humboldt Street, our Puente Formation locality LACM 7507 produced a fossil specimen of the snake mackerel, *Thyrsocles kriegeri*, from a sewer street shaft at a depth of about 100 feet below the surface. Just north to north-northwest of the proposed project area we have a general locality for the Puente Formation in Elysian Park, LACM 4967, that produced the holotype specimen (name bearing specimen of a species new to science) of the extinct fossil herring *Clupea tiejei* described by L. R. David in 1943 (Miocene Fishes of Southern California. Geological Society of America Special Paper 43, p. 92). In the hills of Lincoln Heights further east-northeast of the proposed project area our Puente Formation locality LACM 3882 produced the holotype specimen of the fossil baleen whale *Mixocetus elysius* described by R. Kellogg in 1934 (A New Cetothere from the Modelo Formation at Los Angeles, California. Carnegie Institution of Washington Publication, 447(3):86). North-northeast of the proposed project area, east of the Los Angeles River and north of the Pasadena Freeway (I-110) between Figueroa Street and Cypress Avenue, our Puente Formation locality LACM 1880 produced a suite of fossil bony fish including hatchetfish, *Argyropelecus bullockii*, bristlemouth, *Cyclothone*, herring, *Etringus*, rockfish, Scorpaenidae, extinct deep-sea fish, *Chauliodus*, slickheads, Alepocephalidae, cod, *Eclipes*, and croaker, *Lompoquia*.

Shallow excavations in the younger Quaternary Alluvium exposed in the less elevated terrain in most of the proposed project area are unlikely to uncover significant fossil vertebrate remains. Deeper excavations there that extend down into older sedimentary deposits, however, and any excavations in the exposures of the Puente Formation in the more elevated terrain of the proposed project area, may well encounter significant vertebrate fossils. Any substantial excavations in the proposed project area, therefore, should be closely monitored to quickly and professionally recover any potential vertebrate fossils without impeding development. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

A handwritten signature in cursive script that reads "Samuel A. McLeod".

Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice