Los Angeles County
Metropolitan Transportation Authority

Draft Environmental Impact Report
Executive Summary

LA RIVER PATH

December 2025

Metro

EXECUTIVE SUMMARY

ES-1 Introduction

In accordance with the California Environmental Quality Act (CEQA) (*Public Resources Code* Section 21000, et seq.) and the CEQA Guidelines (14 *California Code of Regulations* [CCR] Section 15000, et seq.), this Executive Summary provides a synopsis of the Los Angeles County Metropolitan Transportation Authority's (Metro's) LA River Path Project (Project) and its potential effect on the environment. This Executive Summary is an overview of the main Environmental Impact Report (EIR), and includes the following information:

- EIR purpose and process
- Project history and objectives
- Public review process
- Alternatives considered
- Environmental analysis summary
- Areas of controversy and issues to be resolved

A detailed discussion and a full analysis of these topics is in this Draft EIR and its appendices.

ES-2 Project Description

ES-2.1 Overview and History

The Project would create a pedestrian and bicycling path regionally located in the center of Los Angeles County, California, and would close the longest remaining 8-mile gap between the existing Los Angeles River Greenway Trail and the existing LA River Trail along the LA River, allowing for a continuous 32-mile path extending from Griffith Park through Downtown Los Angeles to the City of Vernon and connecting to Long Beach along the LA River. Land uses within the Project study area and surrounding area are predominantly industrial or contain infrastructure such as utility and flood-control facilities, with some residential, commercial, religious, and open space land uses near the Project. The Project would improve health, economic, environmental, transportation, and equity conditions throughout and beyond the Project study area.

In June 2014, the Metro Board of Directors authorized the *Los Angeles River Bike Path Gap Closure Feasibility Study* (Feasibility Study) (Metro 2016) to evaluate possibilities for closing the 8-mile gap along the LA River between Elysian Valley and the City of Vernon. The Feasibility Study included a preliminary assessment of the engineering feasibility, neighborhood connectivity, safety, environmental and permitting requirements, hydraulic impacts, real estate, maintenance and operations, and preliminary cost estimates of a gap closure project. The Feasibility Study found that a gap closure project was feasible and would help serve the active transportation needs of communities neighboring the Project study area and the region. In October 2019, the *LA River Path Conceptual*

Design Report (Conceptual Design Report) (Metro 2019) incorporated significant public outreach findings and resulted in the identification of Project objectives and path alternatives. Metro sought to capture community feedback on topics such as Project goals and objectives, path types, and preferred access points to guide the evaluation of different path alignments, and ultimately identified three top-performing path alternatives. Overall, more than 4,600 in-person comments and 3,800 survey responses were received throughout the conceptual design process. In addition, several completed, ongoing, and future projects or plans along the LA River or near the Project may influence it. These projects or plans include:

- City of Los Angeles' *Los Angeles River Revitalization Master Plan* (City of Los Angeles Department of Public Works 2007)
- US Army Corps of Engineers' (USACE's) *Los Angeles River Ecosystem Restoration Final Integrated Feasibility Report and Final Environmental Impact Statement/Environmental Impact Report* (USACE 2015)
- River LA's *Greenway 2020* advocacy campaign (River LA 2013)
- Los Angeles County's *LA River Master Plan* (LARMP) (Los Angeles County Department of Public Works [LACDPW] 2022)
- City of Los Angeles' *Draft Cornfield Arroyo Seco Specific Plan Update* (CASP Update) (City of Los Angeles Department of City Planning 2022)

Five potential alternatives reflecting various preliminary, yet feasible alignments were initially considered (Alignments A, B, C, D, and E). Each alternative had a unique combination of path types, crossings, and access points. Feasible alignment options evaluated include the West Bank Alignment, Bottom-of-channel Alignment, East Bank Alignment, and East Side Alignment. The five potential alternatives were refined once more based on community input regarding access points and path types. Following the final screenings, three path alternatives (Alternatives A, B, and C) responded best to both the evaluation criteria and the community feedback; they were ultimately presented to the community for their feedback in May 2019. Alternatives A, B, and C were identified to provide the greatest community benefits and best meet the Project goals. From these three scoping alternatives, Metro identified the Project and two options to the Project, Option 1 and Option 2, for evaluation in this Draft EIR.

Figure ES-1 shows the Project's regional location and Figure ES-2 shows the Project study area. The Project study area shows the area in which reasonably foreseeable direct or indirect impacts of the Project may occur. Individual resource areas addressed in this Draft EIR may have unique study areas based on the potential for specific direct and indirect impacts associated with those resources; this is described fully in each resource's environmental setting section in Chapter 3, *Environmental Settings, Impacts, and Mitigation*.

Metro has prepared this Draft EIR to inform public agency decision-makers and the general public about potential significant environmental impacts of the Project, as well as possible ways to minimize potential impacts, and reasonable alternatives to the Project.

Figure ES-1. Project Regional Context

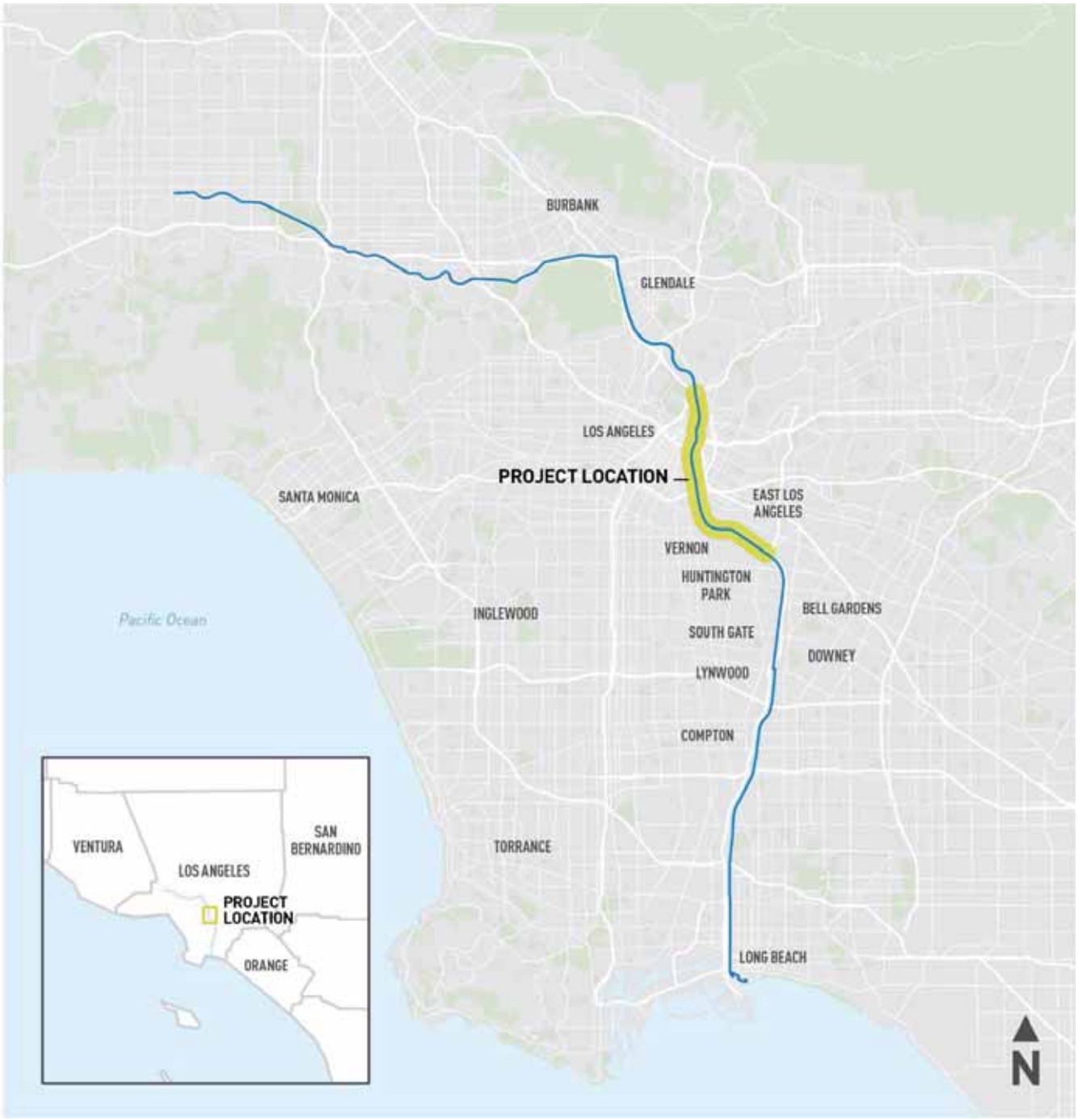

Figure ES-2. Project Study Area

ES-2.2 Environmental Review Process

In 2014, the Los Angeles City Council and Metro's Board of Directors authorized two motions to pursue closing the gap between the two existing paths along the LA River (City of Los Angeles 2014, Metro 2014). In 2016, Metro identified the LA River Path as one of the first projects to receive funding from Measure M. Metro conducted two significant efforts assessing the viability of the Project. The first was the Feasibility Study, which found that a gap closure project was feasible. The second was the Conceptual Design Report, which incorporated significant public outreach findings and resulted in the identification of Project objectives and path alternatives.

Metro filed a Notice of Preparation (NOP) for the Project's Draft EIR on October 23, 2019, and accepted comments on the NOP for a 45-day period from October 23 through December 6, 2019. Metro used a variety of methods to communicate with the public and public agencies to notify them of the NOP and invite public agencies, Native American tribes, and interested individuals and organizations to comment on the scope of this Draft EIR. Throughout the scoping comment period, interested parties were able to provide their input via mail, email, voicemail, and through an online comment form. Metro conducted four public scoping meetings to solicit input on the Draft EIR scope from interested organizations, interested parties, and members of the public.

This Draft EIR is being distributed to interested agencies, organizations, parties, and individuals to ensure they have an opportunity to express their views regarding the potential environmental impacts of the Project. This distribution also ensures that information relevant to permits, authorizations, and discretionary approvals is provided to decision-makers, lead agencies, and CEQA-responsible and trustee agencies. During the public review and comment period, Metro will conduct public hearings to take testimony on the Draft EIR. Public agencies, organizations, and individuals may submit written comments concerning the adequacy of the document during the public comment period, as detailed in Chapter 1, *Introduction*.

After circulation of the Draft EIR and review of public and agency comments, the Metro Board can consider and select a Locally Preferred Alternative (LPA). Public and agency comments received on the Draft EIR will be considered as part of the LPA selection process. If an LPA is selected by the Metro Board, Metro will then prepare a Final EIR including written responses to public and agency comments. The Metro Board may then adopt the findings of the Project's environmental effects after implementation of mitigation measures and statement of overriding considerations, certify the Final EIR, and approve the Project.

ES-2.3 Project Objectives

Project objectives were shaped by input from stakeholders and communities throughout the conceptual design public engagement process from late 2018 through 2019.

The primary objective of the Project is to create a safe and world-class active transportation path along the LA River between Elysian Valley in the City of Los Angeles and the Cities of Vernon and Maywood that would enhance and provide recreational opportunities, livability, regional and local connectivity and provide an outstanding user experience, access to economic opportunity, and separation from vehicular traffic for people of all ages and abilities. This new transportation facility would contribute to improved health, economic, environmental, transportation, and equity issues throughout and beyond the study area.

The Project objectives include:

- Providing, to the extent feasible, a seamless pedestrian and bicycling path between the San Fernando Valley in Los Angeles and the LA River Bicycle Path in Long Beach
- Improving safety for pedestrians and bicyclists from existing conditions
- Increasing access from local neighborhoods to employment centers, regional destinations, resources, and amenities, including healthcare services
- Reducing vehicle miles traveled by allowing people to walk and bicycle on a dedicated, vehicle-separated path through and within Los Angeles County, thereby reducing trip lengths and expanding travel choices
- Improving access to opportunity for historically under-invested communities, especially for low-income households earning less than $60,000 per year and in marginalized communities
- Creating a path that feels safe, comfortable, and is a world-class transportation facility open to people of all ages and abilities
- Creating a path that meets the needs of both recreational and utilitarian users

ES-2.4 Proposed Project and Options Considered in the EIR

Metro has identified an alignment as the Proposed Project; there are two alignment options for the Proposed Project (Option 1 and Option 2) that are considered and included in this Draft EIR, and are summarized here.

The inclusion of an option or alternative in the Draft EIR does not imply that any stakeholder agencies have approved or authorized the design, including project components that interact with the agencies' projects (e.g., Los Angeles Department of Water and Power's Main Street Center - General Construction Headquarters and USACE's LA River Ecosystem Restoration project). Therefore, their presence in the Draft EIR does not signal approval of either the alternatives or the Proposed Project design.

ES-2.4.1 Proposed Project

Spanning approximately 9.6 miles, the Proposed Project includes seven river crossings and nine access points: four on the west bank and five on the east bank on the river, as shown in Figure ES-3. Additionally, the Proposed Project includes improvements to the existing access point on the west bank of the river at Atlantic Boulevard in the City of Vernon. The Proposed Project would serve four Metro stations: Union Station, Chinatown Station, Pico/Aliso Station, and Washington Station. Detailed discussions of the Proposed Project's components are described in this section.

Starting north on the west bank of the LA River where the LA River Greenway Trail ends, the Proposed Project would run atop the bank and pass beneath the existing Interstate (I-)5 Viaduct and Riverside Drive Viaduct. Then, the Proposed Project would transition to an elevated configuration, crossing over the Metrolink LA River–Downey Bridge and moving under the State Route (SR)-110 Bridge. After passing under SR-110, the Proposed Project would transition to an incised configuration along the west bank, allowing it to go under the Metro A Line LA River Bridge. The path would mainly remain in an incised configuration from the North Spring Street Viaduct to the Mission Junction where it would cross both Metrolink railroad bridges with a new elevated crossing from the west bank, connecting to Albion Park on the east bank, between North Spring

Figure ES-3. Proposed Project Alignment

Street and North Main Street. South of Mission Junction, the Proposed Project would again transition to an elevated configuration to cross the LA River from the west bank to the east bank between the Metrolink Mission Junction Railroad Bridge South and Cesar E Chavez Avenue Viaduct.

Approximately 800 feet north of the Cesar E Chavez Avenue Viaduct, the Proposed Project would cross to the east bank of the river, where it would run in an incised configuration, allowing it to pass under the Cesar E Chavez Avenue Viaduct, El Monte Busway Bridge, and US Highway Route 101 LA River Bridge. The Proposed Project would then transition to an elevated configuration to avoid a transmission tower and provide an opportunity to connect to Union Station across the river on the west bank.

The Proposed Project's connector to the Union Station access point would be implemented only if the separate Link Union Station (LinkUS) project proceeds with its proposed demolition of the Kahn-Beck Co./Friedman Bag Co. Building (located at 801 E Commercial Street/600 Center Street).[1]

South of the Union Station connector and transmission tower along the west bank, the path would transition back to an incised configuration, traveling under the First Street Viaduct and Fourth Street Viaduct. The Proposed Project would then transition to an elevated configuration to cross the LA River from the east bank to the west bank between the Fourth Street Viaduct and the Sixth Street Viaduct.

The Proposed Project would remain elevated to travel under the Sixth Street Viaduct and then transition to an incised configuration to go under the Seventh Street Viaduct. The path would transition to an elevated configuration to go under the I-10 Santa Monica Viaduct and Olympic Boulevard Viaduct. Continuing in an elevated configuration, the path would then go over the Union Pacific (UP) LA River Bridge and the Washington Boulevard Bridge. The path would then immediately travel beneath the Redondo Junction Grade Separation and begin to cross from the west bank of the LA River to the east bank.

After the Proposed Project crosses over the river, the path would continue south in an elevated configuration on the east bank, crossing over the BNSF Railway LA River Bridge, 26th Street Bridge, and Soto Street Bridge. Continuing south, the Proposed Project would remain in an elevated configuration until reaching Bandini Boulevard Bridge. The path between Bandini Boulevard and Atlantic Boulevard would use a combination of incised and top-of-bank path types to go under the Bandini Boulevard Bridge, the Downey Road Bridge, and two BNSF Railway bridges, one at Downey Road and the other at District Boulevard. Just north of Atlantic Boulevard, the Proposed Project would cross over the LA River from the east bank to the west bank.

The alignment would then turn south to go under the Atlantic Boulevard Bridge in an incised configuration on the west bank and tie into the existing LA River Trail in the City of Vernon. Figure ES-3 shows the Proposed Project alignment, path types and access points.

Proposed Project Access Points

The configuration and location of each access point for the Proposed Project are listed in Table ES-1 from north to south.

[1] The demolition occurred in 2025, after this Draft EIR was substantially complete.

Table ES-1. Proposed Project Access Points

Access Point	Bank	Connector Description
Albion Park	East	Single elevated bridge over the LA River to elevated bridge over railroad tracks with ramp connecting to Albion Park
Mission Road/Cesar E Chavez Avenue	East	Single elevated ramp crossing over railroad tracks to connect to the northwest corner of Mission Road and Cesar E Chavez Avenue intersection at the back of sidewalk
Union Station	West	Single elevated bridge over the LA River and railroad tracks and landing at the northeast corner of Center Street and Commercial Street underneath the future Link US viaduct
First Street	East	Single elevated ramp that parallels the path and then travels over the railroad tracks and Myers Street to connect at-grade to the back of sidewalk at the northwest corner of Mission Road and First Street intersection
Sixth Street	West	Single incised ramp connecting down to the south side of the Sixth Street Tunnel with future access to the Sixth Street PARC Project
Washington Boulevard	West	Single hook ramp connecting down to the south side of Washington Boulevard
Bandini-Soto Triangle	West	Single elevated bridge over the LA River connecting at-grade to Bandini Boulevard Bridge at the back of sidewalk adjacent to the commercial plaza known as the “Bandini-Soto Triangle”
Downey Road	East	Single at-grade connection to the back of sidewalk on the northwest side of Downey Road
Atlantic Boulevard	East	Single at-grade connection to the northwest side of Atlantic Boulevard at the back of sidewalk
Atlantic Boulevard (Existing)	West	Improvements to an existing access point in the City of Vernon

Proposed Project Design Variations

In addition to the Proposed Project, multiple design variations have been identified to offer site-specific engineering variations to navigate the constraints of the Proposed Project. Design variations include path connections to rail service at Union Station. Table ES-2 is a summary of design variations for the Proposed Project.

Table ES-2. Proposed Project Design Variations

Design Variation	Bank	Configuration
Riverside Drive	West	Cantilever along the west bank from the existing path to under the Riverside Drive Bridge.
Arroyo Seco Parkway (SR-110)	West	Single elevated top-of-bank path starting north under SR-110 to just south of the freeway.
East Cesar E Chavez Avenue	West	Elevated path ramps up before crossing westward over railroad right-of-way (ROW) at grade and continuing south again parallel to the railroad ROW. Path crosses underneath the East Cesar E Chavez Avenue Bridge and continues south to the optional access point at Union Station via Keller Street.
Union Station	West	Connection to Union Station is provided from the optional access point at Union Station via Keller Street through an on-street alignment along Keller Street, then connection with Ramirez Street to Union Station.
US Highway Route 101 LA River Bridge	East	Continues in an incised configuration underneath US Highway Route 101 LA River Bridge.
Kearney Street	East	Optional access point at Kearney Street is added via path traveling north up the east bank and crossing over to North Myers Street before turning left and continuing to optional access point at Kearney Street.
East Fourth Street	West	Elevated river crossing passes underneath the East Fourth Street Bridge before continuing south along the west bank in an elevated configuration.
East Washington Boulevard (In-Channel)	West	Path becomes elevated in-channel and continues south underneath the East Washington Boulevard Bridge, East 26th Street Bridge, and South Soto Street Bridge before crossing to the east bank and continuing south underneath Bandini Boulevard.
East Washington Boulevard (Triangular Helix)	West	Elevated path crosses westward under the Redondo Junction Grade Separation, ascends in a triangular helix configuration, and continues south, crossing over East Washington Boulevard and LA River from the west bank to the east bank.
South of Downey Road	East	Path continues south in an incised configuration.
South Atlantic Boulevard	North	Path continues splits north of the Atlantic Boulevard East access point, continuing south before becoming elevated to cross to the southern bank to end at the Atlantic Boulevard Existing Path access point.

ES-2.4.2 Option 1

As discussed in Section ES-2.1, Metro identified two options for the Proposed Project. Option 1 would retain most components of the Proposed Project, with some modifications. These modifications would result in a slightly longer route for Option 1, which would span approximately 10.1 miles. Option 1 would have the same path types as the Proposed Project though with some changes in locations and compositions, with 56% elevated, 9% top-of-bank, and 35% incised path types. Option 1 would cross the river six times and would have 11 access points: six on the west bank and five on the east bank, including improvements to the existing Atlantic Boulevard access point in the City of Vernon. Option 1 would provide connections to the same three Metro stations, Union Station, Chinatown Station, and Washington Boulevard Station, with the addition of two Metro stations, Lincoln/Cypress Station and Little Tokyo/Arts District Station. This section details the modifications to Project elements associated with Option 1.

Starting north on the west bank where the LA River Greenway Trail ends, Option 1 would run atop the riverbank to traverse under the I-5 Viaduct and Riverside Drive Viaduct. Option 1 would then traverse

over the Metrolink LA River–Downey Bridge and under the SR-110 Bridge in an elevated configuration. After passing under SR-110, Option 1 would transition to an elevated configuration along the west bank then cross over the river to the east bank just north of the Metro A Line LA River Bridge. Compared to the Proposed Project, Option 1would have a path alignment and design variations that include river crossings, path along the east bank, and access points to Ed P. Reyes Greenway on the east bank and Los Angeles State Historic Park on the west bank.

After crossing the river to land on the east bank, Option 1 would mainly be elevated as it passes the Metro A Line and continues south. North of Broadway, the alignment would include an access point at the Ed P. Reyes Greenway and a river crossing to the west bank leading to the Los Angeles State Historic Park access point. Option 1 continues south along the east bank to cross under the North Broadway Viaduct and North Spring Street Viaduct. Continuing in an elevated configuration, Option 1 would cross over the North Main Street Bridge and both Metrolink railroad bridges at Mission Junction. Option 1 would remain in an elevated configuration to diagonally cross under the Cesar E Chavez Avenue Viaduct and cross over the river from the east bank to the west bank.

After landing on the west bank, Option 1 would continue south in a mostly elevated configuration to traverse under the US Highway Route 101 LA River Bridge and First Street Viaduct. Compared to the Proposed Project, Option 1 includes an elevated in-channel alignment along the west bank north of First Street, and two access points that connect to the First Street Bridge. South of the First Street Viaduct, Option 1 would descend into an incised configuration to travel under the Fourth Street Viaduct, then transition into elevated to travel under the Sixth Street Viaduct. The path would then transition to incised to go under the Seventh Street Bridge, I-10 Santa Monica Viaduct, and Olympic Boulevard Viaduct. Moving from incised to elevated as the path approaches Redondo Junction Grade Separation, Option 1 would cross over the UP LA River Bridge and Washington Boulevard Bridge. The elevated configuration would then travel beneath the Redondo Junction Grade Separation and begin to cross the LA River to the east bank.

Once Option 1 crosses over the river to the east bank, the path would continue in an elevated configuration to cross over the existing BNSF Railway LA River Bridge, 26th Street Bridge, and Soto Street Bridge. Just southeast of the Soto Street Bridge, an elevated river crossing would connect to the Bandini-Soto Triangle access point on the west bank. South of the river crossing, Option 1would continue south on the east bank, transitioning to an incised configuration to cross under Bandini Boulevard. South of Bandini Boulevard Bridge, Option 1 would transition to a top-of-bank configuration as the path travels south. Option 1 would then change to an incised configuration between Downey Road and Atlantic Boulevard, allowing it to pass under the Downey Road Bridge and the two BNSF Railway bridges at the Downey Road Bridge and at District Boulevard. By comparison, the Proposed Project in this area would run predominantly atop the bank, descending into an incised alignment to cross under the BNSF Railway Bridge at District Boulevard. Just north of Atlantic Boulevard, Option 1 would cross over the LA River from the east bank to the west bank and then tie into the existing LA River Trail in the City of Vernon. Figure ES-4 shows the Option 1 alignment, path types, and access points.

Figure ES-4. Option 1 Alignment

Option 1 Access Points

Table ES-3 lists the configuration and location of each potential access point for Option 1, from north to south. Option 1 would include the same access points as the Proposed Project, with modifications to two of them (Union Station and First Street) and would have two additional access points: Ed P. Reyes River Greenway and LA State Historic Park.

Table ES-3. Option 1 Access Points

Access Point	Bank	Connector Description	Common to Proposed Project
Ed P. Reyes River Greenway	East	Single elevated ramp over railroad tracks that parallels the path to the east and connects to the Ed P. Reyes River Greenway	No
LA State Historic Park	West	Single elevated bridge over the LA River and railroad tracks, and then ramps down under the North Broadway Viaduct and lands on the north side of the Baker Street south of the intersection of Aurora Street at northern driveway access to LA State Historic Park parking lot	No
Albion Park	East	Single elevated ramp over railroad tracks that would loop around the southern edge of Albion Park to land at the back of sidewalk at Albion Street	Yes
Mission Road/Cesar E Chavez Avenue	East	Single elevated ramp that parallels the path and crosses over railroad tracks to connect to the northwest corner of Mission Road and Cesar E Chavez Avenue intersection at the back of sidewalk	Yes
Union Station via Center Street	West	Single elevated ramp that parallels the path before traveling over the railroad tracks south of the US Highway Route 101 LA River Bridge to land near the northeast corner of the Commercial Street and Center Street intersection at the back of sidewalk	Yes, with some differences
First Street North/First Street South	West	Dual elevated ramps that connect to the north and south sides of the First Street Viaduct	Yes, with some differences
Sixth Street	West	Single elevated ramp that parallels the path to the west and connects into the Sixth Street Tunnel from the south side with access to the future Sixth Street PARC Project	Yes
Washington Boulevard	West	Single hook ramp that connects down to the south side of Washington Boulevard at the back of sidewalk	Yes
Bandini-Soto Triangle	West	Single elevated bridge over the LA River that connects at-grade to Bandini Boulevard at the back of sidewalk adjacent to the commercial plaza known as the “Bandini-Soto Triangle”	Yes
Downey Road	East	Single at-grade connection to the back of sidewalk on the west side of Downey Road	Yes
Atlantic Boulevard	East	Single at-grade connection to the northwest side of Atlantic Boulevard at the back of sidewalk	Yes
Atlantic Boulevard (Existing)	West	Improvements to an existing access point in the City of Vernon	Yes

Option 1 Design Variations

Similar to the Proposed Project, design variations have been identified to offer site-specific engineering variations to address the constraints of the Project study area. Design variations at various locations of the alignment and access points for Option 1 are included in the footprint. Option 1 includes all of the Proposed Project's design variations except Kearney Street and includes four additional design variations: Egret Park to Ed P. Reyes Greenway, Naud Street, Albion Street, and East Seventh Street/Jesse Street. Table ES-4 summarizes design variations for Option 1.

Table ES-4. Option 1 Design Variations

Design Variation	Bank	Configuration	Common to Proposed Project
Egret Park to Ed P. Reyes Greenway	East	Single at-grade connection from Egret Park to Riverside Drive bridge onto Avenue 19 southerly to Ed P. Reyes River Greenway. A spur route would branch off Avenue 19, south of the Arroyo Seco confluence, and traverse at-grade southerly along the backside of the Lincoln Heights Jail building. This spur route would continue under the Metro A Line Bridge and connect to Ed P. Reyes River Greenway.	No
Riverside Drive	West	Cantilever along the west bank from the existing path to under the Riverside Drive Bridge.	Yes
Arroyo Seco Parkway (SR-110)	West	Single elevated top-of-path connection from path starting north under SR-110 to just south of the freeway.	Yes
Naud Street	West	Elevated path would cross westward, remaining in an elevated configuration, to the west bank where the path would reach the optional Naud Street access point.	No
Albion Street	East	Elevated path would split from westbound path to cross eastward over Metro ROW, before traveling south to reach the Albion Park access point.	No
East Cesar E Chavez Avenue	West	Elevated path crosses from the east bank to the west bank before continuing westward over railroad ROW at grade and then south parallel to the railroad ROW. Path crosses underneath the East Cesar E Chavez Avenue Bridge and continues south to the optional access point at Union Station via Keller Street.	Yes
Union Station	West	Connection to Union Station is provided from the optional access point at Union Station via Keller Street through an on-street alignment along Keller Street, then connection with Ramirez Street to Union Station.	Yes
US Highway Route 101 LA River Bridge	East	Elevated path would continue south along the east bank underneath the East Cesar E Chavez Bridge before crossing diagonally underneath the US Highway Route 101 LA River Bridge to the west bank.	Yes
East Fourth Street	West	Path continues south underneath East Fourth Street Bridge.	Yes
East Seventh Street/Jesse Street	East	Elevated river crossing to east bank provides access to optional East Seventh Street/Jesse Street access point.	No
East Washington Boulevard (In-Channel)	West	Path becomes elevated in-channel and continues south underneath the East Washington Boulevard Bridge, East 26th Street Bridge, and South Soto Street Bridge before crossing to the east bank and continuing south underneath Bandini Boulevard.	Yes

Table ES-4. Option 1 Design Variations

Design Variation	Bank	Configuration	Common to Proposed Project
East Washington Boulevard (Triangular Helix)	West	Elevated path crosses westward under the Redondo Junction Grade Separation, ascends in a triangular helix configuration, and continues south, crossing over East Washington Boulevard and LA River from the west bank to the east bank.	Yes
South of Downey Road	East	Path continues south at top-of-bank.	No
South Atlantic Boulevard	North	Path continues splits north of the Atlantic Boulevard East access point, continuing south before becoming elevated to cross to the southern bank to end at the Atlantic Boulevard Existing Path access point.	Yes

ES-2.4.3 Option 2

As discussed in Section ES-2.1, Metro identified two options for the Proposed Project. Option 2 would retain most components of the Proposed Project, with some changes. These modifications would result in a slightly shorter alignment for Option 2, which would span approximately 9.1 miles. Option 2 would have the same path types as the Proposed Project though with some changes in locations and compositions, with 47% elevated, 19% top-of-bank, and 34% incised path types. Option 2 would cross the river seven times and would have nine access points: four on the west bank and five on the east bank of the river, including improvements to the existing Atlantic Boulevard access point in the City of Vernon. Option 2 would provide connections to four Metro stations: Union Station, Chinatown Station, Pico/Aliso Station, and Washington Station, with the addition of the Lincoln/Cypress Station. This section details the modifications to Project elements associated with Option 2.

Starting north on the west bank where the LA River Greenway Trail ends, Option 2 would be in a top-of-bank configuration to travel under the I-5 Viaduct and Riverside Drive Viaduct. Option 2 would then traverse over the Metrolink LA River–Downey Bridge and under the SR-110 Bridge in an elevated configuration to then cross over the river from the west bank to the east bank. Compared to the Proposed Project, Option 2 would include river crossings, a path along the east bank and an access point at Ed P. Reyes Greenway.

After crossing the river to land on the east side of the railroad tracks in an elevated configuration, Option 2 would transition to grade to go under the Metro A Line LA River Bridge and would no longer be adjacent to the channel, but instead on the outside edge of the railroad tracks. Option 2 would be at-grade adjacent to the outside edge of the railroad track between the Ed P. Reyes River Greenway and Spring Street. Compared to the Proposed Project, Option 2 includes a top-of-bank alignment along the east bank from SR-110 to just south of Spring Street. As Option 2 passes under the North Spring Street Viaduct and approaches Albion Park, the path would begin to incline to an elevated configuration to cross the LA River from the east bank to the west bank.

Once on the west bank, Option 2 would remain elevated to cross over the North Main Street Bridge and both Metrolink railroad bridges at Mission Junction, in contrast to the Proposed Project's incised alignment. Option 2 would then move to the middle of the channel, remaining elevated, to cross under the Cesar E Chavez Avenue Viaduct and US Highway Route 101 LA River Bridge. After passing under the First Street Viaduct, Option 2 would descend to an incised configuration. Three connectors would branch from the elevated pathway in the channel's center, leading to three different access

points. To the north of Cesar E Chavez Avenue Viaduct, one connector would extend to the Mission Road/Cesar E Chavez access point on the east bank. To the south of US Highway Route 101 LA River Bridge, another connector would lead to the Union Station access point on the west bank and another connector would lead to the First Street access point on the east bank. Option 2 would travel in a mostly incised configuration between the First Street Viaduct and Olympic Boulevard Viaduct compared to the Proposed Project. Like the Proposed Project, as it approaches Redondo Junction Grade Separation, Option 2 would transition from an incised to an elevated configuration, crossing over the UP LA River and Washington Boulevard bridges. The path would then continue in an elevated configuration, traveling beneath the Redondo Junction Grade Separation and then crossing the LA River over the BNSF Railway LA River Bridge to the east bank.

Once on the east bank in an elevated configuration, the path would remain elevated as it crosses over the 26th Street Bridge and Soto Street Bridge. Between Soto Street and Bandini Boulevard, Option 2 would transition to an incised configuration to cross under Bandini Boulevard Bridge. An elevated crossing between Soto Street and Bandini Boulevard would connect to the Bandini-Soto Triangle access point. Continuing south on the east bank, Option 2 would use the top-of-bank to circumvent two transmission towers north of Downey Road, before transitioning to either the Downey Road access point or going under the Downey Road Bridge and BNSF Railway Bridge at Downey Road. South of Downey Road Bridge, Option 2 would use a combination of incised and top-of-bank configuration and then pass under the BNSF Railway Bridge at District Boulevard. Just north of Atlantic Boulevard, Option 2 would cross over the LA River from the east bank to the west bank.

After crossing the river to the west bank, Option 2 would continue south in an incised configuration. After passing under the Atlantic Boulevard Bridge, Option 2 would tie into the existing LA River Trail on the west bank in the City of Vernon. Compared to the Proposed Project and Option 1, Option 2 would not include the Atlantic Boulevard East access point. Figure ES-5 shows the Option 2 alignment, path types, and access points.

Figure ES-5. Option 2 Alignment

Option 2 Access Points

The configuration and location of each access point for Option 2 are listed in Table ES-5 from north to south. Option 2 would include eight of the same access points as the Proposed Project, with modifications to one of them (Union Station) and would have two additional access points: Ed P. Reyes River Greenway and Spring Street/Broadway/Albion Park.

Table ES-5. Option 2 Access Points

Access Point	Bank	Configuration	Common to Proposed Project
Ed P. Reyes River Greenway	East	At-grade connection directly adjacent to path at Ed P. Reyes River Greenway	No
Spring Street/Broadway/ Albion Park	East	Single at-grade connection from path under Spring Street to the Albion Park and access to Broadway and Spring Street	No
Mission Road/Cesar E Chavez Avenue	East	Single elevated ramp crossing over railroad tracks to connect to the northwest corner of the Mission Road and Cesar E Chavez Avenue intersection at the back of sidewalk	Yes
Union Station via Center Street	West	Single elevated ramp that crosses over the railroad tracks south of the US Highway Route 101 LA River Bridge to land near the northeast corner of the Commercial Street and Center Street intersection at the back of sidewalk	Yes, with some differences
First Street	East	Single elevated ramp that travels over the railroad tracks and Myers Street to connect at-grade to the back of sidewalk at the northwest corner of Mission Road and First Street intersection	Yes
Sixth Street	West	Direct connection between the Option 2 path and the existing Sixth Street Tunnel with access to the future Sixth Street PARC Project	Yes
Washington Boulevard	West	Single hook ramp that connects down to the south side of Washington Boulevard at the back of sidewalk	Yes
Bandini-Soto Triangle	West	Single elevated bridge over the LA River that connects at-grade to Bandini Boulevard at the back of sidewalk adjacent to the commercial plaza known as the “Bandini-Soto Triangle”	Yes
Downey Road	East	Single at-grade connection to the back of sidewalk on the west side of Downey Road	Yes
Atlantic Boulevard (Existing)	West	Improvements to an existing access point in the City of Vernon	Yes

Option 2 Design Variations

Design variations have been identified to offer site-specific engineering variations to navigate challenges and constraints in the Project study area. Design variations at various locations of the alignment and at access points for Option 2 are included in the footprint. Option 2 would include all of the Proposed Project’s design variations except US Highway Route 101 LA River Bridge and includes four additional design variations design variations: Egret Park to Ed P. Reyes Greenway, North Avenue 19, and North Broadway/Spring Street. Table ES-6 summarizes design variations for Option 2.

Table ES-6. Option 2 Design Variations

Design Variation	Bank	Configuration	Common to Proposed Project
Egret Park to Ed P. Reyes Greenway	East	Single at-grade connection from Egret Park to Riverside Drive bridge onto Avenue 19 southerly to Ed P. Reyes River Greenway.	No
Riverside Drive	West	Cantilever along the west bank from the existing path to under the Riverside Drive Bridge.	Yes
Arroyo Seco Parkway (SR-110)	West	Single elevated top-of-bank connection from path starting north under SR-110 to just south of the freeway.	Yes
North Avenue 19	West	Elevated path continues south before crossing the river channel diagonally to the east bank near the Ed Reye Greenway access point.	No
North Broadway/ Spring Street	East	Path branches east to optional access point at Broadway and Spring Street.	No
East Cesar E Chavez Avenue	West	Elevated in-channel path splits westward before crossing over railroad ROW at grade and then continuing south parallel to the railroad ROW. Path crosses underneath the East Cesar E Chavez Avenue Bridge and continues south to the optional access point at Union Station via Keller Street.	Yes
Union Station	West	Connection to Union Station is provided from the optional access point at Union Station via Keller Street through an on-street alignment along Keller Street, then connection with Ramirez Street to Union Station.	Yes
Kearney Street	East	Elevated in-channel path splits eastward to reach east bank before continuing south and then east to reach optional access point at Kearney Street.	Yes
East Fourth Street	West	Path continues south underneath East Fourth Street Bridge.	Yes
East Washington Boulevard (In-Channel)	West	Path becomes elevated in-channel and continues south underneath the East Washington Boulevard Bridge, East 26th Street Bridge, and South Soto Street Bridge before crossing to the east bank and continuing south underneath Bandini Boulevard.	Yes
East Washington Boulevard (Triangular Helix)	West	Elevated path crosses westward under the Redondo Junction Grade Separation, ascends in a triangular helix configuration, and continues south, crossing over East Washington Boulevard and LA River from the west bank to the east bank.	Yes
South of Downey Road	East	Path continues south in an incised condition.	Yes
South Atlantic Boulevard	North	Path continues south before becoming elevated to cross to the southern bank to end at the Atlantic Boulevard Existing Path access point.	Yes

ES-2.4.4 Comparison of Proposed Project and Options

As stated, this Draft EIR analyzes the Proposed Project and two options, Option 1 and Option 2, each having a different combination of Project elements to navigate site conditions in different ways. The Proposed Project and its options each includes a combination of path types, river crossing locations, access points, and design variations aimed at accomplishing the Proposed Project objectives. Table ES-7 is a summary comparison of the Proposed Project, Option 1, and Option 2.

Table ES-7. Summary Comparison of Proposed Project and Options

Proposed Alignments	Approximate Path Length	Access Points	River Crossings	Elevated Path Type	Top-of-Bank Path Type	Incised Path Type
Proposed Project	9.6 miles	9	7	46%	28%	26%
Option 1	10.1 miles	11	6	56%	9%	35%
Option 2	9.1 miles	9	7	47%	19%	34%

Note: This count of access points does not include the existing westbound access point at Atlantic Boulevard.

Figures ES-3, ES-4, and ES-5 above show proposed alignments for the Proposed Project, Option 1, and Option 2.

ES-2.5 Project Schedule

Construction activities for the portion of the path for which funding is currently available are estimated to last approximately 3 years (Figure ES-6). Preconstruction activities are anticipated to start in 2028. The anticipated construction start is in 2028, with phased completion anticipated in 2031.

Figure ES-6. Project Timeline

ES-3 Summary of Environmental Impacts Analysis

This Draft EIR identifies potential environmental impacts of the Project and its options and analyzes any significant impacts and implementation of feasible mitigation measures. Project features are design features, best management practices, or other measures required by law or permit approvals and are incorporated as part of the Project. Mitigation measures are additional actions designed to avoid, minimize, or compensate for significant impacts and are required where significant impacts have been identified. Mitigation measures would be proposed as conditions of Project approval and would be monitored to ensure compliance and implementation. Table ES-8 summarizes the environmental impacts, required mitigation measures, and level of significance after mitigation (as applicable). A detailed analysis for each environmental resource area is provided in Chapter 3, *Environmental Settings, Impacts, and Mitigation*.

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
Aesthetics and Visual Resources					
AES-1: Have a substantially adverse effect on a scenic vista?	Proposed Project	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
AES-2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historical buildings within a state scenic highway?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
AES-3: Substantially degrade the existing visual character or quality of public views of the site and its surroundings, and conflict with applicable zoning and other regulations governing scenic quality? (Public views are those that are experienced from publicly accessible vantage point.).	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
AES-4: Create a new source of substantial light or glare, which would adversely affect day- or nighttime views in the area?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
Air Quality					
AQ-1: Conflict with or obstruct implementation of the applicable air quality plan?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
AQ-2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
AQ-3: Expose sensitive receptors to substantial pollutant concentrations?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
AQ-4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
Biological Resources					
BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	Proposed Project	Construction	Potentially Significant	▪ MM-BIO-01, *Worker Environmental Awareness Program* ▪ MM-BIO-02a, *Preconstruction Identification of Active Bat Roost Sites* ▪ MM-BIO-02b, *Avoid Disturbing Active Bat Roosts* ▪ MM-BIO-03, *Nesting Bird Surveys*	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Potentially Significant	▪ MM-BIO-01 ▪ MM-BIO-02a ▪ MM-BIO-02b ▪ MM-BIO-03	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Potentially Significant	▪ MM-BIO-01 ▪ MM-BIO-02a ▪ MM-BIO-02b ▪ MM-BIO-03	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	Proposed Project	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
BIO-3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Proposed Project	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Proposed Project	Construction	Potentially Significant	▪ MM-BIO-02a ▪ MM-BIO-02b	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Potentially Significant	▪ MM-BIO-02a ▪ MM-BIO-02b	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Potentially Significant	▪ MM-BIO-02a ▪ MM-BIO-02b	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	No Impact	None	No Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Proposed Project	Construction	Potentially Significant	▪ MM-HWQ-04, *Fully Incised Path* ▪ MM-HWQ-05, *Incised/Elevated Transition Widening* ▪ MM-HWQ-06, *Elevated-in-Channel Incised Path* ▪ MM-HWQ-07, *Channel Daylight Crossing Structure*	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	Potentially Significant	▪ MM-HWQ-04 ▪ MM-HWQ-05 ▪ MM-HWQ-06 ▪ MM-HWQ-07	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	Potentially Significant	▪ MM-HWQ-04 ▪ MM-HWQ-05 ▪ MM-HWQ-06 ▪ MM-HWQ-07	Less than Significant Impact
		Operation	No Impact	None	No Impact
Cultural Resources					
CUL-1: Cause a substantial adverse change in the significance of a built-environment historical resource as defined in Section 15064.5?	Proposed Project	Construction	Potentially Significant	▪ MM-CUL-01, *Conformance with the Secretary of the Interior's Standards for Rehabilitation* ▪ MM-CUL-02, *Recordation of Existing Conditions* ▪ MM-NOI-02, *Drill Piles Where Feasible* ▪ MM-VIB-01, *Vibration Control Plan* ▪ MM-VIB-02, *Vibration Monitoring Plan*	Less than Significant Impact
		Operation	No Impact	None	No Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
	Option 1	Construction	Potentially Significant	▪ MM-CUL-01 ▪ MM-CUL-02 ▪ MM-NOI-02 ▪ MM-VIB-01 ▪ MM-VIB-02	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	Potentially Significant	▪ MM-CUL-01 ▪ MM-CUL-02 ▪ MM-NOI-02 ▪ MM-VIB-01 ▪ MM-VIB-02	Less than Significant Impact
		Operation	No Impact	None	No Impact
CUL-2: Cause a substantial adverse change in the significance of a unique or historical archaeological resource pursuant to Section 15064.5?	Proposed Project	Construction	Potentially Significant	▪ MM-CUL-03, *Qualified Archaeologist* ▪ MM-CUL-04, *Cultural Resources Mitigation and Management Plan*	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	Potentially Significant	▪ MM-CUL-03 ▪ MM-CUL-04	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	Potentially Significant	▪ MM-CUL-03 ▪ MM-CUL-04	Less than Significant Impact
		Operation	No Impact	None	No Impact
CUL-3: Disturb any human remains, including those interred outside of formal cemeteries?	Proposed Project	Construction	Potentially Significant	▪ MM-CUL-04	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	Potentially Significant	▪ MM-CUL-04	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	Potentially Significant	▪ MM-CUL-04	Less than Significant Impact
		Operation	No Impact	None	No Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
Energy					
ENE-1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
ENE-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
Geology and Paleontological Resources					
GEO-1(i): Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	Proposed Project	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
GEO-1(ii): Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
GEO-1(iii): Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
GEO-1(iv): Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
GEO-2: Result in substantial soil erosion or loss of topsoil?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
GEO-3: Located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
GEO-4: Located on expansive soil, as defined in Table 18-1-B of the Uniform	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
Building Code (1994), creating substantial direct or indirect risks to life or property?		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
GEO-5: Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	Proposed Project	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
GEO-6: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Proposed Project	Construction	Potentially Significant	▪ MM-PAL-01, *Prepare a Paleontological Resources Monitoring Plan* ▪ MM-PAL-02, *Worker Environmental Awareness Program Training* ▪ MM-PAL-03, *Curation*	Significant and Unavoidable
		Operation	No Impact	None	No Impact
	Option 1	Construction	Potentially Significant	▪ MM-PAL-01 ▪ MM-PAL-02 ▪ MM-PAL-03	Significant and Unavoidable
		Operation	No Impact	None	No Impact
	Option 2	Construction	Potentially Significant	▪ MM-PAL-01 ▪ MM-PAL-02 ▪ MM-PAL-03	Significant and Unavoidable
		Operation	No Impact	None	No Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
Greenhouse Gas Emissions					
GHG-1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
GHG-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
Hazards and Hazardous Materials					
HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Proposed Project	Construction	Potentially Significant	▪ MM-HAZ-01, *Project-wide Phase II Environmental Site Assessment* ▪ MM-HAZ-02, *Soil Management Plan Surveys* ▪ MM-HAZ-03, *Preconstruction Asbestos, Lead-Based Paint, and Universal Waste Surveys*	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
	Option 1	Construction	Potentially Significant	▪ MM-HAZ-01 ▪ MM-HAZ-02 ▪ MM-HAZ-03	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Potentially Significant	▪ MM-HAZ-01 ▪ MM-HAZ-02 ▪ MM-HAZ-03	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
HAZ-3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	Proposed Project	Construction	Potentially Significant	▪ MM-HAZ-03	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	Potentially Significant	▪ MM-HAZ-03	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	Potentially Significant	▪ MM-HAZ-03	Less than Significant Impact
		Operation	No Impact	None	No Impact
HAZ-4: Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Proposed Project	Construction	Potentially Significant	▪ MM-HAZ-01 ▪ MM-HAZ-02	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	Potentially Significant	▪ MM-HAZ-01 ▪ MM-HAZ-02	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	Potentially Significant	▪ MM-HAZ-01 ▪ MM-HAZ-02	Less than Significant Impact
		Operation	No Impact	None	No Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	Proposed Project	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
HAZ-6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
HAZ-7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
Hydrology and Water Quality					
HWQ-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Proposed Project	Construction	Potentially Significant	MM-HWQ-01, *Temporary Water Diversion Plan*	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Potentially Significant	MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Potentially Significant	MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
HWQ-2: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
HWQ-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would result in substantial erosion or siltation onsite or offsite?	Proposed Project	Construction	Potentially Significant	MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Potentially Significant	MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Potentially Significant	MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
HWQ-4: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious area in a manner that would substantially increase the rate or amount of surface runoff resulting in flooding onsite or offsite?	Proposed Project	Construction	Potentially Significant	MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Potentially Significant	MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Potentially Significant	MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
HWQ-5: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	Proposed Project	Construction	Potentially Significant	MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Potentially Significant	MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Potentially Significant	MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
HWQ-6: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would impede or redirect flood flows?	Proposed Project	Construction	Potentially Significant	▪ MM-HWQ-01 ▪ MM-HWQ-02, *Construction Scheduling*	Less than Significant Impact
		Operation	Potentially Significant	▪ MM-HWQ-03, *Advanced Hydraulic Analysis* ▪ MM-HWQ-04, *Fully Incised Path* ▪ MM-HWQ-05, *Incised/Elevated Transition Widening* ▪ MM-HWQ-06, *Elevated-in-Channel Incised Path* ▪ MM-HWQ-08, *Streamlined Bridge Piers*	Less than Significant Impact
	Option 1	Construction	Potentially Significant	▪ MM-HWQ-01 ▪ MM-HWQ-02	Less than Significant Impact
		Operation	Potentially Significant	▪ MM-HWQ-03 ▪ MM-HWQ-04 ▪ MM-HWQ-05 ▪ MM-HWQ-06 ▪ MM-HWQ-08	Less than Significant Impact
	Option 2	Construction	Potentially Significant	▪ MM-HWQ-01 ▪ MM-HWQ-02	Less than Significant Impact
		Operation	Potentially Significant	▪ MM-HWQ-03 ▪ MM-HWQ-04 ▪ MM-HWQ-05 ▪ MM-HWQ-06 ▪ MM-HWQ-08	Less than Significant Impact
HWQ-7: Result in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Proposed Project	Construction	Potentially Significant	▪ MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Potentially Significant	▪ MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Potentially Significant	▪ MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
HWQ-8: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Proposed Project	Construction	Potentially Significant	▪ MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Potentially Significant	▪ MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Potentially Significant	▪ MM-HWQ-01	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
HWQ-9: Cause changes to flood risk in sensitive reaches of the LA River or conflict with USACE's obligations under Section 408?	Proposed Project	Construction	Potentially Significant	▪ MM-HWQ-01 ▪ MM-HWQ-02	Less than Significant Impact
		Operation	Potentially Significant	▪ MM-HWQ-03 ▪ MM-HWQ-04 ▪ MM-HWQ-05 ▪ MM-HWQ-06 ▪ MM-HWQ-08 ▪ MM-HWQ-09, *Compliance with Section 408 Permit*	Less than Significant Impact
	Option 1	Construction	Potentially Significant	▪ MM-HWQ-01 ▪ MM-HWQ-02	Less than Significant Impact
		Operation	Potentially Significant	▪ MM-HWQ-03 ▪ MM-HWQ-04 ▪ MM-HWQ-05 ▪ MM-HWQ-06 ▪ MM-HWQ-08 ▪ MM-HWQ-09	Less than Significant Impact
	Option 2	Construction	Potentially Significant	▪ MM-HWQ-01 ▪ MM-HWQ-02	Less than Significant Impact
		Operation	Potentially Significant	▪ MM-HWQ-03 ▪ MM-HWQ-04 ▪ MM-HWQ-05 ▪ MM-HWQ-06 ▪ MM-HWQ-08 ▪ MM-HWQ-09	Less than Significant Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
HWQ-10: Cause water quality or hydraulic conflicts with the ultimate implementation of the LARER project?	Proposed Project	Construction	No Impact	None	No Impact
		Operation	Potentially Significant	▪ MM-HWQ-04 ▪ MM-HWQ-05 ▪ MM-HWQ-06 ▪ MM-HWQ-07, *Channel Daylight Crossing Structure* ▪ MM-HWQ-09	Less than Significant Impact
	Option 1	Construction	No Impact	None	No Impact
		Operation	Potentially Significant	▪ MM-HWQ-04 ▪ MM-HWQ-04 ▪ MM-HWQ-06 ▪ MM-HWQ-07 ▪ MM-HWQ-09	Less than Significant Impact
	Option 2	Construction	No Impact	None	No Impact
		Operation	Potentially Significant	▪ MM-HWQ-04 ▪ MM-HWQ-05 ▪ MM-HWQ-06 ▪ MM-HWQ-07 ▪ MM-HWQ-09	Less than Significant Impact
Land Use					
LU-1: Physically divide an established community?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
LU-2: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
Noise and Vibration					
NOI-1: Generate a substantial temporary or permanent increase in ambient noise levels near the project in excess of standards established by the FTA, in the local general plan, noise ordinance, or applicable agency standards?	Proposed Project	Construction	Potentially Significant	▪ MM-NOI-01, *Noise Control and Monitoring Plan*	Significant and Unavoidable
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Potentially Significant	▪ MM-NOI-01	Significant and Unavoidable
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Potentially Significant	▪ MM-NOI-01	Significant and Unavoidable
		Operation	Less than Significant Impact	None	Less than Significant Impact
NOI-2: Generate excessive ground-borne vibration or ground-borne noise levels?	Proposed Project	Construction	Potentially Significant (for damage) Potentially Significant (for annoyance)	▪ MM-NOI-02, *Drill Piles Where Feasible* ▪ MM-VIB-01, *Vibration Control Plan* ▪ MM-VIB-02, *Vibration Monitoring Plan*	Less than Significant Impact (for damage) Significant and Unavoidable (for annoyance)
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Potentially Significant (for damage) Potentially Significant (for annoyance)	▪ MM-NOI-02 ▪ MM-VIB-01 ▪ MM-VIB-02	Less than Significant Impact (for damage) Significant and Unavoidable (for annoyance)
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Potentially Significant (for damage) Potentially Significant (for annoyance)	▪ MM-NOI-02 ▪ MM-VIB-01 ▪ MM-VIB-02	Less than Significant Impact (for damage) Significant and Unavoidable (for annoyance)
		Operation	Less than Significant Impact	None	Less than Significant Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
NOI-3: Expose people residing or working in the RSA to excessive noise levels if the project is located near a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport?	Proposed Project	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
Population and Housing					
PH-1: Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
PH-2: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	No Impact	None	No Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
Public Services/Safety and Security					
PS-1: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable services ratios, response times or other performance objectives for fire protection and emergency services?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
PS-2: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable services ratios, response times or other performance objectives for police protection?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
PS-3: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable services ratios, response times or other performance objectives for schools?	Proposed Project	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
PS-4: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable services ratios, response times or other performance objectives for public libraries?	Proposed Project	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	No Impact	None	No Impact
		Operation	No Impact	None	No Impact
Recreation					
REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
REC-2: Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
REC-3: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for parks?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
Transportation					
TR-1: Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
TR-2: Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
TR-3: Substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
TR-4: Result in inadequate emergency access?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
Tribal Cultural Resources					
TCR-1: Cause a substantial adverse change in the significance of a TCR, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k), or is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision I of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	Proposed Project	Construction	Potentially Significant	▪ MM-TCR-01, *Tribal Monitoring* ▪ MM-CUL-03 ▪ MM-CUL-04	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	Potentially Significant	▪ MM-TCR-01 ▪ MM-CUL-03 ▪ MM-CUL-04	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	Potentially Significant	▪ MM-TCR-01 ▪ MM-CUL-03 ▪ MM-CUL-04	Less than Significant Impact
		Operation	No Impact	None	No Impact
Utilities and System Services					
UTL-1: Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, or other utility or public services facilities, the construction or relocation of which could cause significant environmental impacts?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
UTL-2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
UTL-3: Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
UTL-4: Generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid-waste reduction goals?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
UTL-5: Conflict with federal, state, and local management and reduction statutes and regulations related to solid waste?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	No Impact	None	No Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	No Impact	None	No Impact

Table ES-8. Summary of Impacts by Environmental Resource

Environmental Topic	Proposed Project/ Option	Phase	Impact Before Mitigation	Proposed Mitigation Measure	Impact After Mitigation
Wildfire					
WF-1: Substantially impair an adopted emergency response plan or emergency evacuation plan?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
WF-2: Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
WF-3: Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
WF-4: Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Proposed Project	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 1	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact
	Option 2	Construction	Less than Significant Impact	None	Less than Significant Impact
		Operation	Less than Significant Impact	None	Less than Significant Impact

ES-4 Significant and Unavoidable Impacts

CEQA Guidelines Section 15216.2(b) requires EIRs to include a discussion of significant environmental impacts that cannot be avoided if a project is implemented. In Chapter 3, *Environmental Settings, Impacts, and Mitigation*, Sections 3.2 through 3.19 analyze significant environmental impacts related to the Proposed Project and its options; identify feasible mitigation measures that could avoid or reduce these significant impacts, where available; and present a determination stating whether these mitigation measures would reduce these impacts to a less than significant level. If a specific impact discussed in any of these sections cannot be fully reduced to a less than significant level, it is considered a significant and unavoidable impact. As concluded in the Draft EIR and shown in Table ES-8, the following impacts would be significant and unavoidable for the Proposed Project and its options, even after implementation of mitigation measures:

- Geology, soils, and paleontological resources (paleontological resources during construction)
- Noise and vibration (increase in ambient noise during construction; vibration annoyance during construction)

ES-5 Project Alternatives

CEQA requires that a range of reasonable project alternatives to the Proposed Project is considered that could meet most of the basic project objectives and substantially reduce or eliminate significant impacts associated with the project. According to CEQA Guidelines Section 15126.6(a):

> "An EIR shall describe the range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation."

Project Alternatives are summarized below, and are described in more detail in Chapter 5, *Alternatives*.

ES-5.1 No Project Alternative

The No Project Alternative is required by CEQA Guidelines Section 15126.6(e)(2) and assumes that the Proposed Project would not be implemented. The Proposed Project is identified in the LARMP as the "Metro LA River Path." Under the No Project Alternative, the approximately 8-mile stretch of the LA River from Elysian Valley in the City of Los Angeles to the Cities of Vernon and Maywood would not be developed with an active transportation path. The 8-mile gap between the existing Los Angeles River Greenway Trail and the existing LA River Trail along the LA River would remain and connectivity between the existing pedestrian and bicycle paths would not occur. The Project footprint along the LA River would remain a flood channel and remain closed to the public. No new access points to the surrounding parks and recreational facilities would be developed and path elements such as lighting, landscaping, and signage would not exist. In addition, no new bridges and piers would be constructed in the LA River and no new river crossings related to the Project would occur.

The No Project Alternative assumes that projects in the regional area would continue to progress as identified in local general plans, capital improvement programs, and regional plans, including the Southern California Association of Government's (SCAG's) *Connect SoCal—The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy* (Connect SoCal) (SCAG 2020) and other proposed projects identified in the LARMP, including the Los Angeles River Ecosystem Restoration (LARER) project. Under the No Project Alternative, the LARMP would continue to serve as the existing planning framework for enhancing the LA River, including the Project area.

ES-5.2 Mostly-East Bank Alternative

The Mostly-East Bank Alternative, known as Alignment D in the Conceptual Design Report, proposes a pedestrian and bicycling path alignment running predominantly along the east bank of the LA River from the northern terminus of the existing LA River Greenway Trail at Riverside Drive in the City of Los Angeles to the southern terminus of the existing path at Atlantic Boulevard. Starting at the north end on the western bank where the LA River Greenway Trail ends, this alternative would cross over the LA River to operate on the east bank north of Mission Road/Cesar E. Chavez to just north of Washington Boulevard/Redondo Junction. Due to physical and hydrological constraints, only a west bank option is possible at the Redondo Junction and the Mostly-East Bank Alternative would require a gap in the alignment path starting at the Redondo Junction before continuing along the east bank and connecting with the existing bike path at Atlantic Boulevard. The alternative would be directly adjacent to the river's east bank between the channel and at-grade active rail facilities. The Mostly-East Bank Alternative would include 10 access points: Figueroa Street (Existing), Los Angeles State Historic Park/Main Street, Mission Road/Cesar E Chavez, Union Station, First Street, Seventh Street, Washington Boulevard, Bandini Boulevard, Downey Road, and Atlantic Boulevard.

ES-5.3 Mostly-West Bank Alternative

The Mostly-West Bank Alternative, known as Alignment E in the Conceptual Design Report, proposes a pedestrian and bicycling path predominantly along the west bank of the LA River from the northern terminus of the existing path at Elysian Park to the southern terminus of the existing path at Atlantic Boulevard. The Mostly-West Bank Alternative would follow the western bank of the LA River in the area between the channel and at-grade active rail facilities. Starting at the north end on the western bank where the LA River Greenway Trail ends, the Mostly-West Bank Alternative would cross over the LA River to operate on the eastern bank between Ed. P. Reyes Greenway and Albion Park, then cross back to the west bank at the LA State Historic Park access point and stays on the west bank until Washington Boulevard. This alternative would then operate on the east bank until just north of Atlantic Boulevard where the alignment would cross back to the west bank and connect with the existing access point at Atlantic Boulevard. The Mostly-West Bank Alternative would include 10 access points: Ed P. Reyes Greenway, Albion Park/Main Street, Los Angeles State Historic Park/Main Street, Mission Road/Cesar E Chavez Avenue, Union Station, First Street, Sixth Street Tunnel, Washington Boulevard, Bandini-Soto Triangle, and Downey Road.

ES-5.4 Shortened Northern Path Alternative

The Shortened Northern Path Alternative would not meet the Project's primary objective. The Shortened Northern Path Alternative would have a northern terminus of the existing LA River Greenway Trail in the City of Los Angeles and a southern terminus at Sixth Street and would not close the entire 8-mile gap along the LA River between Elysian Valley and the City of Vernon. This alternative would result in limited or no access to the local neighborhoods south of Sixth Street.

ES-5.5 Shortened Southern Path Alternative

The Shortened Southern Path Alternative would not meet the Project's primary objective. The Shortened Southern Path Alternative would have a northern terminus at First Street in the City of Los Angeles and a southern terminus at Atlantic Boulevard in the City of Vernon and would not close the entire 8-mile gap along the LA River between Elysian Valley and the City of Vernon. This alternative would result in limited or no access to the local neighborhoods north of First Street.

ES-5.6 Comparison of Alternatives

Table ES-9 summarizes the environmental impacts of the alternatives compared to the Proposed Project and identifies if the alternatives would have greater, lesser, or similar impacts compared to the Proposed Project. Additional detail is described in Chapter 5, *Alternatives*.

Table ES-9. Alternatives Comparison of Environmental Impacts Relative to the Proposed Project

Environmental Topics	Construction/ Operation	Proposed Project	No Project Alternative	Mostly-East Bank Alternative	Mostly-West Bank Alternative	Shortened Northern Path Alternative	Shortened Southern Path Alternative
Aesthetics and Visual Resources	Construction	LTS	↓	=	=	↓	↓
	Operation	LTS	↓	=	=	↓	↓
Air Quality	Construction	LTS	↓	=	=	↓	↓
	Operation	LTS	↑	=	=	↑	↑
Biological Resources	Construction	LTSM	↓	↓	=	↓	↓
	Operation	LTS	↓	=	=	↓	↓
Cultural Resources	Construction	LTSM	↓	=	=	↓	↓
	Operation	NI	=	=	=	=	=
Energy	Construction	LTS	↓	=	=	↓	↓
	Operation	LTS	↑	=	=	↑	↑
Geology, Soils, and Paleontological Resources	Construction	SU	↓	=	=	↓	↓
	Operation	LTS	↓	=	=	↓	↓
Greenhouse Gas Emissions	Construction	LTS	↓	=	=	↓	↓
	Operation	LTS	↑	=	=	↑	↑
Hazards and Hazardous Materials	Construction	LTSM	↓	=	=	↓	↓
	Operation	LTS	↓	=	=	↓	↓
Hydrology and Water Quality	Construction	LTSM	↓	=	=	↓	↓
	Operation	LTSM	↑	=	=	↓	↓
Land Use and Planning	Construction	LTS	↓	=	=	=	=
	Operation	LTS	↑	=	=	=	=

Table ES-9. Alternatives Comparison of Environmental Impacts Relative to the Proposed Project

Environmental Topics	Construction/ Operation	Proposed Project	No Project Alternative	Mostly-East Bank Alternative	Mostly-West Bank Alternative	Shortened Northern Path Alternative	Shortened Southern Path Alternative
Noise and Vibration	Construction	SU	↓	↓	↓	↓	↓
	Operation	LTS	↓	=	=	↓	↓
Population and Housing	Construction	LTS	↓	=	=	=	=
	Operation	LTS	↓	=	=	=	=
Public Services/ Safety and Security	Construction	LTS	↓	=	=	↓	↓
	Operation	LTS	↑	=	=	↓	↓
Recreation	Construction	LTS	↓	=	=	=	=
	Operation	LTS	↓	=	=	↓	↓
Transportation	Construction	LTS	↓	=	=	↓	↓
	Operation	LTS	↑	=	=	↑	↑
Tribal Cultural Resources	Construction	LTSM	↓	=	=	↓	↓
	Operation	NI	=	=	=	=	=
Utilities and Service Systems	Construction	LTS	↓	=	=	↓	↓
	Operation	LTS	↓	=	=	↓	↓
Wildfire	Construction	LTS	↓	=	=	=	↓
	Operation	LTS	↓	=	=	=	↓

Notes:

LTS = Less Than Significant

LTSM = Less Than Significant with Measures Incorporated

NI = No Impact

SU = Significant and Unavoidable

↑: Greater Impacts compared to the Proposed Project

↓: Lesser Impacts compared to the Proposed Project

=: Similar Impacts compared to the Proposed Project

ES-5.6.1 No Project Alternative

The No Project Alternative would have similar impacts compared to the Proposed Project for cultural resources (operation), tribal cultural resources (TCRs) (operation), and noise and vibration (operation). The No Project Alternative would not include operation and maintenance (O&M) activities that would disturb cultural resources and TCRs and would result in no impacts. Under the No Project Alternative, impacts for noise and vibration (operation) would be less than significant and have similar impacts to the Proposed Project. The reduction in vehicular traffic associated with the Proposed Project would not occur as a result of the No Project Alternative and vehicle miles traveled (VMT) would not be reduced. Traffic noise could be greater than Proposed Project, but the No Project Alternative would avoid minor O&M noises associated with the Proposed Project. Therefore, the No Project Alternative would result in less than significant impact related to both noise and vibration, similar to the Proposed Project during operation.

The No Project Alternative would not result in Project-related construction and O&M activities and would have fewer impacts compared to the Proposed Project for the following environmental resources: aesthetics/visual resources; air quality (construction); biological resources; cultural resources (construction); energy (construction); geology, soils, and paleontological resources; GHG (construction); hazards and hazardous materials; hydrology and water quality; land use and planning (construction); noise and vibration (construction); population and housing; public services/safety and security (construction); recreation (construction); transportation (construction); TCRs (construction); utilities and service systems; and wildfire.

The No Project Alternative would have greater impacts compared to the Proposed Project for the following environmental resources: air quality (operation), energy (operation), GHG (operation), land use (operation), public services/safety and security (operation), recreation (operation), and transportation (operation). Air quality (operation), energy (operation), GHG (operation), and transportation (operation) impacts would be greater than the Proposed Project as a result having lower VMT reductions compared to the Proposed Project. Land use (operation) impacts would be greater than the Proposed Project because the No Project Alternative would not meet the objectives of the LA River Revitalization Master Plan and other applicable regional and local plans to provide linkages and connections to nearby communities, encourage alternative modes of transportation, and provide safe bicycle facilities for people of all types and abilities. Public services/safety and security (operation) and recreation (operation) impacts would be greater than the Proposed Project because the No Project Alternative would not construct additional access points to the LA River, nor incorporate additional safety features along the LA River associated with the Proposed Project.

ES-5.6.2 Mostly-East Bank Alternative

The Mostly-East Bank Alternative would have similar impacts for almost all environmental resources compared to the Proposed Project. Impacts to cultural resources (construction) would be less than significant with mitigation and similar to the Proposed Project during construction. Excluding historic bridges, nine identified historical resources are situated along the west bank and two identified historical resources are situated along the east bank through this area. Compared to the Proposed Project, this alternative would avoid potential less than significant impacts to the property and historic setting of HR-44. However, compared to the Proposed Project one additional historic property (HR-38) may be impacted by construction vibration due to the closer proximity of construction activity on the east bank and one historic property (HR-33) may no longer be impacted as a result of pile driving no longer occurring in its vicinity. As a result, similar to the Proposed Project, this alternative would result in construction-related vibration impacts to historic resources located in close proximity to construction activities, which would generally involve those historical resources located along the east bank of the LA River Channel. This alternative would implement the same mitigation measures as the Proposed Project to avoid construction impacts on built-environment historical resources.

This alternative would have fewer impacts related to biological resources (construction) and noise and vibration (construction annoyance). This alternative would have fewer impacts related to biological resources (construction) because it may not require the removal of the southern California black walnut trees located along the western riverbank between the Riverside Drive Viaduct and the SR-110 Bridge and would therefore result in fewer impacts related to the removal of protected trees, migratory birds, and loss of nesting habitats than the Proposed Project.

Impacts related to noise and vibration (construction annoyance) would be significant and unavoidable and less than the Proposed Project during construction. The path type near Receptors 17, 18, and 19 would no longer require pile driving and the severity of noise and vibration impacts may be reduced. General construction activity may still result in noise and vibration impacts at these receptors. One

additional historic property (HR-38) may be impacted by construction vibration due to the closer proximity of construction activity on the east bank and one historic property (HR-33) may not be impacted as a result of pile driving no longer occurring in its vicinity, compared to the Proposed Project. This alternative would implement the same mitigation measures as the Proposed Project to reduce noise and vibration impacts during construction. It is anticipated that potential significant vibration damage impacts would be reduced with the implementation of mitigation measures similar to the Proposed Project. However, like the Proposed Project, construction of the Mostly-East Bank Alternative may still result in noise and vibration annoyance impacts due to the proximity of adjacent sensitive receptors and the potential use of pile drivers.

This alternative would not have greater impacts compared to the Proposed Project.

ES-5.6.3 Mostly-West Bank Alternative

The Mostly-West Bank Alternative would have similar impacts for almost all environmental resources compared to the Proposed Project. Impacts to cultural resources (construction) would be less than significant with mitigation and similar to the Proposed Project during construction. This alternative would have potential less than significant impacts to the historic setting of HR-47 because the path alignment would be situated along the opposite side of the LA River; however, new potential impacts to HR-26 may occur. Such impacts to HR-26 would be similar to those described for Option 2 and would be less than significant. A reduction in vibration impacts at one historic property (HR-33) would also occur due to increased distance from construction activity. As a result, similar to the Proposed Project, this alternative would result in construction-related vibration impacts to historic resources located in close proximity to construction activities which would generally involve those historical resources located along the west bank of the LA River Channel. This alternative would implement the same mitigation measures as the Proposed Project to avoid construction impacts on built-environment historical resources.

Impacts related to noise and vibration (construction annoyance) would be significant and unavoidable and less than the Proposed Project during construction. This path alignment would be predominantly on the west bank where sensitive receptors are sporadically located within primarily industrials uses. As the construction activity would primarily occur on the west bank, sensitive receptors on the east bank would be less impacted by construction noise and vibration. Specifically, residences located between the US-101 freeway and Second Street (Receptors 17, 18, and 19) on the east bank would receive a reduction in noise and vibration impacts as a result of the increased distance and path type no longer requiring pile driving. The One Santa Fe Apartments (Receptor 20) may experience increased construction noise and vibration due to construction activity occurring at a closer distance than under the Proposed Project. A reduction in vibration impacts at HR-33 would also occur due to increased distance from construction activity, compared to the Proposed Project. Potential significant vibration damage impacts would be reduced with the implementation of mitigation measures similar to the Proposed Project. However, like the Proposed Project, construction of the Mostly-West Bank Alternative may still result in noise and vibration annoyance impacts due to the proximity of adjacent sensitive receptors and the potential use of pile drivers.

This alternative would not have greater impacts compared to the Proposed Project.

ES-5.6.4 Shortened Northern Path Alternative

The Shortened Northern Path Alternative would have similar impact compared to the Proposed Project for cultural resources (operation), land use planning, population and housing, recreation, TCRs (operation), and wildlife.

As a result of a shortened alignment, this alternative would have fewer impacts compared to the Proposed Project for the following environmental resources: aesthetic/visual resources, air quality (construction), biological resources, cultural resources (construction), energy (construction), geology, soils, and paleontological resources, GHG (construction), hazards and hazardous materials, hydrology and water quality, noise and vibration, public services/safety and security, transportation (construction), TCRs (construction) and utilities and service systems. In particular, cultural resources (construction) would have reduced impacts because this alignment would avoid potentially significant impacts to the Washington Boulevard Bridge and Atlantic Boulevard Bridge associated with the path alignment of the Proposed Project. The number of historic properties that would be potentially exposed to excessive vibration would be reduced by six properties compared to the Proposed Project. This alternative would implement the same mitigation measures as the Proposed Project to avoid construction impacts on built-environment historical resources and impacts. Therefore, impacts to historic resources would be less than significant with mitigation and less than the Proposed Project during construction.

Significant and unavoidable impacts related to paleontological resources (construction) and noise and vibration impacts (construction) would be reduced under this alternative, compared to the Proposed Project, due to the shorter alignment and reduced construction activities. However, these impacts would remain significant and unavoidable even after implementation of mitigation measures, though to a lesser extent compared to the Proposed Project. In particular, noise and vibration (construction) would have reduced impacts due to its shorter alignment. The number of noise and vibration sensitive receptors affected would be reduced by three sensitive receptors compared to the Proposed Project and the number of historic properties that would be potentially exposed to excessive vibration would be reduced by six properties. This alternative would implement the same mitigation measures as the Proposed Project to reduce noise and vibration impacts during construction. It is anticipated that potential vibration damage impacts would also be able to be mitigated. However, like the Proposed Project, this alternative may still result in noise and vibration annoyance impacts due to the proximity of adjacent sensitive receptors and the potential use of pile drivers. Impacts to noise and vibration annoyance (construction) would be significant and unavoidable but less than the Proposed Project during construction.

In addition, this alternative would result in fewer impacts for hydrological impacts compared to the Proposed Project. However, this alternative would still be located within LA River Reaches 7 and 8 in conjunction with the LARER project and within a 100-year flood zone, thus requiring mitigation measure specific to Reaches 7 and 8, similar to the Proposed Project. This alternative would not avoid hydrological impacts at Reaches 7 and 8. Nonetheless, this alternative would result in lesser impacts to hydrological resources compared to the Proposed Project because of the shorter alignment and avoidance of hydrological impacts associated with the construction of piers and elevated crossings related to the Proposed Project south of Sixth Street and near the Washington Boulevard (Redondo Junction), Bandini-Soto Triangle, and Atlantic Boulevard access points. Similar to the Proposed Project, this alternative would be an active transportation path that would result in a reduction of passenger vehicle trips to the region and in a reduction in VMT. However, as a result of the shortened alignment from the northern terminus of the existing LA River Greenway Trail to Sixth Street, this alternative would not reduce VMTs to the same level as the Proposed Project. As a result, the

alternative would have greater levels of impact compared to the Proposed Project for air quality (operation), energy (operation), GHG (operation), and transportation (operation).

This alternative would not have greater impacts compared to the Proposed Project.

ES-5.6.5 Shortened Southern Path Alternative

The Shortened Southern Path Alternative would have similar impacts compared to the Proposed Project for cultural resources (operation), land use planning, population and housing, recreation, and TCRs (operation).

As a result of a shortened alignment from the First Street to southern terminus at Atlantic Boulevard, this alternative would have fewer impacts compared to the Proposed Project for the following environmental resources: aesthetic/visual resources, air quality (construction), biological resources, cultural resources (construction), energy (construction), geology, soils, and paleontological resources, GHG (construction), hazards and hazardous materials, hydrology and water quality, noise and vibration, public services/safety and security, transportation (construction), TCRs (construction), utilities and service systems, and wildfire. In particular, cultural resources (construction) would have reduced impacts because potentially significant impacts to the North Main Street Bridge and Cesar E Chavez Viaduct associated with the path alignment of the Proposed Project would be avoided by this alternative. The number of historic properties potentially exposed to excessive vibration would be reduced by 15 properties. This alternative would implement the same mitigation measures as the Proposed Project to avoid construction impacts on built-environment historical resources and impacts. Therefore, impacts to historic resources would be less than significant with mitigation and less than the Proposed Project during construction.

Significant and unavoidable impacts related to paleontological resources (construction) and noise and vibration impacts (construction) would be reduced under this alternative due to the shorter alignment and reduced construction activities compared to the Proposed Project. However, these impacts would remain significant and unavoidable even after implementation of mitigation measures, though to a lesser extent compared to the Proposed Project. In particular, noise and vibration (construction) would have reduced impacts due to its shorter alignment, reduction in construction activities, and no construction north of First Street. The number of noise and vibration sensitive receptors affected would be reduced by 19 sensitive receptors compared to the Proposed Project and the number of historic properties that would be potentially exposed to excessive vibration would be reduced by 15 properties. This alternative would implement the same mitigation measures as the Proposed Project to reduce noise and vibration impacts during construction. It is anticipated that potential vibration damage impacts would also be able to be mitigated. However, like the Proposed Project, this alternative may still result in noise and vibration annoyance impacts due to the proximity of adjacent sensitive receptors and the potential use of pile drivers. Impacts to noise and vibration annoyance (construction) would be significant and unavoidable but less than the Proposed Project during construction.

This alternative would result in lesser impacts for hydrological impacts compared to the Proposed Project. This alternative would not be located within LA River Reaches 7 and 8 in conjunction with the LARER project and would not be within a 100-year flood zone. Thus, the Proposed Project's mitigation measure specific to Reaches 7 and 8 and the LARER project would not be required, and fewer hydrology mitigation measures are needed compared to the Proposed Project. This alternative would still have hydrological impacts associated with the construction of piers and elevated crossings related to the Proposed Project south of Sixth Street and near the Washington Boulevard (Redondo Junction), Bandini-Soto Triangle, and Atlantic Boulevard access points. However, hydrological impacts are

reduced because of the shorter alignment and would result in lesser impacts to hydrological resources compared to the Proposed Project. In addition, this alternative would be substantially within the same footprint as the Proposed Project south of First Street and would not be located within a designated Very High Fire Hazard Severity Zone (VHFHSZ), resulting in no wildfire impacts compared to the Proposed Project. Similar to the Proposed Project, this alternative would be an active transportation path that would result in a reduction of passenger vehicle trips to the region and in a reduction in VMT. However, as a result of the shortened alignment from the First Street to the southern terminus at Atlantic Boulevard, this alternative would not reduce VMTs to the same level as the Proposed Project. As a result, the alternative would have greater levels of impact compared to the Proposed Project for air quality (operation), energy (operation), GHG (operation), and transportation (operation).

This alternative would not have greater impacts compared to the Proposed Project.

ES-6 Environmentally Superior Alternative

According to CEQA Guidelines Section 15126.6(a), a Draft EIR must identify an "environmentally superior alternative" to determine which alternative possesses an overall environmental advantage when compared to all other alternatives evaluated in the Draft EIR. If the environmentally superior alternative is the No Project Alternative, CEQA requires the identification of an environmentally superior other than the No Project Alternative. The environmentally superior alternative can inform decision-makers as part of the project approval process; however, Metro is not required by CEQA to select the environmentally superior alternative as the locally approved project.

As shown in Table ES-9, the No Project Alternative would avoid, have similar, or have reduced significant impacts for almost all environmental resources associated with the Proposed Project, but may have a slightly greater impact related to air quality (operation), energy (operation), GHG (operation), land use and planning (operation), noise and vibration (operation), public services/safety and security (operations), and transportation (operation).

The Shortened Southern Alignment would have the greatest reductions in impacts to environmental resources compared to the other alternatives aside from the No Project Alternative. Therefore, the Shortened Southern Alternative is the environmentally superior alternative as it would further reduce impacts to aesthetic/visual resources, air quality (construction), biological resources, cultural resources (construction), energy (construction), geology, soils, and paleontological resources, GHG (construction), hazards and hazardous materials, hydrology and water quality, noise and vibration, public services/safety and security, transportation (construction), TCRs (construction), utilities and service systems, and wildfire compared to the Proposed Project.

ES-7 Public Outreach

Metro has implemented a comprehensive outreach program for the Project in an effort to better understand the communities that live in and near the Project area, their priorities, and how the Project can best meet their needs. During the conceptual design phase, the Project team held nine community meetings and 23 pop-up events and administered two online survey tools to gather community input. More than 300 people participated in the nine community meetings, more than 4,600 comments were received through all in-person events, and more than 3,800 responses were received for the two online and in-person surveys. Outreach during the conceptual design phase helped inform the Project's mission statement, goals, path types, and access point opportunities.

Metro's scoping outreach program for the Project worked to increase awareness and disseminate information, gather public input, and support the technical and legal environmental process. In alignment with Metro's Public Participation Plan, in Title IV, *Environmental Justice and Limited English Proficiency*, accommodations were made to expand participation during the public scoping process. Notification of public scoping meetings were published in eight newspapers highly circulated in areas potentially affected by the Project. A variety of other noticing methods were also implemented in advance of the public scoping meetings, including mailed notices, email notice distributions, information posted to the Metro website, hand-distributed flyers, geo-targeted Facebook advertisements, and Metro Marketing efforts. Metro conducted four public scoping meetings in Boyle Heights, Little Tokyo/Arts District, City of Maywood, and Cypress Park during the 45-day scoping period. Metro received a total of 148 written and oral comments during the public scoping period.

Metro filed an NOP for the Project Draft EIR on October 23, 2019, with the State of California Office of Planning and Research's State Clearinghouse and the Los Angeles County Clerk. The NOP provided notice for responsible agencies to transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 45 days of receiving the NOP from the Lead Agency (Metro). The NOP also invited public participation in the EIR scoping process and announced scheduled scoping meetings.

ES-8 Areas of Controversy and Issues to be Resolved

ES-8.1 Areas of Controversy

CEQA Guidelines Section 15123(b)(2) requires that an EIR identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public.

During the public comment period for the NOP, various comment letters were received regarding the Project. The comments submitted on the NOP during the public review and comment period are in Appendix A, *Public Participation and Outreach*. Areas of potential controversy known to Metro are discussed in the *Scoping Summary Report* (also in Appendix A, *Public Participation and Outreach*). Areas of known controversy are briefly summarized as follows:

- Project construction costs
- Safety and security for path users
- Air quality and odor along the path
- Equity concerns for disadvantaged communities
- Connectivity to recreation and key destinations
- Impacts related to hazardous materials

ES-8.2 Issues to be Resolved by the Decision-Making Body

CEQA Guidelines Section 15123(b)(3) requires a discussion of issues to be resolved, including a choice of alternatives and whether or how to mitigate significant impacts. The Metro Board will decide if the significant impacts associated with biological resources, cultural resources hazards and hazardous materials, hydrology and water quality, and TCRs have been fully mitigated to below a level of significance. Impacts related to geology, soils, and paleontological resources (during construction)

and noise and vibration (during construction) would remain significant and unavoidable. The Metro Board will also decide if any Proposed Project alternatives substantially reduce significant impacts while still meeting the key Project objectives, and if one of the alternatives could be approved. Upon the completion of the Final EIR and other required documentation, if warranted, the Metro Board will adopt findings relative to the Project's environmental effects, and prepare a statement of overriding considerations, in conjunction with the certification of the Final EIR and approval of the Project.

The following issues are to be resolved as the Project proceeds through the environmental process and interested-party coordination:

- Selection of alignment
- Selection of access points
- Selection of design variations
- Selection of the Final EIR Project (Metro Board will select a Final EIR Project after circulation of the Draft EIR)
- Funding shortfall
- Phasing of the Project based on available funding

ES-9 References

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