# Shoemaker Bridge Replacement Project

CITY OF LONG BEACH
LOS ANGELES COUNTY, CALIFORNIA
07-LA-710 (PM 6.0/6.4)
EA: 27300/ SCH No. 2016041007

## Final Environmental Impact Report/ Environmental Assessment

**Prepared by the**
**State of California, Department of Transportation**
**and the**
**City of Long Beach**

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans.

April 2020

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FHWA Highway ID No.

SCH# 2016041007
07-LA-710 PM 6.0/6.4
EA# 27300
EFIS# 0700021122

Shoemaker Bridge Replacement Project
(Postmile 6.0 to 6.4), in the City of Long Beach,
Los Angeles County, California.

# Final Environmental Impact Report/ Environmental Assessment

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 U.S.C. 4332(2)(c) and 49 U.S.C. 303 and/or 23 USC 138

THE STATE OF
CALIFORNIA
Department of Transportation
and
THE CITY OF LONG BEACH

Responsible Agency: California Department of Transportation

April 8, 2020
Date of Approval

Ronald Kosinski
Caltrans District 7 Deputy District Director
District 7 Division of Environmental Planning
California Department of Transportation
NEPA Lead Agency

April 9, 2020
Date of Approval

Alvin Papa
City Engineer Department of Public Works
City of Long Beach
CEQA Lead Agency

The following persons may be contacted for more information about this document:

Jason Roach
California Department of Transportation
100 South Main Street, MS-16A
Los Angeles, CA 90012-3712
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for the City of Long Beach
333 West Ocean Boulevard
Long Beach, CA 90802
Phone No: (562) 570-6634

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CALIFORNIA DEPARTMENT OF TRANSPORTATION
**FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

*Shoemaker Bridge Replacement Project*

FOR

The California Department of Transportation (Caltrans) and the City of Long Beach have determined that Alternative 3 (Design Option A), or the Preferred Alternative and Design Option, will have no significant impact on the human environment. The Preferred Alternative and Design Option will remove existing Shoemaker Bridge in the City of Long Beach, California. The Project is located at the southern end of State Route 710 (SR-710) (Post Mile 6.0/6.4), and would construct a replacement bridge just south of the existing bridge location. The new Shoemaker Bridge would consist of multiple structures, with spans that cross the Los Angeles River, the northbound lanes of SR-710, and the LA River and Rio Hondo Trail. Local road improvements would occur throughout the Project limits including those on West Shoreline Drive, 3rd Street, Ocean Avenue, Golden Shore/Golden Avenue, West Seaside Avenue, West Broadway, 6th Street, 7th Street, 9th Street, 10th Street, and Anaheim Street.

As of June 24, 2020, the Federal Highway Administration (FHWA) has indicated that the Project has satisfactorily demonstrated requirements under the Transportation Conformity rules and regulations as the scope and concept of the project is consistent with the amended 2020 RTP. A copy of the FHWA transportation conformity letter is included as an attachment to this Finding of No Significant Impact (FONSI).

This FONSI is based on the attached Environmental Impact Report/Environmental Assessment (EIR/EA), which has been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed Project, and includes the appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached EA.

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code (USC) 327 and the Memorandum of Understanding dated December 23, 2016, executed by FHWA and Caltrans.*

June 30, 2020
Date

Ronald Kosinski
Ronald Kosinski
Caltrans District 7 Deputy District Director

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# FHWA Transportation Conformity Letter

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U.S. Department of Transportation
Federal Highway Administration

**California Division**

650 Capitol Mall, Suite 4-100
Sacramento, CA 95814
(916) 498-5001
(916) 498-5008 (FAX)

June 24, 2020

In Reply, Refer To:
HDA-CA

John Bulinski, District Director
California Department of Transportation
District 7
100 South Main Street, Suite 100
Los Angeles, CA 90012-3606

Attention: Andrew Yoon

Dear Mr. Bulinski:

SUBJECT: Project Level Conformity Determination for the SR-710 Shoemaker Bridge Replacement Project (MPO FTIP ID LA0G830)

On June 8, 2020, the California Department of Transportation (Caltrans) submitted to the Federal Highway Administration (FHWA) a complete request for a project level conformity determination for the SR-710 Shoemaker Bridge Replacement Project. The project is in an area that is designated Non-Attainment or Maintenance for Ozone, Carbon Monoxide (CO) and Particulate Matter (PM10, PM 2.5).

The project level conformity analysis submitted by Caltrans indicates that the project-level transportation conformity requirements of 40 CFR Part 93 have been met. The project is included in the Southern California Association of Governments' (SCAG) current Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP), as amended. The design concept and scope of the preferred alternative have not changed significantly from those assumed in the regional emissions analysis.

As required by 40 CFR 93.116 and 93.123, the localized PM2.5 and PM10 analyses are included in the documentation. The analyses demonstrate that the project will not create any new violations of the standards or increase the severity or number of existing violations.

Based on the information provided, FHWA finds that the SR-710 Shoemaker Bridge Replacement Project conforms with the State Implementation Plan (SIP) in accordance with 40 CFR Part 93.

If you have any questions pertaining to this conformity finding, please contact Joseph Vaughn at (916) 498-5346 or by email at Joseph.Vaughn@dot.gov.

Sincerely,

TASHIA J CLEMONS
Digitally signed by TASHIA J CLEMONS
Date: 2020.06.24 06:52:52 -07'00'

Tashia J. Clemons
Director, Planning and Environment

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# Final Adopted FTIP/RTP Project Listings

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**TABLE 2** Financially-Constrained RTP/SCS Projects - Continued

| System | Lead Agency | RTP ID | Route # | Route Name | From | To | Description | Completion Year | Project Cost ($1,000's) |
|---|---|---|---|---|---|---|---|---|---|
| **County: Los Angeles** | | | | | | | | | |
| LOCAL HIGHWAY | LONG BEACH | 7120018-LA0G1448 | 0 | | PIER J | PIER G | DOUBLE TRACK ACCESS FROM PIER G TO PIER J. CREATING A NEW 9,000-FOOT DEPARTURE TRACK FOR TRAINS SERVING FOUR MARINE TERMINALS ALONG THE EAST BASIN: PIER J PCT, PIER G ITS, PIER G METRO, AND PIER E/F LBCT. REMOVES ONE TRACK FROM ITS SOUTH RAILYARD, TOTALING 1,800 FEET. ADDS 7 NEW TRACKS TOTALING 5,700 FEET TO STORAGE YARD EAST OF PIER J AVE. | 2022 | $25,000 |
| LOCAL HIGHWAY | LONG BEACH | 7120018-LA0G1449 | 0 | | MIDDLE HARBOR EXIT GATE | PICO AVE. | PIER D STREET REALIGNMENT PROJECT. REALIGN PIER D ST BETWEEN MIDDLE HARBOR OUT GATE AND PICO AVE AND BROADWAY BETWEEN OLD POLB MAINTENANCE YARD (WESTERN TERMINUS OF THE ROADWAY) AND PICO AVE. | 2023 | $32,000 |
| LOCAL HIGHWAY | LONG BEACH | LA0C8094-LA0C8094 | 0 | | 9TH STREET | PIER B ST. S. | PIER B INTERMODAL RAILYARD EXPANSION. PROJECT WILL EXPAND PIER B INTERMODAL RAILYARD TO FACILITATE ADDITIONAL RAIL SHIPMENTS. | 2032 | $440,007 |
| LOCAL HIGHWAY | LONG BEACH | LA0G830-LA0G830 | 0 | | N/A | N/A | I-710 IMPROVEMENTS/SHOEMAKER BRIDGE REPLACEMENT: REPLACE THE EXISTING SHOEMAKER BRIDGE WITH A NEW BRIDGE. THE NEW BRIDGE WILL BE REDUCED TO HAVE TWO MIXED-FLOW LANES IN THE NB AND IN THE SB DIRECTIONS TO TIE THE FLOW INTO I-710. THE NEW BRIDGE WILL ALSO INCLUDE PEDESTRIAN AND BICYCLE ACCESS. ADDITIONALLY, BICYCLE, PEDESTRIAN, AND STREET ENHANCEMENTS WILL BE PROVIDED ON ADJACENT THOROUGHFARES. | 2025 | $330,000 |
| LOCAL HIGHWAY | LONG BEACH | LAE0701-LAE0701 | 0 | | 710 FREEWAY | LONG BEACH BLVD. | DEVELOP AND IMPLEMENT TRAFFIC CALMING MEASURES FOR TRAFFIC EXITING THE I-710 INTO LONG BEACH | 2019 | $1,920 |
| LOCAL HIGHWAY | LOS ANGELES COUNTY | 1A1005-LAF3136 | 0 | | MAGIC MOUNTAIN PARKWAY | HENRY MAYO DRIVE | WIDEN THE OLD ROAD FROM N. OF MAGIC MOUNTAIN PKWY TO HENRY MAYO DR TO 1200 FT WEST OF THE OLD ROAD. PROJECT LOCATED ON THE OLD RD. FROM APPROX. 700 FT NORTH OF MAGIC MOUNTAIN PKWY TO HENRY MAYO DR FROM THE OLD ROAD TO THE SR126 HOOK RAMPS, AND RYE CANYON RD BTWN THE OLD ROAD & AVENUE STANFORD. WIDENING BRIDGE APPROACHES FROM 4 TO 6 LANES, REPLACE BRIDGE #53C0327 & #53C0328, TO REDUCE BOTTLENECK. | 2023 | $61,798 |
| LOCAL HIGHWAY | LOS ANGELES COUNTY | 1AL04-LA0G1068 | 0 | | 500' EAST OF NORWALK BLVD | 500' WEST OF NORWALK BLVD | INTERSECTION IMPROVEMENTS AT NORWALK BOULEVARD AND WASHINGTON BOULEVARD. PROVIDE ADDITIONAL WESTBOUND THRU LANE ALONG WASHINGTON BOULEVARD. INCREASE NORTHBOUND LEFT TURN STORAGE ALONG NORWALK BOULEVARD. | 2019 | $560 |
| LOCAL HIGHWAY | LOS ANGELES COUNTY | 1AL04-LA0G1069 | 0 | | 500' EAST OF WHITTIER BOULEVARD | 500' WEST OF WHITTIER BOULEVARD | VARIOUS INTERSECTION IMPROVEMENTS AT NORWALK BOULEVARD AND WHITTIER BOULEVARD INCLUDING LEFT TURN PHASING, RIGHT TURN PHASING, ADDING RIGHT TURN LANES, AND LEFT TURN STORAGE LENGTHENING. A THRU LANE WILL BE CONFIGURED THROUGH SOME WIDENING AND RE-STRIPPING ON SOUTHBOUND NORWALK ABOUT 350 FEET ON BOTH SIDES OF THE INTERSECTION | 2020 | $2,930 |

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# 2019 Federal Transportation Improvement Program

Los Angeles County
Local Highway
Including Amendment 1-5
(In $000`s)

| ProjectID | County | Air Basin | Model | RTP ID | Program | Route | Begin | End | Signage Begin | Signage End | System | Conformity Category | Amendment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LA0G171 | Los Angeles | SCAB | | 1AL04 | RAN07 | | | | | | L | EXEMPT - 93.126 | 0 |
| Description: | | | | | | | PTC | 12,800 | | | Agency | LONG BEACH | |

Navy Mole Storage Yard: The proposed project includes three new tracks along the west side of Pier T. This project will also involve relocating the existing utilities.

| Fund | ENG | R/W | CON | Total | Prior | 2018/2019 | 2019/2020 | 2020/2021 | 2021/2022 | 2022/2023 | 2023/2024 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PORT FUNDS | 1,500 | 100 | 11,200 | 12,800 | 1,500 | 1,100 | 10,200 | | | | | 12,800 |
| LA0G171 Total | 1,500 | 100 | 11,200 | 12,800 | 1,500 | 1,100 | 10,200 | | | | | 12,800 |

| ProjectID | County | Air Basin | Model | RTP ID | Program | Route | Begin | End | Signage Begin | Signage End | System | Conformity Category | Amendment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LA0G172 | Los Angeles | SCAB | | 1AL04 | TRR15 | | | | | | L | EXEMPT - 93.126 | 0 |
| Description: | | | | | | | PTC | 29,000 | | | Agency | LONG BEACH | |

TI Wye Track Realignment: This project will provide for double tracking the south leg of the wye to accommodate simultaneous train switching moves from these various activities on Terminal Island.

| Fund | ENG | R/W | CON | Total | Prior | 2018/2019 | 2019/2020 | 2020/2021 | 2021/2022 | 2022/2023 | 2023/2024 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PORT FUNDS | 4,000 | | 25,000 | 29,000 | 1,000 | 1,263 | 3,122 | 23,615 | | | | 29,000 |
| LA0G172 Total | 4,000 | | 25,000 | 29,000 | 1,000 | 1,263 | 3,122 | 23,615 | | | | 29,000 |

| ProjectID | County | Air Basin | Model | RTP ID | Program | Route | Begin | End | Signage Begin | Signage End | System | Conformity Category | Amendment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LA0G173 | Los Angeles | SCAB | | 1ITS04 | RAN07 | | | | | | L | EXEMPT - 93.126 | 0 |
| Description: | | | | | | | PTC | 27,610 | | | Agency | LONG BEACH | |

Reconfiguration of Control Point (CP) Mole - The new control point at the Mole will enable increased train speeds and reduced train delays caused by manual switch operations.

| Fund | ENG | R/W | CON | Total | Prior | 2018/2019 | 2019/2020 | 2020/2021 | 2021/2022 | 2022/2023 | 2023/2024 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PORT FUNDS | 4,610 | | 23,000 | 27,610 | 2,600 | 5,810 | | 19,200 | | | | 27,610 |
| LA0G173 Total | 4,610 | | 23,000 | 27,610 | 2,600 | 5,810 | | 19,200 | | | | 27,610 |

| ProjectID | County | Air Basin | Model | RTP ID | Program | Route | Begin | End | Signage Begin | Signage End | System | Conformity Category | Amendment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LA0G830 | Los Angeles | SCAB | | LA0G830 | CAX77 | | | | | | L | NON-EXEMPT | 1 |
| Description: | | | | | | | PTC | 330,000 | | | Agency | LONG BEACH | |

I-710 Improvements/Shoemaker Bridge Replacement: Replace the existing Shoemaker bridge with a new bridge. The new bridge will be reduced to have two mixed-flow lanes in the NB and in the SB directions to tie the flow into I-710. The new bridge will also include pedestrian and bicycle access. Additionally, bicycle, pedestrian, and street enhancements will be provided on adjacent thoroughfares.

| Fund | ENG | R/W | CON | Total | Prior | 2018/2019 | 2019/2020 | 2020/2021 | 2021/2022 | 2022/2023 | 2023/2024 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CITY FUNDS | 2,664 | | | 2,664 | 2,664 | | | | | | | 2,664 |
| MEASURE R 20H - HIGHWAY CAPITAL | 11,000 | | | 11,000 | 5,500 | 5,500 | | | | | | 11,000 |
| STIP Advance Cons | 14,000 | | | 14,000 | | 14,000 | | | | | | 14,000 |
| LA0G830 Total | 27,664 | | | 27,664 | 8,164 | 19,500 | | | | | | 27,664 |

| ProjectID | County | Air Basin | Model | RTP ID | Program | Route | Begin | End | Signage Begin | Signage End | System | Conformity Category | Amendment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LAE0701 | Los Angeles | SCAB | | LAE0701 | NCR30 | | | | | | L | EXEMPT - 93.126 | 0 |
| Description: | | | | | | | PTC | 1,920 | | | Agency | LONG BEACH | |

DEVELOP AND IMPLEMENT TRAFFIC CALMING MEASURES FOR TRAFFIC EXITING THE I-710 INTO LONG BEACH

| Fund | ENG | R/W | CON | Total | Prior | 2018/2019 | 2019/2020 | 2020/2021 | 2021/2022 | 2022/2023 | 2023/2024 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEMO-SAFETEA-LU | | | 1,600 | 1,600 | | 1,600 | | | | | | 1,600 |
| AGENCY | 64 | | 256 | 320 | 64 | 256 | | | | | | 320 |
| LAE0701 Total | 64 | | 1,856 | 1,920 | 64 | 1,856 | | | | | | 1,920 |

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# S.1 NEPA Assignment

California participated in the "Surface Transportation Project Delivery Pilot Program" (Pilot Program) pursuant to 23 USC 327, for more than five years, beginning July 1, 2007, and ending September 30, 2012. MAP-21 (P.L. 112-141), signed by President Obama on July 6, 2012, amended 23 USC 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, Caltrans entered into a Memorandum of Understanding pursuant to 23 USC 327 (NEPA Assignment MOU) with the Federal Highway Administration (FHWA). The NEPA Assignment MOU became effective October 1, 2012, and was renewed on December 23, 2016 for a term of five years. In summary, Caltrans continues to assume FHWA responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, FHWA assigned and Caltrans assumed all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to Caltrans under the 23 USC 326 CE Assignment MOU, projects excluded by definition, and specific project exclusions.

# S.2 Project Description

The City of Long Beach (City) is the lead agency under the California Environmental Quality Act (CEQA), and the California Department of Transportation (Caltrans) is the lead agency under the National Environmental Policy Act (NEPA) as assigned by FHWA, in accordance with NEPA (42 United States Code [USC] 4321 et seq.); and the Council on Environmental Quality (CEQ) Regulations implementing NEPA (40 Code of Federal Regulations [CFR] 1500–1508).

The City, in cooperation with Caltrans, is proposing to replace the Shoemaker Bridge (West Shoreline Drive) in the City of Long Beach, California. A regional location map is included on Figure S-1. The Shoemaker Bridge Replacement Project (Project) is an early action project (EAP) of the Interstate 710 (I-710) Corridor Project and is located at the southern end of State Route 710/Interstate 710 (SR-710/I-710) in the City and is bisected by the Los Angeles River (LA River).

A No Build Alternative (Alternative 1) and two Build Alternatives (Alternatives 2 and 3) to replace the existing Shoemaker Bridge are being evaluated as part of the proposed Project. The primary difference between Alternative 2 and Alternative 3 is that Alternative 2 proposes to repurpose a portion of the existing Shoemaker Bridge for a nonmotorized use, and Alternative 3 proposes removal of the existing bridge. Additionally, two design options for a roundabout (Design Option A) or "Y" intersection (Design Option B) at the easterly end of the bridge would be evaluated in both build alternatives.

The Build Alternatives would include bicycle and pedestrian uses along the south side of the new bridge and also provide improvements along associated roadway connectors to downtown Long Beach, West Shoreline Drive from I-710, and portions of 3rd Street, 6th Street, 7th Street, and West Broadway from Cesar E. Chavez Park to Magnolia Avenue. The proposed improvements may include additional street lighting, restriping, turn lanes, bicycle, pedestrian, and streetscape improvements. Additionally, as an EAP of the I-710 Corridor Project, the Build Alternatives would evaluate the impacts from the closure of the 9th and 10th Street ramp connections into downtown Long Beach. The Project limits and Project design elements are illustrated on Figure S-2 and Figure S-3, respectively.

The proposed Project is included in the 2019 Federal Transportation Improvement Program (FTIP) as follows:

> I-710 Improvements/Shoemaker Bridge Replacement – Replace the existing Shoemaker bridge with a new bridge. The new bridge will be reduced to have two mixed-flow lanes in the NB and in the SB directions to tie the flow into I-710. The new bridge will also include pedestrian and bicycle access. Additionally, bicycle, pedestrian, and street enhancements will be provided on adjacent thoroughfares.

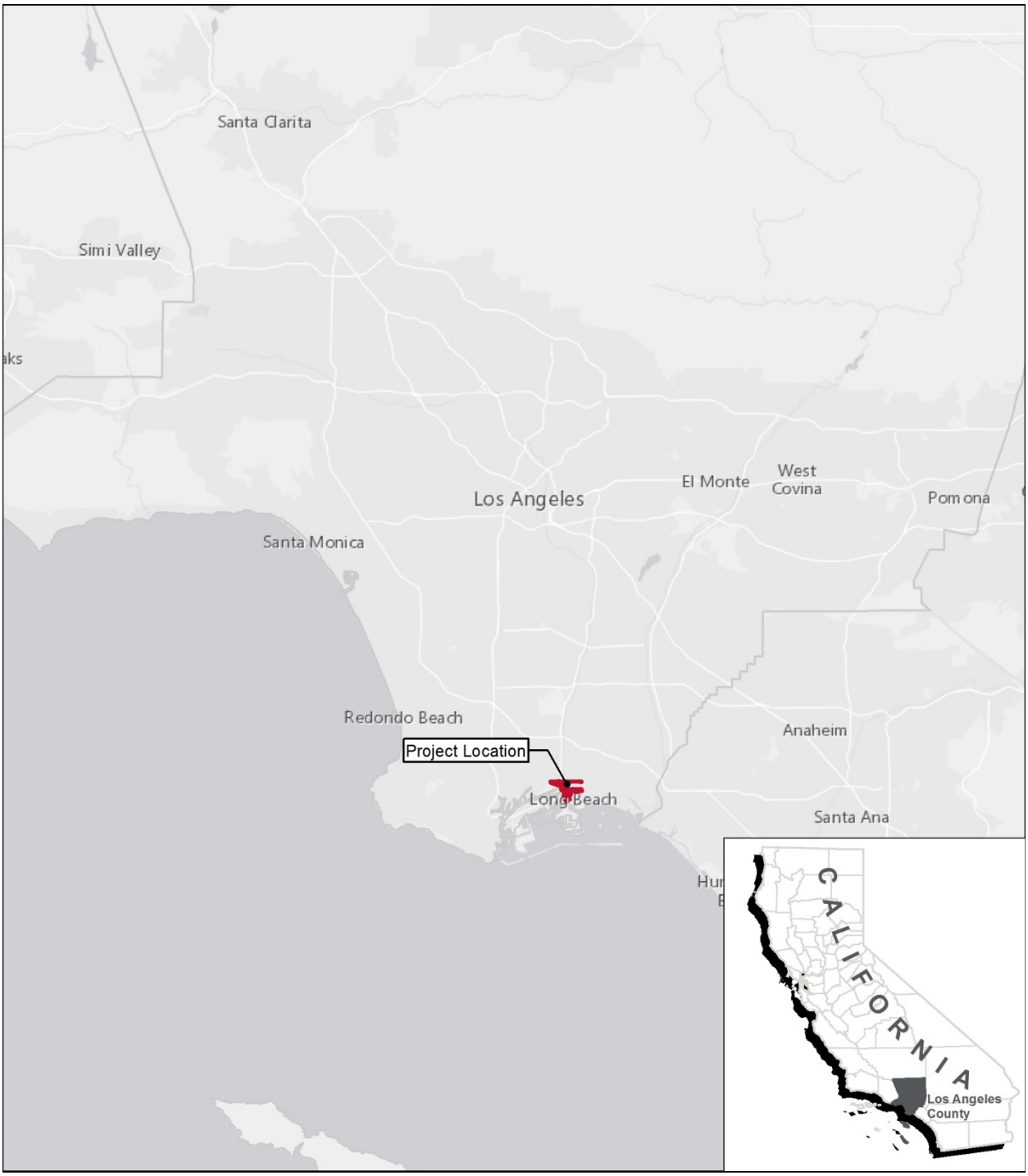
The Finding of No Significant Impact (FONSI) will be signed once the project satisfactorily demonstrates requirements under the Transportation Conformity rules and regulations as the scope and concept of the project will be amended in the upcoming RTP. In California, no new regional conformity determinations can be approved by FHWA until emissions inventories are updated with new assumptions reflecting the recently-implemented Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program.

The proposed Project is a stand-alone project that proposes to address design and safety deficiencies associated with the existing Shoemaker Bridge and improve circulation and connectivity within downtown Long Beach. Even though the Project is a stand-alone project, its design would accommodate the future construction of the I-710 Corridor Project.

Currently, Shoemaker Bridge is under jurisdiction of the City and serves as the extension of West Shoreline Drive within downtown Long Beach to the I-710 corridor. I-710 transitions into SR-710 south of Pacific Coast Highway. Since the existing Shoemaker Bridge is within City right-of-way (ROW), the City serves as the lead agency under the CEQA. However, since the new Shoemaker Bridge would require federal funding and would be transferred to Caltrans for future ownership and maintenance, Caltrans serves as a Responsible Agency under CEQA as well as the lead agency under NEPA.

## S.2.1 Additional Project Features

This Project contains a number of standardized project measures as outlined by the Caltrans Construction Contract Standards and Caltrans Best Management Practices (BMP), which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed Project. Table S-1 outlines the standardized Project measures and identifies them as Project features. These Project features are also referenced under the Environmental Consequences sections found in Chapter 2.




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure S-1. Regional Location**

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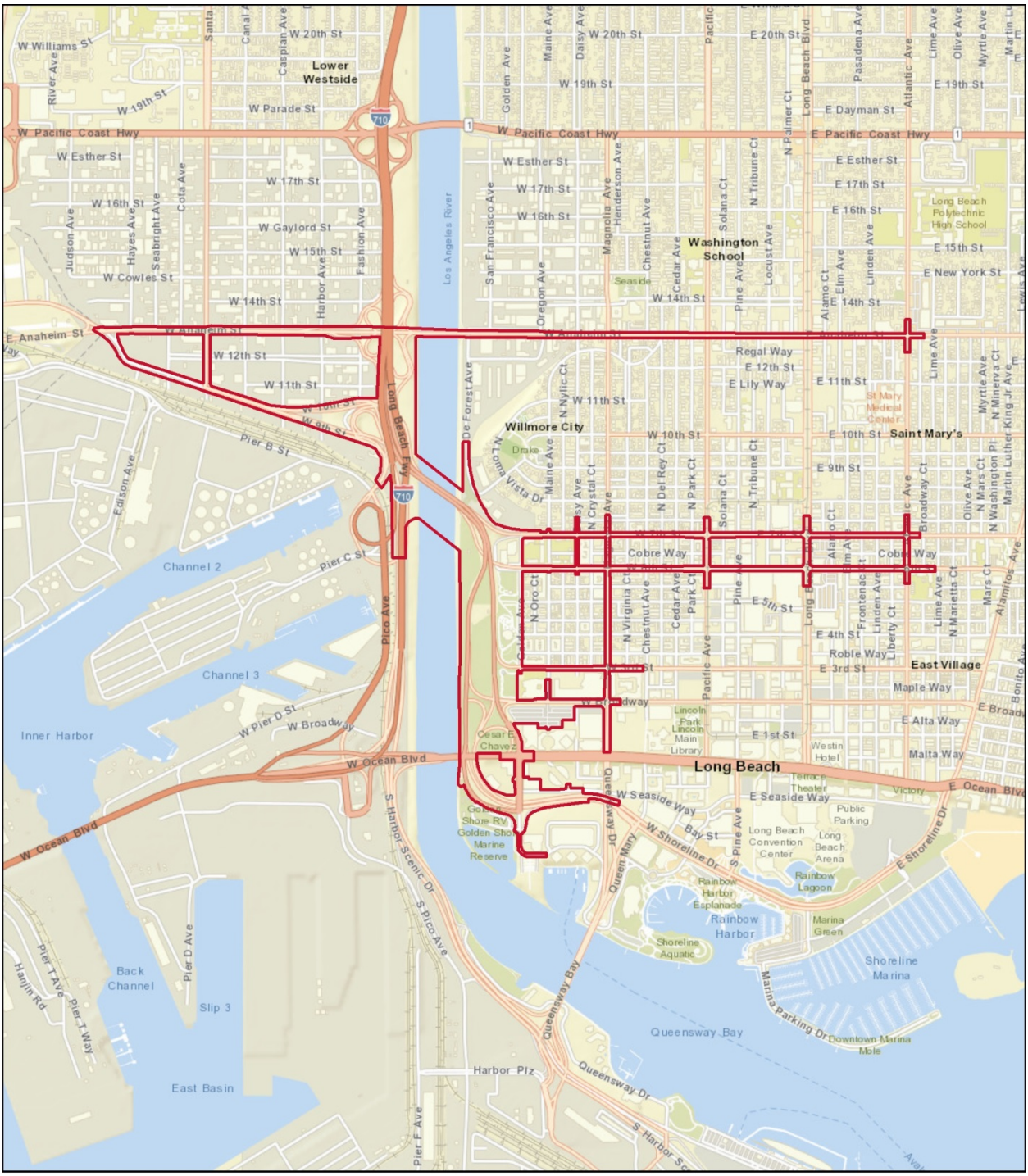
Lower Westside
Washington School
Willmore City
Saint Mary's
East Village
Long Beach
Channel 2
Channel 3
Inner Harbor
Back Channel
Slip 3
East Basin
Queensway Bay
Harbor Plz
Shoreline Marina
Rainbow Harbor
Rainbow Lagoon
Long Beach Convention Center
Long Beach Arena
Los Angeles River
Long Beach Fwy
W Pacific Coast Hwy
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W Ocean Blvd
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Cobre Way
Regal Way
E Lily Way
Roble Way
Maple Way
E Alta Way
Malta Way
W Seaside Way
E Seaside Way
Bay St
W Shoreline Dr
E Shoreline Dr
Queensway Dr
Marina Parking Dr
Downtown Marina
Mole
Pier B St
Pier C St
Pier D Ave
Pier T Ave
Pier T Way
Pier F Ave
Hanlin Rd
Pico Ave
S Pico Ave
Scenic Dr
Golden Shore RV
Golden Shore Marine Reserve
Cesar E Chavez
Lincoln Park
Lincoln Main Library
Westin Hotel
Terrace Theater
Public Parking
Shoreline Aquatic
Marina Green
Long Beach Polytechnic High School
St Mary Medical Center
Seaside
Drake
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W Gaylord St
W Cowles St
E New York St
W Anaheim St
E Anaheim St
W Williams St
W Pier D St
W Broadway
Golden Ave
Maine Ave
Daisy Ave
Pacific Ave
Long Beach Blvd
Pasadena Ave
Atlantic Ave
Lime Ave
Olive Ave
Myrtle Ave
Martin Luther King Jr Ave
Alamitos Ave
Bonito Ave
Linden Ave
Locust Ave
Pine Ave
Chestnut Ave
Cedar Ave
Park Ave
Broadway Ct
Frontenac Ct
Liberty Ct
Mars Ct
N Marietta Ct
N Washington Pl
N Minerva Ct
Harbor Ave
Fashion Ave
Seabright Ave
Hayes Ave
Judson Ave
Cota Ave
Caspian Ave
Canal Ave
River Ave
Edison Ave
De Forest Ave
Oregon Ave
San Francisco Ave
Magnolia Ave
Henderson Ave
Solana Ct
N Tribune Ct
N Palmer Ct
N Nylic Ct
N Crystal Ct
N Del Rey Ct
N Park Ct
N Oro Ct
N Virginia Ct
Alamo Ct
Elm Ave
Frontenac Ct
N Bay Shore Walk
Queen Mary
Queen Way Dr
Golden Ave
Pine Ave
Locust Ave
Cedar Ave
Chestnut Ave
Park Ave
Pacific Ave
Long Beach Blvd
Pasadena Ave
Atlantic Ave
Lime Ave
Olive Ave
Myrtle Ave
Martin Luther King Jr Ave
Alamitos Ave
Bonito Ave
Linden

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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure S-3. Project Design Features of Alternatives 2 and 3**
**Sheet 1 of 5**

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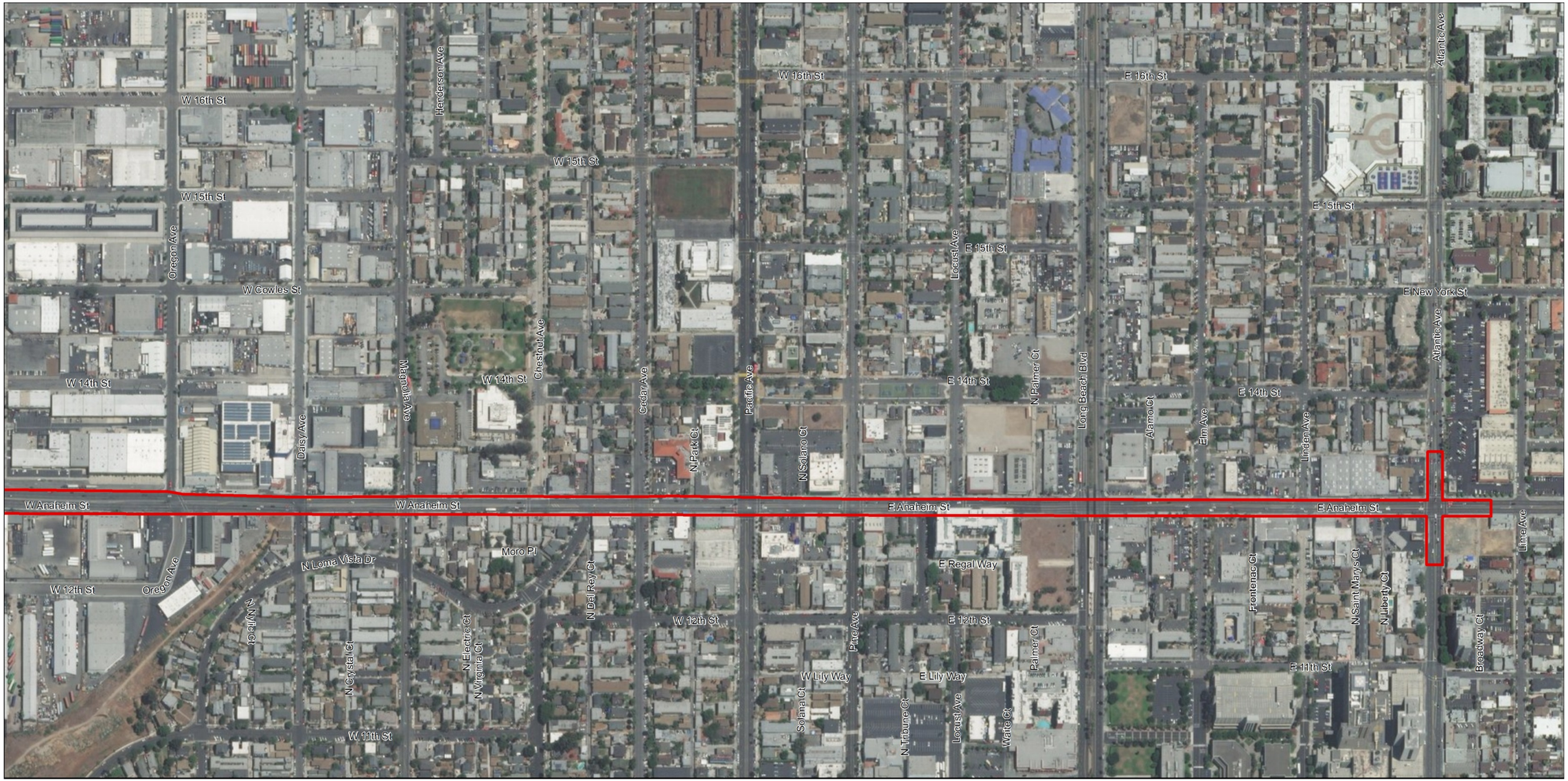


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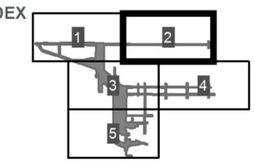
**LEGEND**

- Proposed Retaining Wall
- Proposed Right-of-Way
- Permanent Slope Easement
- Roadway Improvements
- Repurpose of Existing Bridge Under Alt 2
- Removal of Existing Bridge Under Alt 3
- Project Limits
- Streets To Be Removed
- Existing Right-of-Way
- Temporary Road Construction and Staging
- Proposed Shoemaker Bridge
- Temporary Construction Easement
- Potential Staging Area

**MAP INDEX**




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure S-3. Project Design Features of Alternatives 2 and 3**
**Sheet 2 of 5**

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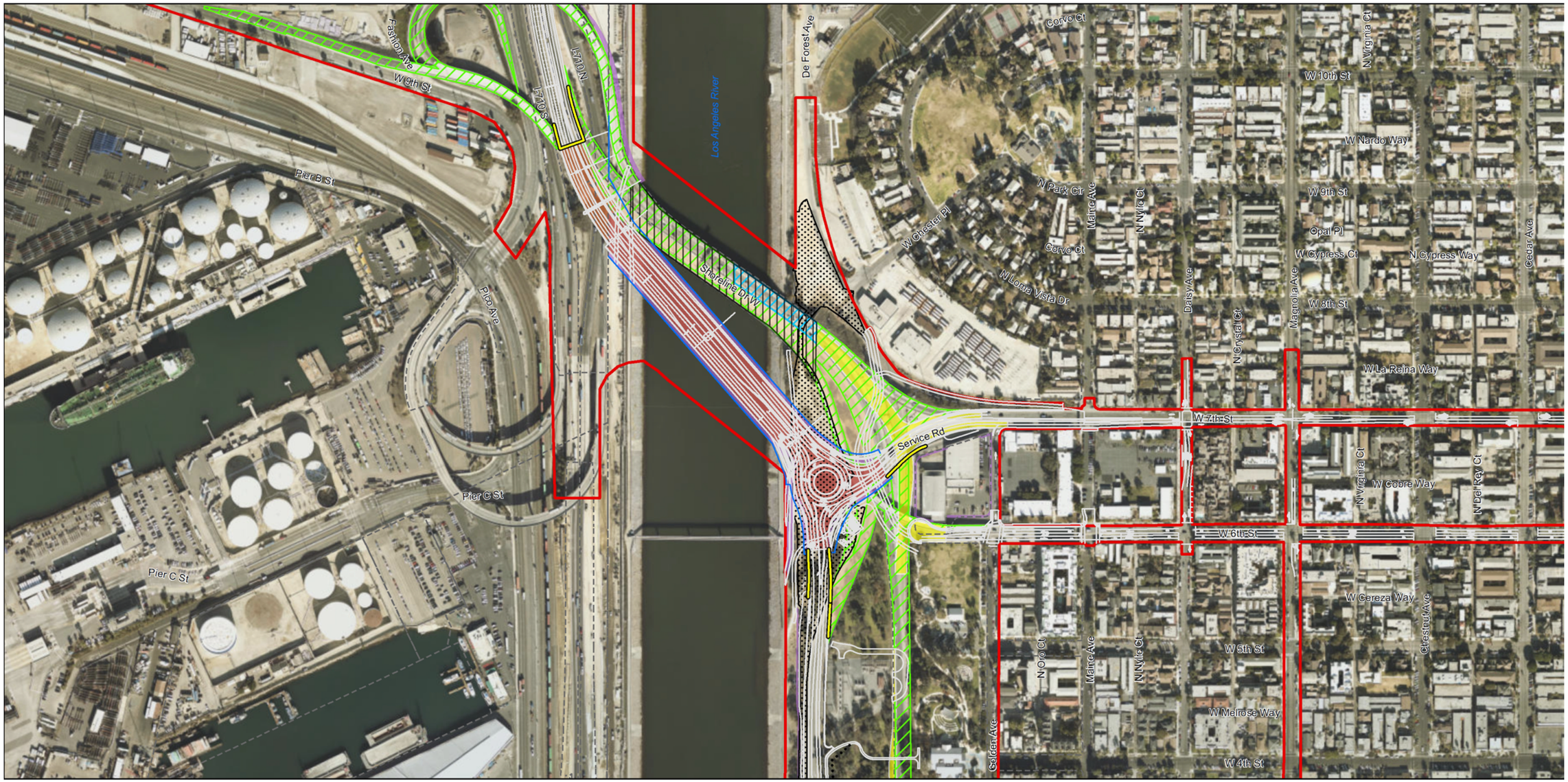


**LEGEND**

- Proposed Retaining Wall
- Proposed Right-of-Way
- Permanent Slope Easement
- Roadway Improvements
- Repurpose of Existing Bridge Under Alt 2
- Removal of Existing Bridge Under Alt 3
- Project Limits
- Streets To Be Removed
- Existing Right-of-Way
- Temporary Road Construction and Staging
- Proposed Shoemaker Bridge
- Temporary Construction Easement
- Potential Staging Area
- Long Beach MUST Project

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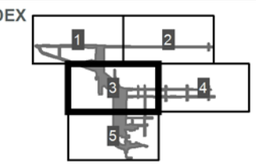
MAP INDEX




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure S-3. Project Design Features of Alternatives 2 and 3**
**Sheet 3A of 5**

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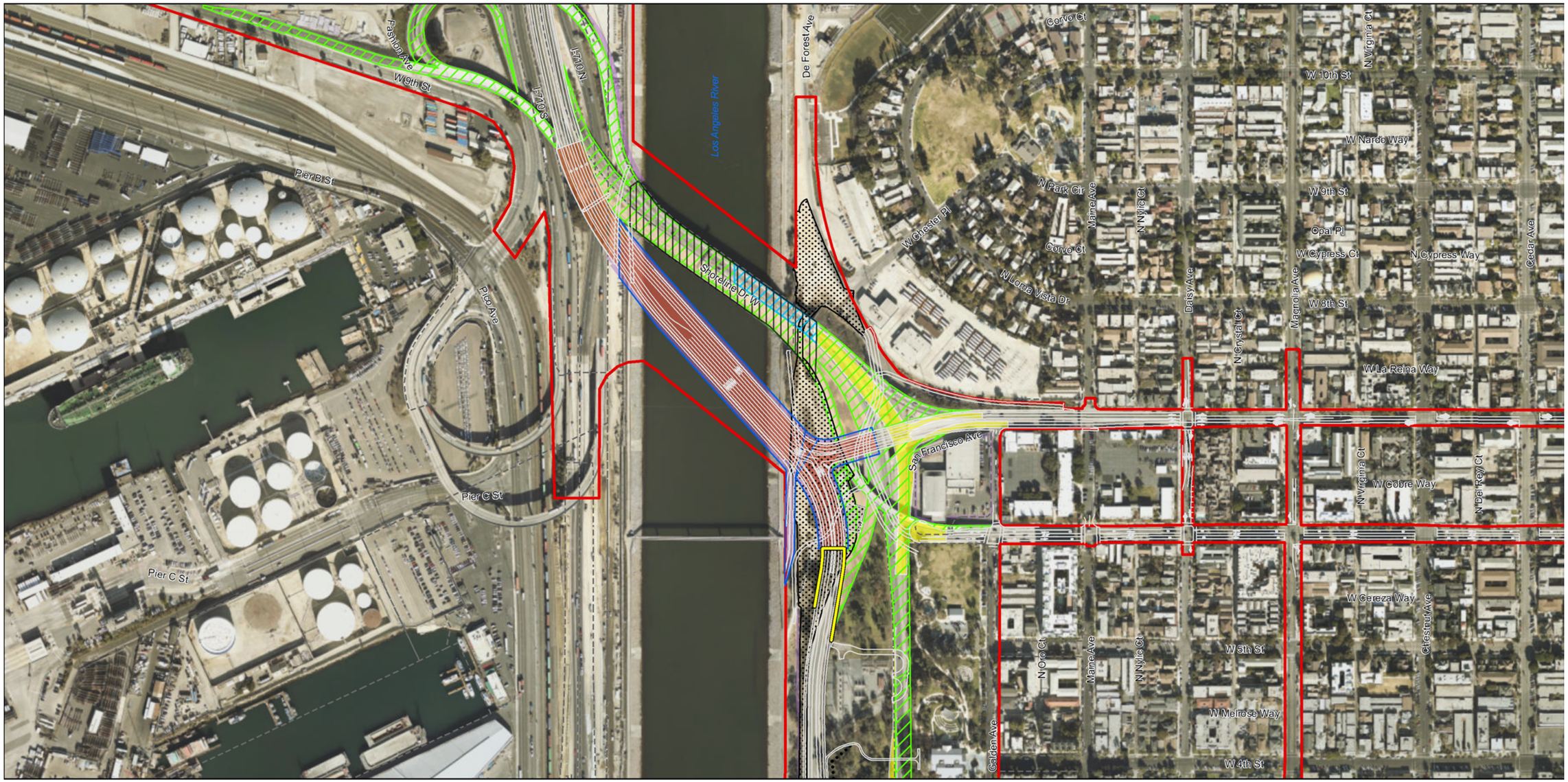


07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure S-3. Project Design Features of Alternatives 2 and 3**
**Sheet 3B of 5**

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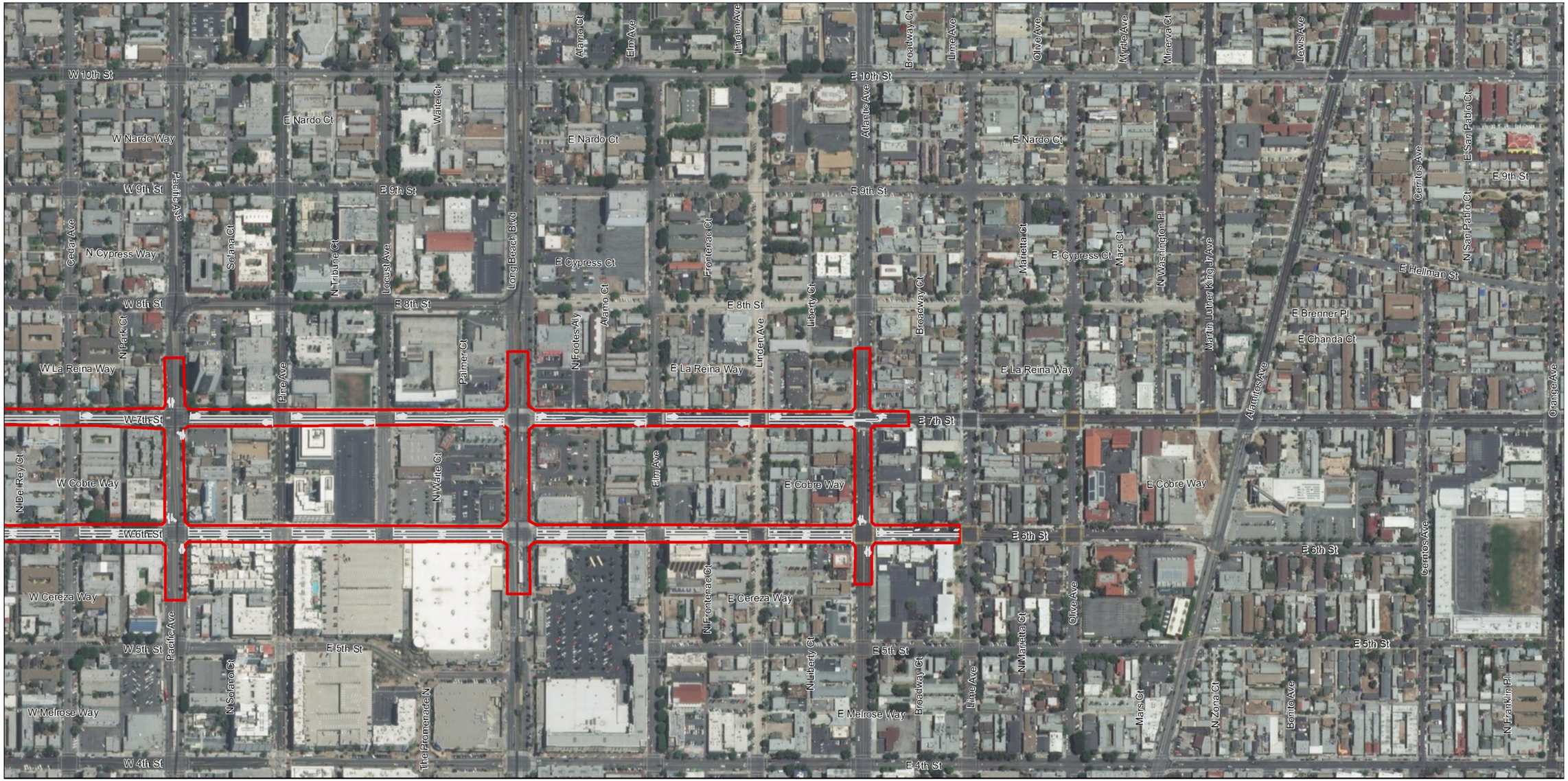
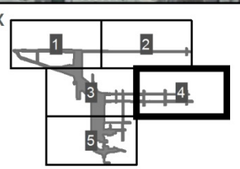


**LEGEND**

- Proposed Retaining Wall
- Proposed Right-of-Way
- Permanent Slope Easement
- Roadway Improvements
- Repurpose of Existing Bridge Under Alt 2
- Removal of Existing Bridge Under Alt 3
- Project Limits
- Streets To Be Removed
- Existing Right-of-Way
- Temporary Road Construction and Staging
- Proposed Shoemaker Bridge
- Temporary Construction Easement
- Potential Staging Area

**MAP INDEX**




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure S-3. Project Design Features of Alternatives 2 and 3**
**Sheet 4 of 5**

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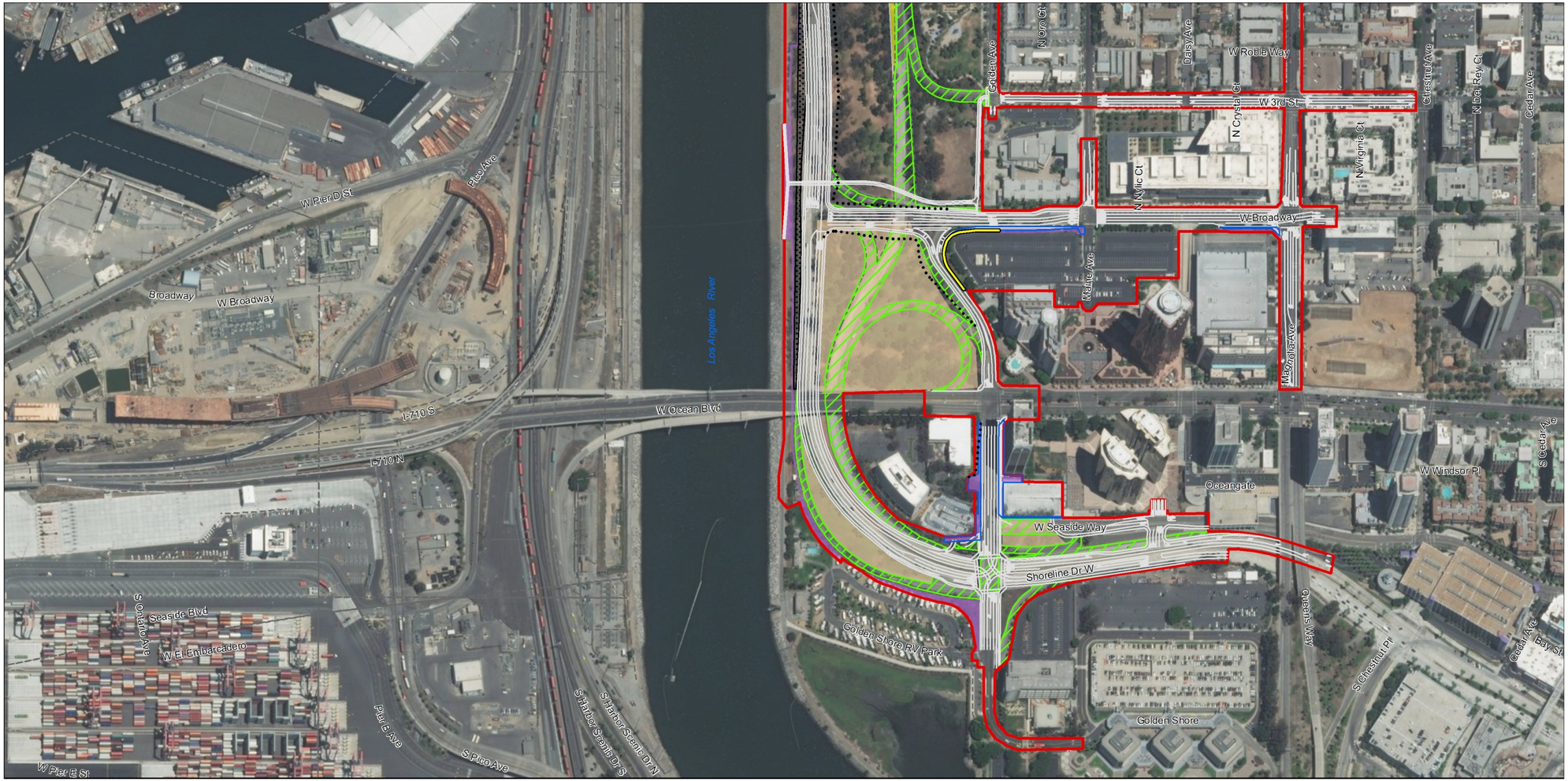


**LEGEND**

- Proposed Retaining Wall
- Proposed Right-of-Way
- Permanent Slope Easement
- Roadway Improvements
- Repurpose of Existing Bridge Under Alt 2
- Removal of Existing Bridge Under Alt 3
- Project Limits
- Streets To Be Removed
- Existing Right-of-Way
- Temporary Road Construction and Staging
- Proposed Shoemaker Bridge
- Temporary Construction Easement
- Potential Staging Area
- Long Beach MUST Project

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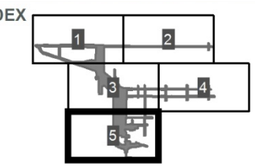
MAP INDEX




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure S-3. Project Design Features of Alternatives 2 and 3**
**Sheet 5 of 5**

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## Table S-1. Additional Project Features

| Project Feature | |
|---|---|
| ***Utilities and Emergency Services*** | |
| **PF-1** | During construction, the City's Resident Engineer will ensure that all public utility lines, pipes, and cables disturbed or removed to accommodate the Project must be replaced or relocated within the Project limits to continue to meet the needs of residents and businesses in the community. In addition, arrangements must be made to avoid disruption of utility services. If interruption in service is unavoidable, notice must be given, and proper arrangements will be made with residents and businesses. |
| **PF-2** | To ensure that emergency response times are not disrupted during construction, the City's Resident Engineer will ensure that LBFD be informed of the Project construction schedule, lane closures (if any), and detour plans (if any) at least 2 weeks in advance of any detour plan or lane closure being implemented throughout construction. |
| ***Traffic and Transportation*** | |
| **PF-3** | The TMP will include, but is not limited to, the following measures:<br>• A Maintenance of Traffic (MOT) Plan will be established that provides at least one lane of traffic in each direction on roads during construction.<br>• Local access will be maintained to businesses and residential properties at all times.<br>• Pedestrian access points to businesses, parks, and schools within the construction area will be maintained throughout the construction period, where feasible. If usual access points are lost, provisions for alternative access to the affected parcels will be made. Appropriate signage will be placed to inform pedestrians and bicyclists of the alternative access to local businesses. Disabled access will be maintained during construction where feasible.<br>• During construction, appropriate signage and advanced warning will be developed and displayed to direct pedestrian, bicycle, and vehicular traffic alternate routes.<br>• During construction, the City will establish an information field office near the construction site. The field office will serve the following purposes:<br>• Provide information pertaining to construction and lane closures;<br>• Notify property owners, residences, and businesses of major construction activities (e.g., utility relocation/disruption, rerouting of delivery trucks);<br>• Provide information via the City website. |

## Table S-1. Additional Project Features

| Project Feature | |
|---|---|
| ***Cultural Resources*** | |
| **PF-4** | If cultural materials are discovered during construction, all earth moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find. |
| **PF-5** | If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities will stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the NAHC, who, pursuant to PRC Section 5097.98, will then notify the MLD. At this time, the person who discovered the remains will contact the Caltrans District 7 Environmental Branch Chief and Caltrans District 7 Native American Coordinator so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable. |
| ***Water Quality*** | |
| **PF-6** | During construction, the City's Resident Engineer or designated contractor will ensure scheduling and move-in/move-out temporary erosion control (SS-1) to designate multiple move-ins to establish temporary erosion control on graded areas that are substantially complete. |
| **PF-7** | During construction, the City's Resident Engineer or designated contractor will ensure that silt fence (SC-1) will be installed to protect the perimeter of the Project work sites. |
| **PF-8** | During construction, the City's Resident Engineer or designated contractor will ensure that street sweeping (SC-7) will be utilized to clean up adjacent City streets. |
| **PF-9** | During construction, the City's Resident Engineer or designated contractor will ensure that storm drain inlet protection (SC-10) will be used to protect the new and existing storm drain inlets |
| **PF-10** | To minimize the volume of decontamination wash water and prevent the transport of contaminates from work site areas during construction, the City's Resident Engineer or designated contractor will ensure the implementation of BMPs, including the following:<br>• Waste management (WM) -6, addressing hazardous waste management<br>• WM-7, addressing contaminated soil management<br>• Tracking control (TC) -3, which pertains to entrance outlet tire |
| **PF-11** | During construction, the City's Resident Engineer or designated contractor will ensure that pile driving operations (NS-11) will involve mitigation measures to control waste from pile driving operations. |

## Table S-1. Additional Project Features

| Project Feature | |
|---|---|
| **PF-12** | During construction, the City's Resident Engineer or designated contractor will ensure compliance with the provisions of the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009-DWQ, NPDES No. CAS000002), and any subsequent amendments (Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ), as they relate to construction activities for the Project. This will include submission of the Permit Registration Documents, including an NOI, risk assessment, site map, SWPPP, annual fee, and signed certification statement to the SWRCB via the SMARTS at least 7 days prior to the start of construction.<br>• Construction activities will not commence until a WDID number is received from the SMARTS. The SWPPP will be prepared by a QSD.<br>• The SWPPP will meet the requirements of the Construction General Permit and identify potential pollutant sources associated with construction activities; identify non-stormwater discharges; develop a water quality monitoring and sampling plan; and identify, implement, and maintain BMPs to reduce or eliminate pollutants associated with the construction site. BMPs will include, but not be limited to, good housekeeping, erosion control, and sediment control BMPs.<br>• The BMPs identified in the SWPPP will be implemented during Project construction. Caltrans and the City will comply with the Risk Level 1 sampling and reporting requirements of the Construction General Permit.<br>• A REAP will be prepared and implemented by a QSD within 48 hours prior to a rain event of 50 percent or greater probability of precipitation according to NOAA. A NOT will be submitted to the SWRCB within 90 days of completion of construction and stabilization of the site. |
| **PF-13** | During construction, the City's Resident Engineer or designated contractor will ensure all construction site BMPs follow the latest edition of the Stormwater Quality Handbooks: Construction Site BMPs Manual (Caltrans 2017a) to control and reduce the impacts of construction related activities, material, and pollutants on the watershed. These include, but are not limited to, temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-stormwater BMPs identified in the following Non-Stormwater (NS) BMPs listed below:<br>• NS-2, related to dewatering operations<br>• NS-3, related to paving and grinding operations<br>• NS-4, related to temporary stream crossing<br>• NS-5, related to clear water diversion<br>• NS-6, related to illicit connection/discharge<br>• NS-7, related to potable water/irrigation<br>• NS-11, related to pile driving operation<br>• NS-12, related to concrete curing<br>• NS-13, related to concrete finishing<br>• NS-16, related to temporary batch plants<br>In addition, during construction, the City's Resident Engineer or designated contractor will ensure compliance with the following Materials Management BMPs:<br>• WM-3, related to stockpile management<br>• WM-5, related to solid waste management |

## Table S-1. Additional Project Features

| Project Feature | |
|---|---|
| | • WM-9, related to sanitary septic waste management<br>• WM-10, related to liquid waste management |
| **PF-14** | During the PS&E phase, the City's Resident Engineer will review the results of further geotechnical explorations to determine if dewatering is necessary during construction of deep foundations within the LA River. |
| **PF-15** | During construction, the City's Resident Engineer or designated contractor will ensure that turbidity and pH testing will be conducted at discharge points during qualifying rain events. |
| **PF-16** | During construction, the City's Resident Engineer or designated contractor will ensure that carriers be constructed at entry points to the receiving waters to prevent large debris from entering the receiving water. |
| **PF-17** | During construction, the City's Resident Engineer or designated contractor will ensure that cofferdams be used during bank or sediment disturbing construction activities. |
| **PF-18** | During construction, the City's Resident Engineer or designated contractor will ensure that turbidity curtains be used in lieu of silt curtains, which are less effective at trapping sediment in tidal channels. |
| **PF-19** | During construction, the City's Resident Engineer or designated contractor will ensure that streambank stabilization (SS-12) be required to mitigate work involving the existing LA River banks. |
| **PF-20** | During construction, the City's Resident Engineer or designated contractor will ensure that material and equipment use over water (NS-13) be required for work done over the LA River. |
| **PF-21** | During construction, the City's Resident Engineer or designated contractor will ensure that structure demolition/removal over or adjacent to water (NS-15) be required for removal of the existing bridge over the LA River. |
| **PF-22** | During construction, the City's Resident Engineer or designated contractor will ensure that solid waste management (WM-5) be used to control runoff from waste piles generated from demolishing the existing bridge structures. |
| **PF-23** | During construction, a Temporary Sediment Basin (SC-2) will be utilized on the east side of the bridge to mitigate sediment transport into the existing pump station and LA River. |
| **PF-24** | During construction, the City of Long Beach's Resident Engineer or designated contractor will ensure that proposed locations for servicing, washing, and refueling of equipment are designated in areas that are located away from temporary channels or swales that have the potential to quickly convey runoff to the drainage system and into the LA River. The Resident Engineer or designated contractor will comply with the |

## Table S-1. Additional Project Features

| Project Feature | |
|---|---|
| | guidance outlined in BMP NS-8, pertaining to vehicle and equipment cleaning, NS-9, pertaining to vehicle and equipment fueling, and NS-10, pertaining to vehicle and equipment maintenance. |
| **PF-25** | During construction, the City's Resident Engineer or designated contractor will ensure that construction materials be securely locked up to avoid vandalism and accidental spills into the watercourse. The City's Resident Engineer or designated contractor will follow measures outlined in BMPs materials management WM-1, regarding material delivery and storage, and WM-4, regarding spill prevention and control. |
| **PF-26** | During construction, the City's Resident Engineer or designated contractor will ensure that contaminated material (e.g., oil, lubricants) will be kept at a safe distance (a minimum of 100 feet [30.5 meters]) from an entry point into a receiving water body. Temporary barriers and containers will be necessary to confine any contaminated materials. Upon completion of construction, all contaminated material on the construction site must be removed and disposed of in accordance with federal, regional, and local regulations. |
| **PF-27** | During construction, the City's Resident Engineer or designated contractor will ensure that a temporary spill containment system will be installed and maintained on either side of the receiving water crossing. The City's Resident Engineer or designated contractor will be responsible for the containment plan and the execution of spill containment during the course of construction. The containment plan will be reviewed and approved by the City's Resident Engineer. |
| **PF-28** | During construction, the City's Resident Engineer or designated contractor will ensure excess grease will be manually removed from moving parts of bridges and collected for disposal. |
| **PF-29** | During construction, the City's Resident Engineer or designated contractor will ensure that structures will be degreased prior to painting and hydro blasting to remove old paint with additive free water, where possible. |
| **PF-30** | During construction, the City's Resident Engineer or designated contractor will ensure that shrouds be erected around working areas. Nets and tarps will be suspended below bridges to catch debris from abrasive removal of old paint and over spray, where wind conditions permit. |
| **PF-31** | During construction, the City's Resident Engineer or designated contractor will ensure that debris be confined by anchoring tarps to enclose the bridge, where the bridge deck is close to the water level. |
| **PF-32** | During construction, the City's Resident Engineer or designated contractor will ensure that booms be used to capture fugitive floating paint chips. Custom built enclosures will be used to confine and capture abrasives, old paint chips, and paint. |
| **PF-33** | During construction, the City's Resident Engineer or designated contractor will ensure that vacuum or suction shrouds on blast heads will be used to capture grit and old paint. |

## Table S-1. Additional Project Features

| Project Feature | |
|---|---|
| **PF-34** | During construction, the City's Resident Engineer or designated contractor will ensure that storing, mixing, and cleaning operations will be carried out on land. |
| **PF-35** | During construction, the City's Resident Engineer or designated contractor will ensure that concrete curing (NS-12) will be used to control waste related to concrete curing. |
| **PF-36** | During construction, the City's Resident Engineer or designated contractor will ensure that temporary concrete washout and concrete management (WM-8) will be used to control runoff from waste concrete. |
| **PF-37** | During construction, the City's Resident Engineer or designated contractor will ensure that paving and grinding operations (NS-3) will be used to manage waste from paving operations. |
| **PF-38** | During construction, the City's Resident Engineer or designated contractor will ensure that stabilized construction entrance/exits (TC-1) will be situated at locations where construction traffic will enter paved roads. |
| **PF-39** | During construction, the City's Resident Engineer or designated contractor will ensure that hydraulic mulch (SS-3) will be utilized to stabilize the graded slopes prior to plant establishment. |
| **PF-40** | During construction, the City's Resident Engineer or designated contractor will ensure that hydroseeding (SS-4) and soil binders (SS-5) will be used for exposed slopes and stockpiles. |
| **PF-41** | During construction, the City's Resident Engineer or designated contractor will ensure that outlet protection (SS-10) will be used to protect downstream areas from erosion. |
| **PF-42** | During construction, the City's Resident Engineer or designated contractor will ensure that channel bank work include bank protection (riprap, concrete walls, and sheet piling) to eliminate the possibility of enhanced bank erosion. If channel bank work occurs during post construction, Caltrans' Resident Engineer or designated contractor will ensure that the same requirements are adhered to. |
| **PF-43** | To minimize flow rates and volumes of storm water, the City's Resident Engineer or designated contractor will ensure the implementation of BMPs, which may include the following:<br>• Gross solid removal devices<br>• Wet basins<br>• Bioswales and stripes<br>• Media filters may be installed as per SSP 13 6.02C<br>• Catch basin inserts |

## Table S-1. Additional Project Features

| Project Feature | |
|---|---|
| **PF-44** | During construction, the City's Resident Engineer or designated contractor will ensure compliance with the provisions of the General Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4 2013 0095, NPDES Permit No. CAG994004), effective July 6, 2013 (known as the Dewatering permit), as they relate to discharge of non stormwater dewatering wastes for the Project. The two options to discharge would be to the local storm drain system and sanitary sewer system and would require a permit from the RWQCB and the City, respectively. |
| **PF-45** | During construction, the City's Resident Engineer or designated contractor will ensure compliance with the provisions of the General Waste Discharge Requirements for Discharges of Treated Groundwater from Investigation and/or Cleanup of Volatile Organic Compounds Contaminated Sites to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4 2013 0043, NPDES Permit No. CAG914001), effective April 7, 2013 (known as the Dewatering permit for contaminated sites), as they relate to discharge of non stormwater dewatering wastes from contaminated sites for the Project. The two options to discharge would be to the local storm drain system and sanitary sewer system and would require a permit from the RWQCB and the City, respectively. |
| **PF-46** | During construction, the City's Resident Engineer or designated contractor will ensure that an appropriate groundwater treatment method be determined based on a groundwater assessment and recommendations from the Los Angeles RWQCB. These three treatment methods include:<br>• On-site treatment: A temporary water treatment plant would be constructed to treat water generated from dewatering operations to reduce the concentrations of pollutants of concern below NPDES limits.<br>• Treatment and disposal off site: Water would be temporarily stored in the Project area, the waste would be profiled (i.e., categorized as hazardous or non-hazardous), and the water would be transported to a regulated facility for treatment and disposal.<br>• Disposal into the Local sewer system: Groundwater would be disposed into the County of Los Angeles sewage treatment system via a local sewer or truck line, depending on the rate and flow. An Industrial Wastewater Discharge Permit, issued by the County of Los Angeles Sanitation Department, would be required. Treatment of the discharge water may be required to satisfy the permit. |
| **PF-47** | Following construction, Caltrans' Resident Engineer or designated contractor will ensure that the new bridge structures be continuously maintained in accordance with Caltrans' standard maintenance policies and procedures to prevent excessive buildup of debris that could be discharged in a precipitation event. |
| **PF-48** | Prior to construction, the City's Resident Engineer or designated contractor will ensure that the LB MUST Facility will accommodate drainage from the portion of the Project area to the north of Broadway. |
| **PF-49** | Prior to construction, the City's Resident Engineer or designated contractor will ensure that a detention basin will be constructed as part of the Project to accommodate drainage from the portion of the Project area to the south of Broadway. |

## Table S-1. Additional Project Features

| Project Feature | |
|---|---|
| **PF-50** | Prior to construction, the City's Resident Engineer or designated contractor will ensure that preservation of existing vegetation (SS-2) for any ESAs identified in the environmental document and existing park landscaping be protected during construction activities as designated on the construction documents. |
| ***Hazard and Hazardous Waste*** | |
| **PF-51** | During the PS&E phase, the City will ensure unpaved soils adjacent to the existing roadway be tested for ADL according to Caltrans ADL testing guidelines. -Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed in accordance with Caltrans Standard Specifications, Section 14-11.08 Material Containing Hazardous Waste Concentrations of Aerially Deposited Lead (2015) and under the July 1, 2016, ADL Agreement between Caltrans and the California DTSC. This ADL Agreement allows such soils to be safely reused within the project limits, as long as all requirements of the ADL Agreement are met. |
| **PF-52** | During construction, the City Resident Engineer will ensure that the removal of any wooden telephone poles would be conducted in accordance with Appendix XII of the CCR, Title 22, Division 4.5, Chapter 11. |
| **PF-53** | During the PS&E Phase, the City will ensure that an ACM and LBP survey will be conducted for any structure requiring modification or removal. The City will ensure that the survey will be conducted in conformance with the U.S. EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR, SCAQMD Rule 1403, and in accordance with Caltrans SSP 14-11.13, Disturbance of Existing Paint Systems on Bridges, and Caltrans SSP 14-11.16, Asbestos-Containing Construction Materials in Bridges. |
| **PF-54** | During the PS&E Phase, the City will ensure lead and chromium sampling and analysis will be conducted of yellow and white paint striping that would be disturbed or removed by the Project. In addition, during construction, the City Resident Engineer will ensure the removal, handling, and disposal of yellow and white paint striping will be conducted in accordance with Construction Program Procedure Bulletin 99-2, Caltrans SSP 14-11.12, Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue, and Caltrans SSP 36-4, Residual Containing Lead from Paint and Thermoplastic. |

## Table S-1. Additional Project Features

| Project Feature | |
|---|---|
| **PF-55** | During the PS&E Phase, the City will ensure PCB sampling will be conducted for any pole- or pad-mounted transformers and substations, including the SCE Seabright Substation, which would be disturbed or removed as part of the Project. |
| **PF-56** | During construction, the City Resident Engineer will ensure USA will be notified at least 2 days prior to ground-disturbing activities to enable all utility owners within the Project disturbance limits to identify the locations of known underground transmission lines and facilities. |
| **PF-57** | Prior to construction, the City Resident Engineer will ensure the preparation of the following plans to protect worker health and safety and the environment:<br>• Health and Safety Plan: A certified industrial hygienist will prepare a Health and Safety Plan to guide all construction activities. The Health and Safety Plan would identify all potential hazards and contain specific procedures for encountering expected and unexpected contaminants. It would prescribe safe work practices, contaminant monitoring, personal protective equipment, emergency response procedures, and safety training requirements to protect constructions workers and third parties.<br>• Construction Contaminant Management Plan: A soils and groundwater Construction Contaminant Management Plan will be prepared. This plan would include procedures for contaminant monitoring and identification, temporary storage, handling, treatment, and disposal of waste and materials.<br>• Construction Contingency Plan: A Construction Contingency Plan will be prepared with guidance provided in Chapter 7, Environmental Stewardship of the Caltrans Construction Manual (Caltrans 2017a), for the handling and dealing of unknown hazards. This plan would include provisions for responding to events such as the discovery of unidentified USTs, hazardous material, petroleum hydrocarbons, or hazardous or solid wastes during construction. This plan would address UST decommissioning, field screening, and material testing methods, mitigation and contaminant management requirements, and health and safety requirements for construction workers. |
| **PF-58** | During the PS&E phase and prior to start of construction and any parcel dedications, the City will ensure all recommended PSI activities are conducted for the eight properties described in Table 2.12-3 and Table 2.12-4, which are also referenced in Avoidance and Minimization Measures HAZ-1 through HAZ-9 in Section 2.12.4. The results of the PSIs will be used to determine appropriate measures to manage contaminated soil and groundwater and disposal options during construction. The PSI results would also be used to prepare the Health and Safety Plan, Construction Contaminant Management Plan, Construction Contingency Plan, as well as a Lead Compliance Plan if one is needed per the PSI results. |
| **PF-59** | During construction, the Project will avoid building over any plugged and abandoned wells. However, if any wells, including any plugged, abandoned or unrecorded wells, are damaged or uncovered during excavation or grading, remedial plugging operations may be required. If such damage or discovery occurs, the Department of Conservation's Division of Oil, Gas, and Geothermal Resource district office will be contacted to obtain information on the requirements and approval to perform remedial operations. |
| ***Air Quality*** | |
| **PF-60** | During construction, the City's Resident Engineer will ensure that the construction contractor complies with the Caltrans' Standard Specifications in Section 14-9 (2018). |

## Table S-1. Additional Project Features

| Project Feature | |
|---|---|
| | • Section 14.9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. |
| **PF-61** | During construction, the City's Resident Engineer or designated contractor will ensure that water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions. |
| **PF-62** | During construction, the City's Resident Engineer or designated contractor will ensure that a soil binder will be spread on any unpaved roads used for construction purposes and on all Project construction parking areas. |
| **PF-63** | During construction, the City's Resident Engineer or designated contractor will ensure that trucks will be washed as they leave the ROW as necessary to control fugitive dust emissions. |
| **PF-64** | During construction, the City's Resident Engineer or designated contractor will ensure that construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by CCR Title 17, Section 93114. |
| **PF-65** | Prior to construction, the City's Resident Engineer or designated contractor will ensure that a dust control plan will be developed; documenting sprinkling, temporary paving, speed limits, and timely revegetation of disturbed slopes, as needed; to minimize construction impacts on existing communities. |
| **PF-66** | During construction, the City's Resident Engineer or designated contractor will ensure that equipment and materials storage sites will be located as far away from residential and park uses as practicable. Construction areas will be kept clean and orderly. |
| **PF-67** | Prior to construction, the City's Resident Engineer or designated contractor will ensure that environmentally sensitive areas will be established near sensitive air receptors. Within these areas, construction activities involving the extended idling of diesel equipment or vehicles will be prohibited, to the extent feasible. |
| **PF-68** | During construction, the City's Resident Engineer or designated contractor will ensure that track out reduction measures, such as gravel pads at Project access points to minimize dust and mud deposits on roads affected by construction traffic, will be used. |
| **PF-69** | During construction, the City's Resident Engineer or designated contractor will ensure that all transported loads of soils and wet materials will be covered before transport or adequate freeboard (space from the top of the material to the top of the truck) will be provided to minimize emission of dust during transportation. |
| **PF-70** | During construction, the City's Resident Engineer or designated contractor will ensure that dust and mud deposited on paved, public roads due to construction activity and traffic will be promptly and regularly removed to reduce particulate matter emissions. |

## Table S-1. Additional Project Features

| Project Feature | |
|---|---|
| **PF-71** | During construction, the City's Resident Engineer or designated contractor will ensure, to the extent feasible, that construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times. |
| **PF-72** | During construction, the City's Resident Engineer or designated contractor will ensure that mulch will be installed or vegetation planted as soon as practical after grading to reduce windblown particulate matter in the area. |
| **PF-73** | During construction, the City's Resident Engineer or designated contractor will ensure that all trucks that are to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads. |
| **PF-74** | During construction, the City's Resident Engineer will ensure that the contractor will adhere to Caltrans' Standard Specifications for Construction (Sections 14.9 02). |
| ***Noise*** | |
| **PF-75** | During construction, the City's Resident Engineer will ensure that the contractor will use an alternative warning method instead of a sound signal unless required by safety laws. |
| **PF-76** | During construction, the City's Resident Engineer will ensure that the contractor will equip all internal combustion engines with the manufacturer recommended muffler and will not operate any internal combustion engine on the job site without the appropriate muffler. |
| **PF-77** | During construction, the City's Resident Engineer or designated contractor will ensure that all construction equipment, fixed or mobile, will be equipped with properly operating and maintained mufflers consistent with manufacturers' standards during all Project site excavation and grading on site. |
| **PF-78** | During construction, the City of Long Beach's Resident Engineer or designated contractor will ensure that all stationary construction equipment will be placed so that emitted noise is directed away from noise sensitive locations nearest the Project site. |
| **PF-79** | During construction, the City of Long Beach's Resident Engineer or designated contractor will ensure that construction vehicle staging areas and equipment maintenance areas will be located as far as possible from sensitive receptor locations. |

## Table S-1. Additional Project Features

| Project Feature | |
|---|---|
| ***Natural Communities*** | |
| **PF-80** | During construction, the City of Long Beach (City) will ensure that a biologist approved by the Carlsbad Fish and Wildlife Office (CFWO) and National Marine Fisheries Service (NMFS) (Project Biologist) will be on site weekly during Project construction within 200 feet of Environmentally Sensitive Areas (ESAs) and habitat for listed species with the potential to occur in the area (i.e. western snowy plover and California least tern) in order to ensure compliance with all conservation measures. The Project Biologist will be familiar with the habitats, plants, and wildlife in the Project area and will maintain communications with the contractor to ensure that issues relating to biological resources are appropriately and lawfully managed. The Project Biologist will review final plans, designate areas that need temporary fencing (e.g. ESA fencing), and monitor construction. The biologist's name and contact information will be submitted to the CFWO prior to initiating project construction. The contract of the biologist will allow direct communication with the CFWO at any time regarding the proposed project. The Project Biologist will meet the qualifications defined under SSP 14 6.03D(1) Contractor Supplied Biologist. |
| **PF-81** | After the completion of construction, the City of Long Beach (City) will ensure that the Project Biologist will submit a final report to the CFWO within 120 days of project completion, including photographs of impact areas and adjacent habitat, documentation that authorized impacts were not exceeded, and documentation that general compliance with all conservation measures was achieved. The report will specify numbers and locations of listed species (if observed); observed listed species behavior (especially in relation to project activities); and remedial measures employed to avoid and minimize impacts to listed species. Raw field notes will be provided upon request by the CFWO. |
| **PF-82** | The City's Resident Engineer will ensure that prior to clearing or construction, highly visible barriers (such as orange construction fencing) will be installed around sensitive habitats adjacent to the Project footprint to designate ESAs to be preserved. No grading or fill activity of any type will be permitted within these ESAs. The requirement to install highly visible barriers to designate ESAs will be done in accordance with SSP 14 6.03D(2) Natural Resource Protection Plan. |
| **PF-83** | The City's Resident Engineer will ensure that heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental damage to nearby preserved areas. All equipment maintenance, staging, and dispensing of fuel, oil, or any other, such activities will occur in developed or designated nonsensitive upland habitat areas. The designated upland areas will be located in such a manner as to prevent the runoff from any spills from entering waters of the U.S. Provisions to protect ESAs from heavy equipment, including motor vehicle access, will be done in accordance with SSP 14 6.03D(2) Natural Resource Protection Plan. |
| **PF-84** | During construction, the City's Resident Engineer or designated contractor will ensure that turbidity curtains be used in lieu of silt curtains, which are less effective at trapping sediment in tidal channels. |

## Table S-1. Additional Project Features

| Project Feature | |
|---|---|
| ***Animal Species*** | |
| **PF-85** | The City's Resident Engineer will ensure that any native or exotic vegetation removal or tree trimming activities will occur outside of the nesting bird season (February 15 through September 1). In the event that vegetation clearing is necessary during the nesting season, a qualified biologist will conduct a preconstruction survey to identify the locations of nests. Should nesting birds be found, an exclusionary buffer will be established by the biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction or clearing will not be conducted within this zone until the biologist determines that the young have fledged or the nest is no longer active. Nesting bird protection measures will be implemented in accordance with Caltrans SSP 14-6.03B Bird Protection. |
| **PF-86** | The City's Resident Engineer will ensure that all work on existing bridges with potential habitat conducted between February 15 and September 1 will include a survey for bird nests. If bird nests are found, all inactive bird nests will be removed prior to February 1 of that year, before commencement of the nesting season, under guidance and observation of a qualified biologist. Removal of nests that are under construction must be repeated as frequently as necessary to prevent nest completion or until a nest exclusion device is installed (such as netting or a similar mechanism that keeps birds from building nests). If a nest has been completed and eggs have been laid, an exclusionary buffer will be established by a qualified biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction or clearing will not be conducted within this zone until the biologist determines that the young have fledged or the nest is no longer active. Nest removal and exclusion device installation will be monitored by a qualified biologist. Such exclusion efforts must be continued to keep the structures free of swallows until September or completion of construction. All nest exclusion techniques will be coordinated among the City, a Caltrans District Biologist, and the resource agencies. Nesting bird protection measures will be implemented in accordance with Caltrans SSP 14-6.03B Bird Protection. |
| ***Threatened and Endangered Species*** | |
| **PF-87** | Caltrans will consult with the NOAA Fisheries Service for impacts on EFH for northern anchovy. The protection of all life stages of anadromous fish in streams will be done in accordance with Caltrans SSP 14-6.03 Species Protection and SSP 14-6.03C Fish Protection. |
| ***Energy*** | |
| **PF-88** | The Project will incorporate the use of energy-efficient lighting, such as LED traffic signals and street lights, to the extent feasible. LED lights consume 10 percent of the electricity of traditional lights. |

Notes:
LA River=Los Angeles River; LBFD=Long Beach Fire Department; MLD=Most Likely Descendent; PS&E=plans, specifications, and estimates

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# S.3 Purpose and Need

## S.3.1 Purpose of the Project

The purpose of the proposed Project is to:

- Provide a structure and highway facility that meets current structural and geometric design standards
- Provide a facility that is compatible with planned freeway improvements and downtown development projects
- Improve connectivity from the downtown area to surrounding communities and adjacent recreational use areas
- Improve safety and operations for all modes of transportation

The Project limits are generally bounded by 9th Street and 10th Street ramp connections and West Shoreline Drive to the west, Magnolia Avenue to the east, Ocean Boulevard and West Shoreline Drive to the south, and Anaheim Street to the north. The Project limits on the east side extend beyond Magnolia Avenue along Anaheim Street and 6th and 7th Streets to Atlantic Boulevard.

The proposed Project would reconstruct Shoemaker Bridge and realign local street connections to the bridge. The proposed Project limits serve as logical termini, or rational end points for transportation improvements and is sufficient to evaluate the environmental impacts of the connections that originate in downtown Long Beach at the south end and terminate at the bridge's connection to I-710 at the north end, because the Project purpose is to modernize the structure and geometrics of the bridge and to facilitate planned projects adjacent to the bridge. If the other planned projects, such as the I-710 Corridor Project, or other foreseeable transportation improvements are not constructed, the proposed Project would still address the need to bring the bridge structure and roadway up to current design standards. The Shoemaker Bridge replacement and connection modifications are not dependent on other planned projects because local street connections would be made to existing facilities. As such, the proposed Project is considered to have independent utility.

## S.3.2 Need for the Project

The existing Shoemaker Bridge has structural deficiencies and an accident rate in excess of the average for comparable facilities because of nonstandard geometric features that cannot be upgraded to current state highway standards. The Project is needed to improve safety, operations, and connectivity between downtown Long Beach and regional transportation facilities. It is also needed to accommodate planned improvements in the area, such as the City's planned improvements to Cesar E. Chavez and Drake Parks.

If the existing Shoemaker Bridge were to continue to be used for vehicular traffic, the existing non-standard features would remain, and the existing bridge alignment would preclude planned improvements by other locally and regionally significant projects, specifically, the I-710 Corridor Project. The implementation of the proposed Project would provide consistency with the improvements proposed as part of the I-710 Corridor Project. The I-710 Corridor Project proposes improvements to I-710 in City of Long Beach between Ocean Blvd. and SR 60. That project will include widening the

freeway by adding up to two lanes in each direction, improving interchange connections, and upgrading nonstandard features (lane widths, merging distance, etc.) to current Highway Capacity Manual standards. That project also includes alternatives to add a four lane separated freight movement corridor.

In addition, the proposed improvements would provide consistency with the Mobility Element of the City of Long Beach General Plan (City of Long Beach 2013), and meet the needs for traffic safety and accommodating the projected increase in demand for non-motorized transportation facilities within the City.

## Capacity, Transportation Demand and Safety

I-710 serves as the principal transportation connection for goods movement between the Port of Los Angeles and Port of Long Beach (POLB), located at the southern terminus of I-710, and the Burlington Northern Santa Fe (BNSF) Railway/Union Pacific Railroad (UP Railroad) rail yards in the cities of Commerce and Vernon. I-710 also provides key interstate commerce connections to east-west freeways (Interstate 405 [I-405], State Route 91 [SR-91], Interstate 105 [I-105], State Route 60 [SR-60], Interstate 10 [I-10], and Interstate 5 [I-5]). I-710 and the Shoemaker Bridge provide the primary connection between I-710 and downtown Long Beach.

### Level of Service

According to the freeway operations analysis and as further detailed in Traffic Operations Analysis Report (TOAR) dated August 2019, the mainline, weaving, and merge/diverge areas of the SR-710 and Shoemaker Bridge operate at level of service (LOS) D or better in the morning and afternoon peak hour with the exception of the following two mainline segments. The two mainline segments, as shown below, are expected to operate at same LOS as under the build conditions: LOS E during the morning peak hour.

- Northbound SR-710 - Westbound Anaheim Street on-ramp and southbound Pacific Coast Highway off-ramp
- Southbound SR-710 - North of westbound Anaheim Street off-ramp

Among all the study intersections, all the intersections are expected to operate at LOS E or better with the exception of Pier B Street/Pico Avenue at SR-710 Ramps/9$^{th}$ Street intersection which operates at LOS F during the AM peak hour during all the scenarios including the existing, future No Build, and future Build Conditions.

### Safety

Traffic accident data was assembled from Caltrans' Traffic Accident and Surveillance Analysis Systems (TASAS) database. Data was collected for a 36 months period from January 1, 2015 through December 31, 2017 for SR-710 mainline segment within the study area. Accident data presented in Table S-2 compares actual accident rates on the mainline segment to its corresponding state average rates. Accident rates are expressed as number of accidents per million vehicle miles. Table S-2 indicates that the SR-710 segment in the northbound direction has a total accident rate that is substantially higher than the state average rate while the SR-710 segment in the southbound direction has a total accident rate that is higher than the state average.

**Table S-2. Freeway Mainline Accident Data for SR-710**

| PM | Location | Number of Accidents | | | | Actual Accident Rates [1] | | | Average Accident Rates [1] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | T | F | I | F+I | F | F+I | T | F | F+I | T |
| ***NB*** | | | | | | | | | | | |
| PM 6.00 to 6.40 | SR-710 | 38 | 0 | 6 | 6 | 0.00 | **0.25** | ***1.57*** | 0.003 | 0.22 | 0.69 |
| ***SB*** | | | | | | | | | | | |
| PM 6.00 to 6.40 | SR-710 | 19 | 0 | 4 | 4 | 0.00 | 0.17 | **0.79** | 0.003 | 0.22 | 0.69 |

Source: Caltrans District 7 TASAS Table B (January 1, 2015 to December 31, 2017)
Notes:
[1] The accident rate is the number of accidents per million vehicle-miles.
**Bold** indicates an actual accident rate that is higher than the state average accident rate for the segment.
***Bold/Italic/Underline*** indicates actual accident rate that is significantly higher than the state average accident rate for the segment.
F=fatal; I=injury; NB=northbound; PM=post mile; SB=southbound; T=total

Accident data was collected for 36 months period from January 1, 2015 through December 31, 2017, for Shoreline Drive ramps. Similar to mainline accident data, ramp accident rates were compared to the state average rates at the corresponding ramp locations. Table S-3 presents accident data for each ramp location. The data indicates that both ramp locations have actual accident rates that are lower than average rates that are lower than state average rates.

**Table S-3. Freeway Ramp Accident Data for SR-710**

| PM | Location | Number of Accidents | | | | Actual Accident Rates [1] | | | Average Accident Rates [1] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | T | F | I | F+I | F | F+I | T | F | F+I | T |
| ***NB*** | | | | | | | | | | | |
| 6.228 | Shoreline Drive NB On-Ramp | 5 | 0 | 1 | 1 | 0.000 | 0.03 | 0.16 | 0.002 | 0.11 | 0.32 |
| ***SB*** | | | | | | | | | | | |
| 6.272 | Shoreline Drive SB Off-Ramp | 1 | 0 | 1 | 1 | 0.000 | 0.03 | 0.03 | 0.003 | 0.15 | 0.45 |

Source: Caltrans District TASAS Table B (January 1, 2015 to December 31, 2017)
Notes:
[1] The accident rate is the number of accidents per million vehicle-miles.
F=fatal; I=injury; NB=northbound; PM=post mile; SB=southbound; T=total

Evaluation of freeway mainline accident data based on collision type is presented in Table S-4, reveals that the most common type of collision reported for NB SR-710 was sideswipe followed by hitting an object and rear end. On SB SR-710, the most common collision type was sideswipe followed by hitting an object and rear end.

**Table S-4. Freeway Mainline Type of Collision for SR-710**

| PM | Location | Type of Collision | Head-on | Sideswipe | Rear End | Broadside | Hit Object | Overturn | Auto-pedestrian | Other | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ***NB*** | | | | | | | | | | | |
| PM 6.00 to 6.40 | SR-710 | Total | 0 | 22 | 6 | 0 | 8 | 2 | 0 | 0 | 38 |
| | | Percent (%) | 0.0 | ***57.9*** | 15.8 | 0.0 | **21.0** | 5.3 | 0.0 | 0.0 | 100 |
| ***SB*** | | | | | | | | | | | |
| PM 6.00 to 6.40 | SR-710 | Total | 0 | 9 | 3 | 1 | 6 | 0 | 0 | 0 | 19 |
| | | Percent (%) | 0.0 | ***47.3*** | 15.8 | 5.3 | **31.6** | 0.0 | 0.0 | 0.0 | 100 |

Source: Caltrans District 7 TASAS Selective Accident Retrieval (TSAR) (January 1, 2015 to December 31, 2017)
Notes:
***Bold/Italic/Underline*** indicates most occurring type of collision
**Bold** indicates second most occurring type of collision

Evaluation of freeway ramp accident data presented in Table S-5 reveals that the most common type of collision reported for NB SR-710 on-ramp from Shoreline Drive was rear-end followed equally by hitting an object, head-on, and auto-pedestrian. For SB SR-710 off-ramp to Shoreline Drive, hitting an object was the type of collision of the only reported accident.

**Table S-5. Freeway Ramp Type of Collision for State Route 710**

| PM (post mile) | Location | Collision Type | Head-on | Sideswipe | Rear End | Broadside | Hit Object | Overturn | Auto-pedestrian | Other | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Northbound*** | | | | | | | | | | | |
| 6.228 | Shoreline Drive On-Ramp | Total | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 5 |
| | | Percent (%) | **20.0** | 0.0 | ***40.0*** | 0.0 | **20.0** | 0.0 | **20.0** | 0.0 | 100 |
| ***Southbound*** | | | | | | | | | | | |
| 6.272 | Shoreline Drive Off-Ramp | Total | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| | | Percent (%) | 0.0 | 0.0 | 0.0 | 0.0 | ***100*** | 0.0 | 0.0 | 0.0 | 100 |

Source: Caltrans District 7 TASAS Accident Retrieval (TSAR) (January 1, 2015 to December 31, 2017)
***Bold/Italic/Underline*** indicates most occurring type of collision
**Bold** indicates second most occurring type of collision

### Roadway Deficiencies

The existing Shoemaker Bridge was constructed in 1953 and needs to be reconstructed to bring the structure up to current structural design standards consistent with American Association of State Highway and Transportation Officials (AASHTO) Load Resistance Factor Design (LRFD) Bridge Design Specification, 2012 (Sixth Edition) with California Amendments (AASHTO-CA BDS-6), and current roadway design standards, consistent with Caltrans Highway Design Manual (HDM) design standards (December 14, 2018). The following items are assessed in the evaluation of the existing structure: the deck condition is poor, the bridge rails do not meet current standards, and the deck geometry is characterized as tolerable. Additionally, local traffic entering and exiting from ramps on either end of the bridge, northbound (NB) and southbound (SB), have weaving distances that do not meet current standards. Accidents occurring on the bridge and ramps may be attributed in part to the short weaves.

Replacement of the bridge and realignment of connectors in accordance with current Caltrans Highway Design Manual standards would reduce the potential for accidents and modernize the roadway and structural design while accommodating future planned projects, such as the I-710 Corridor Project and the Drake-Chavez Greenbelt Project.

## Social Demands or Economic Development

The City completed the Final Program Environmental Impact Report (PEIR) for the Downtown Plan (DTP) in November 2011. The Project is located within the DTP, which replaces the existing PD-30 planned development ordinance and incorporates zoning, development standards, and design guidelines to guide new development consistent with the community vision for downtown Long Beach.

The DTP is bounded by the LA River to the west, Ocean Boulevard to the south, a portion of Anaheim Street to the north, and land on both sides of Alamitos Avenue on the east (City of Long Beach Planning n.d.).

The fully implemented DTP could increase the density and intensity of existing downtown Long Beach land uses implementing the following:

- Approximately 5,000 new residential units
- 1.5 million square feet of new office, civic, cultural, and similar uses
- 384,000 square feet of new retail
- 96,000 square feet of restaurants
- 800 new hotel rooms

The additional development assumed in the DTP could occur over a 25-year time period. The plan would also enhance mobility for pedestrians, bicyclists, and transit users, while providing a balanced multimodal transportation system (Long Beach Development Services 2008). The Project would accommodate these improvements to help facilitate the connections proposed in the Drake-Chavez Greenbelt Project, which would provide pedestrian connections to the surrounding neighborhood and would provide a bicycle path connection to the Los Angeles River and Rio Hondo (LARIO) Trail.

Shoemaker Bridge provides a vital connection between SR-710 on the west side of the LA River and downtown Long Beach, on the east side of the LA River. The SR-710 mainline continues south past Shoemaker Bridge on the west side of the LA River and provides connections to the POLB and the Port of Los Angeles via local streets and the Terminal Island Bridge. In addition to housing the City's government core (City government offices, main library, courthouse, convention center, and police headquarters), downtown Long Beach is a major tourist destination with unique attractions (Pine Avenue, Pike Place, Long Beach Aquarium, Shoreline Village, and the Queen Mary).

## Modal Interrelationships and System Linkages

SR-710 serves as the principal transportation connection for goods movement between the Port of Los Angeles and POLB, located at the southern terminus of SR-710, and the BNSF Railway/ UP Railroad rail yards in the Cities of Commerce and Vernon. SR-710 also provides key interstate commerce connections to east-west freeways (I-405, SR-91, I-105, SR-60, I-10, and I-5). SR-710 and the Shoemaker Bridge provide the primary connection between SR-710 and downtown Long Beach.

Within the city, public transportation is provided by Long Beach Transit (LBT), the City, and Los Angeles County Metropolitan Transportation Authority (Metro). LBT is the principal provider of public transportation in the city and provides transportation via bus, shuttle, and water taxi.

The following are descriptions of each service provided by LBT:

- LBT currently operates 34 bus routes and nearly 2,000 bus stops. LBT bus routes offer connections to local rail service and to the neighboring Cities of Carson, Compton, Paramount, Bellflower, Artesia, Cerritos, Hawaiian Gardens, and Norwalk.

- The Passport Shuttle is a free local bus service that serves various neighborhoods in Long Beach, including California State University, Long Beach (CSULB), downtown Long Beach, and Pine Avenue.

- The AquaLink water taxi has four stops and ferries up to 75 passengers to the most popular Long Beach Harbor and Alamitos Bay Landing attractions. The AquaLink operates daily from May 21 to September 5 and on weekends September 9 to October 30 (Long Beach Transit n.d.).

- The AquaBus water taxi, which ferries up to 49 passengers to the most popular attractions on the Long Beach Waterfront, stops at five locations, including the Aquarium of the Pacific and the Queen Mary. The AquaBus operates daily from May 21 to September 5 and on weekends from September 9 to October 30 (Long Beach Transit n.d.).

In addition to services provided by LBT, the City administers a Dial-A-Lift service, which offers a curb-to-curb, shared-ride transit service exclusively for the mobility-impaired residing in and traveling throughout the cities of Long Beach, Lakewood, and Signal Hill.

Metro operates the Blue Line light rail in the city, which connects downtown Long Beach to downtown Los Angeles. The north-south Blue Line connects to east-west lines, such as the Red Line in downtown Los Angeles and the Green Line in Willowbrook. There are eight Blue Line stations located in the City. The Transit Mall and Pacific Stations are located within the neighborhoods adjacent to the Project limits, at Pacific Avenue/1st Street and Pacific Avenue/5th Street, respectively.

Portions of the LARIO Trail (a Class I Bikeway) are located within and adjacent to the proposed Project limits. Access points to the LARIO Trail are located throughout the City; however, two access points are located within or adjacent to the proposed Project. One access point is located adjacent to the Southern California Edison (SCE) substation and another is located just north of Shoemaker Bridge near DeForest Avenue, on the east side of the LA River.

In addition, other Class I, II, and III Bikeways are located throughout the City and the neighborhoods adjacent to the proposed Project limits. Class I Bikeways are located along West Shoreline Drive, West Broadway, and 3rd Street. Class II Bikeways are located along 6th Street and 7th Street. Class III Bikeways are located along Pacific Avenue and Chestnut Avenue.

The proposed Project would improve connectivity and access between the western portion of Long Beach, which is primarily comprised of the POLB and rail facilities, to downtown Long Beach by improving existing trail and bikeways. These improvements would provide the surrounding communities safer and more efficient access to mass transit.

### Related Projects

Information concerning related projects provides contextual information for the Project and identifies how the transportation agencies have coordinated transportation planning efforts.

- **I-710 Corridor Project -** The I-710 Corridor Project proposes improvements to I-710 in City of Long Beach between Ocean Blvd. and SR-60. The project will include widening the freeway by adding up to two lanes in each direction, improving interchange connections, and upgrading nonstandard features (lane widths, merging distance, etc.) to current Highway Capacity

Manual standards. The project also includes alternatives to add a four lane separated freight movement corridor.

- **Pier B On-Dock Rail Support Facility Project -** The Pier B On-Dock Rail Support Facility Project (Pier B Project) proposes to reconfigure, expand, and enhance the Pier B Rail Yard located along Anaheim Street and I-710. The project will support more efficient use of "on-dock" rail at the POLB's shipping terminals. The project will also ease roadway traffic congestion and improve air quality.

- **Drake/Chavez Greenbelt Master Plan Project -** The Drake/Chavez Greenbelt Master Plan includes the construction of a new 57-acre public park along the lower LA River that will link Cesar E. Chavez Park to Drake Park, as well as Loma Vista Park. The project will include developments such as the Cesar Chavez/Greenbelt link, LARIO Trail system access, wetlands, a community and urban nature center, community gardens, and various new sports and recreation facilities, among other substantial improvements.

- **Drake/Chavez Soccer Fields Project –** The Drake/Chavez Soccer Fields project proposes to develop 8.75 acres of new park facility on existing vacant parcels. The project would consist of one striped soccer field, large landscaped open space/passive park areas, a pedestrian walking trail, restroom facilities, and parking. The proposed park would incorporate the existing Loma Vista Park into the new park layout by removing the existing chain-link fencing along the northeastern portions of Loma Vista Park. In addition, the proposed project would use a portion of a City-owned parking lot located near the northwest area of the project site to accommodate the proposed passive park space.

The proposed Drake Park Soccer Field Project would be linear in form and would be characterized by an 8 foot wide pedestrian trail traversing the park from the northeast to southwest. The northeast entrance at Anaheim Street and N. Daisy Avenue is envisioned to be a gateway entrance to the proposed park.

- **Long Beach Municipal Urban Stormwater Treatment (LB MUST) Facility Project -** The project is a planned capital improvement project located on the east and west banks of the LA River and SR-710/I-710. LB MUST includes facilities intended to improve water quality associated with urban runoff in the project area, which ultimately flows into the LA River. The two primary project components of the LB MUST project are the MUST facility and the conveyance facilities to carry urban runoff to the MUST facility for treatment. The MUST facility will be located along the east bank of the LA River, immediately north of the existing Shoemaker Bridge. The project will be integrated with the Drake/Chavez Park Master Plan improvements and by providing pedestrian and bicyclist access to the LA River, and coastal post detention basins. These detention basins will be located just south of the existing bridge, and will surround the eastern terminus support structure of the proposed Shoemaker Bridge.

## S.4 Proposed Action

This section describes the proposed project and the design alternatives that were developed by a multidisciplinary team to achieve the proposed project purpose while avoiding or minimizing environmental impacts. The alternatives, as described in this section, consist of Alternative 1 (No Build), Alternative 2 (Design Options A and B), and Alternative 3 (Design Options A and B).

### S.4.1 Alternative 1 (No Build)

Under the Alternative 1 (No Build), the proposed Project improvements would not be implemented; therefore, no construction activities would occur. The existing structure and highway facility would not meet current structural and geometric design standards and, thus, safety and connectivity would not be improved within the Project area.

### S.4.2 Alternative 2 (Design Options A and B)

Build Alternative 2 includes the replacement of the ramp structures that connect to the downtown Long Beach roadway system. This alternative would evaluate the roundabout design option (Design Option A) and the "Y" intersection design option (Design Option B) at the east end of the proposed bridge. The new bridge would consist of multiple structures, with numerous spans that cross the LA River, the northbound (NB) lanes of SR-710, and the LA River and Rio Hondo (LARIO) Trail. The new ramps would be located approximately 500 feet (measured from centerline) south of the existing Shoemaker Bridge. A portion of the existing bridge would be repurposed into a non-motorized recreational public space maintained by the City. The bottom of the new river-spanning structures would exceed the existing 43-foot mean high water level (MHWL).

The deck of the new bridge would accommodate two through ramp lanes in each direction, shoulders, barriers, and vista point on the south side of the bridge. Under Design Option B, the bridge would also include two turn lanes in the southbound (SB) direction. On the west side of the river, the ramps would connect on the left side of the freeway, at approximately the same merge and diverge existing ramp locations. On the east side of the river, a roundabout or "Y" intersection would be provided at the ramp termini. The ramp termini would be located at or near the eastern abutment of the river-spanning section of the new Shoemaker Bridge.

### S.4.3 Alternative 3 (Design Options A and B)

Similar to Alternative 2, Alternative 3 includes the replacement of the ramp structures that connect to the downtown Long Beach roadway system. It would also evaluate both Design Options A and B at the east end of the proposed bridge. In addition, similar to Alternative 2, the bridge under Alternative 3 with Design Option B would include two turn lanes in the SB direction. On the west side of the river, the ramps would connect on the left side of the freeway, at the same merge and diverge locations of the existing ramps. On the east side of the river, a roundabout (Design Option A) or a "Y" intersection (Design Option B) would be provided at the ramp termini. The ramp termini are located at or near the eastern abutment of the river-spanning section of the new Shoemaker Bridge. Local street improvements described under Alternative 2 would also apply under Alternative 3. The difference between Alternatives 2 and 3 is the removal of the existing Shoemaker Bridge. The same ramp/connectors proposed under Alternative 2 would apply under Alternative 3.

## S.5 Identification of the Preferred Alternative

The City, as the lead agency under CEQA in cooperation with Caltrans, as lead agency under NEPA, have identified Alternative 3 (Design Option A) as the Preferred Alternative. After the public circulation period, all comments were considered and addressed prior to the Project Development Team (PDT) selecting the Preferred Alternative, Alternative 3 (Design Option A). Alternative 3 (Design Option A), includes the complete removal of the existing Shoemaker bridge and construction of the new bridge with a roundabout on the eastern end of the proposed bridge as well as local road improvements

throughout the Project limits. Alternative 3 (Design Option A) was selected as the Preferred Alternative because it best satisfies the purpose and need of the Project. Additionally, Alternative 3 consists of the removal of the entire existing Shoemaker bridge and minimizes risks associated with additional piers or columns within the LA River due to the potential hydraulics alterations of the LA River. The Preferred Alternative has also been documented within the Project Report. The environmental effects of the build alternatives are substantially the same.

## S.6 Joint CEQA/NEPA Document

The project is subject to federal, as well as the City of Long Beach and state environmental review requirements because the City of Long Beach proposes the use of federal funds from the Federal Highway Administration (FHWA) and/or the project requires an approval from FHWA. Project documentation, therefore, has been prepared in compliance with both CEQA and the NEPA. The City of Long Beach is the project proponent and the lead agency under CEQA. FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans. With NEPA Assignment, FHWA assigned and Caltrans assumed all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to Caltrans under the 23 USC 326 CE Assignment MOU, projects excluded by definition, and specific project exclusions.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the project as a whole, often a "lower level" document is prepared for NEPA. One of the most common joint document types is an Environmental Impact Report/Environmental Assessment (EIR/EA).

After receiving comments from the public and reviewing agencies, a Final EIR/EA has been prepared. The Final EIR/EA includes responses to comments received on the Draft EIR/EA and identifies the preferred alternative. After the Final EIR/EA is made available, if the City decides to approve the Project as CEQA lead, a Notice of Determination (NOD) will be published in compliance with CEQA. If Caltrans decides to approve the Project under NEPA, a FONSI will be published for compliance with NEPA. A Notice of Availability (NOA) of the FONSI will be sent to the affected units of federal, state, and local government, and to the State Clearinghouse in compliance with Executive Order 12372. The FONSI will be signed once the Project satisfactorily demonstrates requirements under the Transportation Conformity rules and regulations as the scope and concept of the project will be amended in the upcoming RTP. In California, no new regional conformity determinations can be approved by FHWA until emissions inventories are updated with new assumptions reflecting the recently-implemented SAFE Vehicles Rule Part One: One National Program.

## S.7 Environmental Consequences

Table S-7 provided at the end of this Executive Summary summarizes the impacts documented in the environmental analysis contained in Chapter 3 of this EIR/EA. The environmental commitments and measures to minimize harm are listed in the Environmental Commitments Record in Appendix E.

# S.8 Summary of Significant Impacts under CEQA after Mitigation

As discussed in detail in Chapter 3, California Environmental Quality Act (CEQA) Evaluation, no CEQA impacts of the proposed Build Alternatives 2 and 3 (Design Options A and B) were determined to be significant, adverse, and unavoidable after implementation of the identified avoidance, minimization, and mitigation measures or were determined to be either not significant under CEQA or to be avoided or reduced to below a level of significance based on implementation of the project avoidance, minimization, and mitigation measures, as described in detail in Chapter 3.

# S.9 Areas of Controversy and Unresolved Issues

In California, no new regional conformity determinations can be approved by FHWA until emissions inventories are updated with new assumptions reflecting the recently-implemented SAFE Vehicles Rule Part One: One National Program. The FONSI qualifies as an unresolved issues, and will be signed once the Project meets all NEPA requirements, including satisfactorily demonstrating requirements under the Transportation Conformity rules and regulations as the scope and concept of the project will be amended in the upcoming RTP.

# S.10 Coordination with Public and Other Agencies

## S.10.1 Notice of Preparation

The scoping process for the proposed Project was initiated with the preparation and distribution of a Notice of Preparation (NOP). The NOP was posted at the State Clearinghouse (SCH No. 2016041007) and circulated to public agencies and other interested parties in compliance with Section 15082 of the CEQA Guidelines on April 1, 2016. The NOP notified the public of the Environmental Impact Report/Environmental Assessment (EIR/EA) being prepared, along with the scoping meeting location and ways in which the public could provide comments on the Project.

Twelve comments were received from federal, state, and regional/County agencies, and 22 comment letters were received from the general public in response to the NOP. These agencies consisted of the Native American Heritage Commission (NAHC), United States Coast Guard (USCG), Gabrieleno Band of Mission Indians- Kizh Nation, South Coast Air Quality Management District (SCAQMD), Long Beach Water Department, Los Angeles County of Sanitation District, County of Los Angeles Department of Public Works Flood Maintenance Division (LADPW Flood Control District), the California State Lands Commission (CSLC), Long Beach Unified School District (LBUSD), Caltrans, United States Fish and Wildlife Service (USFWS)

A summary of main topics of concern from the general public that were received in response to the NOP included concerns for the potential of increased traffic and refuse truck trips, the cost of the proposed Project and funding sources; removal of 9th Street and the potential lack of access to 6th Street disrupting surrounding residents; the flow of 7th Street traffic if become a two-way roadway, potential for existing flooding conditions on Maine Avenue and Edison Elementary School to worsen; the potential loss of access between the west side of the City and Downtown Long Beach; the speed limit of traffic exiting the bridge into the downtown Long Beach residential areas; the potential for the proposed roundabout to cause more accidents from speeding and drunk drivers; the potential of

decreased air quality resulting from construction of the proposed Project; noise impacts to marine life; noise impacts associated with increased traffic through the Project area, and how the proposed park improvements would have potential impacts to existing parking. The public also made requests that if the existing bridge is used for recreation, it should be ADA compliant and for continued or similar access to and from Seaside Way to Shoreline Drive/Shoemaker Bridge/SR-710 on ramp facilities

## S.10.2 Public Scoping Meetings

A public scoping meeting was held April 13, 2016, from 4:30 to 7:30 p.m. at the Jenny Oropeza Community Center at Cesar E. Chavez Park, located at 401 Golden Avenue, Long Beach, California. Several methods of notification were used, in addition to the publication of the NOP, to notify the public of the scoping period and meetings, including mail and a posting in the Long Beach Press-Telegram. Approximately 35 people attended the public scoping meeting. Spanish and Cambodian translators were at the public scoping meeting in addition to sign language interpreters.

The public scoping meeting included exhibit stations and presentations explaining the purpose of scoping, the Project background, the Shoemaker Bridge Project limits, the need and purpose of the proposed Project, Project alternatives, and key environmental issues to be addressed in the DEIR. Verbal comments were received at the scoping meeting, as well as 34 written comments.

## S.10.3 Public Circulation

As required by the CEQA Guidelines Section 15087, a public notice of availability of the Draft EIR/EA for the proposed Project was published as a display ad in the Long Beach Press Telegram and La Opinion on September 27, 2019. The Draft EIR/EA was circulated for public review for a period of 45 calendar days, from September 27, 2019 to November 12, 2019. Copies of the Draft EIR/EA were distributed to the State Clearinghouse and other federal, State, and local agencies. Copies of the Draft EIR/EA were made available for public review at Caltrans District 7, City of Long Beach Department of Public Works, the Billie Jean King Main Library, and the Mark Twain Neighborhood Library. During public circulation period of the Draft EIR/EA, twelve comments were received. Two of those comments were received outside of the public circulation review period. Comments received after the close of the public circulation period were accepted through November 15, 2019. Comments made on the Draft EIR/EA and the corresponding responses are provided in Appendix K of this Final EIR/EA.

### Public Hearing

Caltrans, in coordination with the City, held a public hearing for the proposed Project in the Cesar Chavez Elementary School Gymnasium located at 730 W. Third Street, Long Beach, CA 90802 on Thursday, October 17th, 2019 from 6:30pm to 8:30pm.

The public hearing allowed the public to engage directly with Project team members to obtain more information about the Project, and provided the public an opportunity to submit comments. The public hearing was conducted on a date during the public review period (September 27, 2019 through November 12, 2019) to maximize the solicitation of public feedback and to expand project awareness within adjacent communities. The total of 18 agency and consultant staff attended the public hearing. Fact sheets, frequently asked questions (FAQs), comment cards, and speaker cards were made available to attendees at the welcome station at the entrance of the public hearing venue.

The public hearing was held as an open house format with 10 exhibit boards and technical staff stationed available to engage and interface with the public about the proposed Project. The Project exhibit boards were provided at the Environmental, Engineering, and ROW stations. The public hearing stations were set up throughout the venue. A PowerPoint presentation with an overview of the Project background, purpose and need, alternatives evaluated, current status of the Project, and the Project schedule, commenced at 7:00 pm. Attendees were encouraged to provide a verbal comment after the conclusion of the PowerPoint presentation between 7:15pm and 8:30 pm. A court reporter documented all the verbal comments given at the public hearing in addition. Participants were also encouraged to submit written comments through the comment card available, project email, or verbally through the court reporter provided at the public hearing. The City provided two American Sign Language, one Spanish, two Tagalog, and two Khmer interpreters.

A total of 24 members of the public attended the public hearing including six residents, one representative from the Downtown Long Beach Alliance, two representatives from the Willmore City Heritage Association, one representative from the West Long Beach Association, and two representatives from the Port of Long Beach. Five members of the public provided verbal comments during the public hearing. One comment card and six speaker cards were completed and collected. The comment cards, speaker cards, and verbal comments as well as the responses to these comments are provided in Appendix K of this Final EIR/EA. Comments provided had the following key themes: public support of the proposed Project, public concerns regarding safety at schools (crosswalks, drop-off/pick-up areas), the location of adjacent projects and the coordination of these projects along with cumulative effects, and the request to notify the public of all on-going projects within the City. Overall the public comments received at the public hearing were in support of the Project.

## S.10.4 Consultation and Coordination with Agencies

### Project Team Coordination

#### Project Development Team Meetings

A PDT was identified to ensure collaborative communication among the stakeholders, which includes representatives from Caltrans, the City and Gateway Cities Council of Government. PDT meetings have occurred on a monthly basis at either Caltrans District 7 offices or the City Department of Public Works (DPW) office and are attended by the engineering and environmental consultant teams from the City and Caltrans. The larger PDT Team consists of engineers, environmental generalists, biologists, archaeologists, paleontologists, and air quality and noise specialists. Monthly PDT meetings will continue until the approval of the CEQA/NEPA process.

#### Value Analysis Workshops

A value analysis workshop has not been conducted at this time.

### Native American Consultation

The Native American Heritage Commission (NAHC) conducted searches of the Sacred Lands File (SLF) and provided lists of Native Americans on April 11, 2016 (for CEQA/AB52) and March 16, 2018, (for Section 106). No cultural resources were identified in the SLF within or adjacent to the Project. The NAHC and the City of Long Beach recommended contacting ten Native American groups/individuals as part of AB 52 consultation requirements. The following Native American

groups/individuals were contacted based on the lists provided by the NAHC and the City of Long Beach.

- Gabrieleno/Tongva San Gabriel Band of Mission Indians- Anthony Morales
- Gabrielino/Tongva Nation- Sam Dunlap and Sandonne Goad
- Gabrielino Tongva Indians of California Tribal Council- Robert Dorame
- Gabrielino-Tongva Tribe- Linda Candelaria, Bernie Acuna and Charles Alvarez
- Ti'At Society/Inter-Tribal Council of Pima- Cindi Alvitre
- Soboba Band of Luiseño Indians- Joseph Ontiveros
- Gabrieleño Band of Mission Indians-Kizh Nation- Andrew Salas
- L.A. City/County Native American Indian Commission- Ron Andrade
- Tongva Ancestral Territorial Tribal Nation- John Tommy Rosas

Per AB 52, the City of Long Beach sent letters to the ten Native American groups or representatives via U.S. certified mail on April 11, 2016, December 20, 2016, and May 4, 2017, and follow up emails on April 5, 2018 and April 23, 2018. In addition, follow up phone calls were made to the Native American groups/representatives on April 23 and 26, 2018.

For purposes of Section 106, Caltrans initiated Native American consultation to the groups/representatives listed on the NAHC Section 106 list for the Long Beach area via U.S. certified mail on March 28, 2018. Caltrans followed up with emails and phone calls to the Native American groups/representatives on April 23 and April 26, 2018.

As of January 2019, five responses from the Native American groups/representative during the AB 52 and Section 106 consultation process requested formal consultation with the City and Caltrans as well as the provision of a Native American monitor during Project construction. Copies of the ASR were sent to the Native American groups/representatives in January 2019 and a Native American consultation summary letter sent in June 2019.

## Coordination with Local Agencies and Organizations

## Downtown Long Beach Alliance Meeting

A meeting with the Downtown Long Beach Alliance was held July 19, 2019. The Project engineering and environmental consultant teams provided an overview of the Project updates since the 2016 scoping meetings including the update that public circulation is anticipated to start at end of 2019. The purpose of the meeting was gather information and to listen to concerns that the Downtown Long Beach Alliance had based on their knowledge of the downtown area. The Downtown Long Beach Alliance provided insights on several project occurring within and adjacent to the Project limits as well as several neighborhood and business groups that the Project team should be in contact with. The main concerns included the Project's integration with public and development projects that would be implemented prior to the Project, as well as the Project's effect to parking, traffic circulation, and

access to project adjacent active public spaces and businesses within the downtown area. The Downtown Long Beach Alliance advised that informational meetings and materials should be provided to these local organizations prior to public circulation. Continued coordination with the Downtown Long Beach Alliance is on-going.

### Long Beach Unified School District Meeting

A meeting with LBUSD was held July 19, 2019. The Project engineering and environmental consultant teams provided an overview of the Project updates since the 2016 scoping meetings, including the update that public circulation is anticipated to start at the end of 2019. LBUSD representatives' main concerns were related to the existing pedestrian bridge on 7th Street, the existing and proposed drop-off locations for students, and the general flow and function around the schools. LBUSD representatives were in agreement that the change of traffic circulation along 3rd, 6th, and 7th Streets; and the proposed linkages through Cesar E. Chavez Park would be beneficial to the students. However, LBUSD suggested that a follow-up meeting be scheduled in September so that they could observe drop-off and pick-up locations and the general flow of school traffic to provide more informed insights on potential impacts as a result of the proposed Project improvements along 3rd, 6th, and 7th Streets. The 2019-2020 school year for Cesar Chavez Elementary and Edison Elementary School are scheduled to begin in August. Continued coordination with LBUSD is on-going.

## S.11 Permits and Approvals Needed

The permits, reviews, and approvals listed in Table S-6 are anticipated to be required for the proposed Project.

## Table S-6. Required Permits, Reviews, and Approvals

| Agency | Permit/Approval | Status |
|---|---|---|
| FHWA | Air Quality Conformity Determination | Prior to approval of the FONSI. |
| USACE | Section 404 Permit for modification to USACE facility (levees)<br>Section 408 Permit for modification to USACE facility (levees) | Application would be submitted after environmental document approval.<br>Application would be submitted after environmental document approval. |
| CDFW | 1602 Lake or Streambed Alteration Agreement | Permit would be obtained after certification of environmental document and prior to construction. |
| CCC | CZMA consistency certification | Consistency Certification is needed prior to issuance of the Final Environmental Document pursuant to NEPA. |
| SWRCB | Section 402 NPDES/Caltrans NPDES Permit CAS000003 and CAS000002 (Construction General Permit) | The Construction General Permit has been adopted and was effective as of July 1, 2010. The Caltrans NPDES Permit was effective as of July 1, 2013. |
| Los Angeles RWQCB | NPDES Permit No. CAG994004 (Dewatering Permit) | Permit will be acquired prior to construction. |
| Los Angeles RWQCB | NPDES Permit No. CAG914001<br>(Dewatering Permit for Contaminated Sites) | Permit will be acquired prior to construction. |
| Affected utilities | Approvals to relocate, protect in place, or remove utility facilities | Prior to any construction that would affect utility facilities. |
| Los Angeles County RWQCB | Section 401 Water Quality Certification<br>Section 402 NPDES (Construction Activity) | Section 401 Water Quality Certification would be obtained after certification of environmental document and prior to construction.<br>Section 402 NPDES (Construction Activity) Application would be submitted after environmental document approval. |
| LACFCD | Encroachment Permit | Letter or permit would be obtained prior to construction. |
| City of Long Beach | Approval of encroachment permits and street construction permits, street closures and rerouting, and associated improvements in the public ROW<br>Section 4(f) consultation for Cesar E. Chavez Park.<br>Water Quality Management Plan | Actions/permits would be obtained prior to the start of construction.<br>Section 4(f) concurrence was received from the City on December 14, 2019.<br>Prior to start of construction. |

## Table S-6. Required Permits, Reviews, and Approvals

| Agency | Permit/Approval | Status |
|---|---|---|
| City of Long Beach LCP/ CCC | CDP application for consistency determination | Application would be submitted after approval of the Final Environmental Document pursuant to CEQA/NEPA. A CDP is required prior to any ground breaking activities. |
| POLB | HDP | Application would be submitted after approval of the Final Environmental Document pursuant to CEQA. An HDP is required prior to any ground breaking activities. |
| Sanitation District of Los Angeles | Construction Work Discharge Permit | Required for discharge of construction water into local sewer system. To be applied for prior to construction. |

Notes:

Caltrans=California Department of Transportation; CCC=California Coastal Commission; CDFW=California Department of Fish and Wildlife; CDP=Coastal Development Permit; CEQA=California Environmental Quality Act; CZMA=Coastal Zone Management Act; FHWA=Federal Highway Administration; HDP=Harbor Development Permit; LACFCD=Los Angeles County Flood Control District; LCP=Local Coastal Program; NEPA=National Environmental Policy Act; No.=Number; NPDES=National Pollutant Discharge Elimination System; POLB=Port of Long Beach; ROW=right-of-way; RWQCB=Regional Water Quality Control Board; SWRCB=State Water Resources Control Board; USACE=United States Army Corps of Engineers

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**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Land Use (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No significant temporary impacts are anticipated. | Alternative 2 (Design Options A and B) would involve impacts to existing land uses as a result of construction activities (i.e. temporary construction easements, temporary staging, and detours for temporary closures or limited access) within existing Caltrans or City right-of-way (ROW). Temporary construction easements (TCE) would also be required. With the inclusion of a Traffic Management Plan (TMP) identified as a Project Feature in Table S-1 and the implementation of Measure LU-1, no adverse temporary impacts to land use are anticipated. | Alternative 3 (Design Options A and B) would result in similar land use impacts as Alternative 2 (Design Option A and B). With the inclusion of a Traffic Management Plan (TMP) identified as a Project Feature in Table S-1 and the implementation of Measure LU-1, no adverse temporary impacts are anticipated. | Measure LU-1 |
| Land Use (Permanent) | Alternative 1 (No Build) would not be consistent with future growth projects and planned projects. No significant permanent impacts are anticipated. | Alternative 2 (Design Options A and B) would require partial acquisitions of adjacent properties to the existing roadway and an aerial easement. Permanent impacts to open space would also occur; however, the Project would result in a net gain of parkland with the conversion of northbound West Shoreline Drive and conversion of a portion of the existing bridge into parkland and open space. Thus, the Project under Alternative 2 (Design Options A and B) would not result in adverse permanent impacts to land use | Alternative 3 (Design Options A and B) would result in similar impacts to Alternative 2 (Design Options A and B) with the exception that under Alternative 3, the existing Shoemaker Bridge would be fully removed. Therefore, the net gain in parkland and open space would be slightly less than Alternative 2. As such, the Project under Alternative 3 (Design Options A and B) would not result in adverse permanent impacts to land use. | No avoidance, minimization, and/or mitigation measures are required. |
| Land Use/ Coastal Zone (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Portions of Alternative 2 (Design Options A and B) are located within the coastal zone. Temporary impacts would occur to coastal resources related to public access, recreational resources, visual and aesthetics, and community cohesion, estuarine habitats and water quality. With the inclusion of project features included in Table S-1 and Measures LU-1 through LU-3, NC-1 through NC-5, IS-2, and VIS-1 and VIS-2, no adverse temporary impacts to land use within a coastal zone are anticipated under Alternative 2 (Design Options A and B). | Portions of Alternative 3 (Design Options A and B) would result in similar impacts to Alternative 2 (Design Option A and B). With the inclusion of project features included in in Table S-1 and Measures LU-1 through LU-3, NC-1 through NC-5, IS-2, and VIS-1 and VIS-2, no adverse temporary impacts to land use within a coastal zone are anticipated under Alternative 3 (Design Options A and B). | Measures LU-1 through LU-3, NC-1 through NC-5, IS-2, and VIS-1 and VIS-2 |
| Land Use/ Coastal Zone (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Portions of Alternative 2 (Design Options A and B) are located within the coastal zone. Improvements extending into the City's Coastal Zone jurisdiction may include minor street improvements such as additional street lighting, re-striping, turn lanes, bicycle, pedestrian, and streetscape improvements. Permanent impacts would occur to coastal resources related to estuarine habitats and water quality. Therefore, with the inclusion of project features as seen in Table S-1 and Measures LU-3 and LU-4, NC-4 and NC-5, and PAL-1 through PAL-5, no adverse permanent impacts are anticipated. | Portions of Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Permanent impacts would occur to coastal resources related to estuarine habitats and water quality. Therefore, with the inclusion of project features as seen in Table S-1 and Measures LU-3 and LU-4, NC-4 and NC-5, and PAL-1 through PAL-6, no adverse permanent impacts are anticipated. | Measures LU-3 and LU-4, NC-4 and NC-5, and PAL-1 through PAL-5 |
| Land Use/ Parks and Recreation (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternative 2 (Design Options A and B) will temporarily impact access to portions of Cesar E. Chavez Park, the LARIO Trail, and LB MUST as a result of construction related activity. With the inclusion of a Traffic Management Plan (TMP) identified as a project feature as seen in Table S-1, and Measures PR-1, PR-3 through PR-10 (for Cesar E. Chavez Park), Measures PR-11 through PR-19 (for LARIO Trail), and Measures PR-20 through PR-28 (for LB MUST), no adverse temporary impacts are anticipated. | Alternative 3 (Design Options A and B) will result in similar impacts to Alternative 2 (Design Option A and B). With the inclusion of a Traffic Management Plan (TMP) identified as a project feature as seen in Table S-1, and Measures PR-1, PR-3 through PR-10 (for Cesar E. Chavez Park), Measures PR-11 through PR-19 (for LARIO Trail), and Measures PR-20 through PR-28 (for LB MUST), no adverse temporary impacts are anticipated. | Measures PR-1, PR-3 through PR-28 |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Land Use/ Parks and Recreation (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | ***Cesar E. Chavez Park.*** Alternative 2 (Design Options A and B) would close the existing NB West Shoreline Drive, incorporate the roadway into the Cesar E. Chavez Park; and reconfigure SB West Shoreline Drive to accommodate for two-way traffic. Additionally, other minor permanent impacts on the park include the new access configuration to the SCE Seabright substation and the new bike trails being added to provide access to the LARIO Trail. Alternative 2 (Design Option A) would require 1.55 acres of parkland for permanent transportation improvement use. Alternative 2 (Design Option B) would require 1.60 acres of parkland for permanent transportation improvement use. However, Alternative 2 would convert approximately 5.57 acres of roadways into parkland due to proposed roadway closures. Therefore, under Alternative 2 (Design Options A and B), a net gain in acreage of 4.05 acres of parkland under Design Option A, and 4.07 acres under Design Option B would result after subtracting out areas that would be permanently incorporated into the transportation facility. With implementation of Measure PR-2, no adverse permanent impacts are anticipated.<br><br>***LB MUST.*** Alternative 2 (Design Options A and B) would impact the LB MUST facility, which is anticipated to be completed prior to the proposed Project. Alternative 2 (Design Option A) would require the permanent incorporation of 1.11 acre of land from the LB MUST Facility, and Alternative 2 (Design Option B) would require the permanent incorporation of 0.73 acre of land from the facility to construct the columns, footings, and retaining walls associated with the roadway improvements. With implementation of Measures PR-20 through PR-28, no adverse permanent impacts are anticipated.<br><br>***LARIO Trail.*** Alternative 2 (Design Option A and B) would require a permanent 0.24 acre closure of the LARIO Trail. With implementation of Measures PR-11 through PR-19, no adverse permanent impacts are anticipated.<br><br>***Golden Shore RV Park.*** No impacts on the recreational use are anticipated to the Golden Shore RV Park resource or the overall use of the resource. | Alternative 3 (Design Options A and B) would result in similar impacts to Alternative 2 (Design Option A and B). Therefore, with the implementation of Measure PR-2 (for Cesar E. Chavez Park), Measures PR-11 through PR-19 (for LARIO Trail), and Measures PR-20 through PR-28 (for LB MUST), no adverse permanent impacts are anticipated. | Measure PR-2, PR-11 through PR-28. |
| Growth (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. Not temporary impacts are anticipated. | Alternative 2 (Design Options A and B) would create short-term jobs for the area during the construction phase. The majority of these jobs are expected to be filled by residents of the City and surrounding communities. Therefore, the project would not increase population, housing, or employment; and as a result, no temporary adverse impacts would occur. | Alternative 3 (Design Options A and B) would create short-term jobs for the area during the construction phase. The majority of these jobs are expected to be filled by residents of the City and surrounding communities. Therefore, the project would not increase population, housing, or employment; and as a result, no temporary adverse impacts would occur. | No avoidance, minimization, and/or mitigation measures are required. |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Growth (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternative 2 (Design Options A and B) is not a growth inducing project. The proposed Project would not establish new homes, result in permanent employment opportunities, or lead to substantial growth that have not already been projected. Additionally, the Project is not proposing to build new roadways to increase capacity and the City is primarily built-out. It is unlikely that these roadway improvements would encourage growth within the area surrounding the Project that is not already projected or planned for. Therefore, the Project would not increase population, housing, or employment under Alternative 2 (Design Options A and B) and no adverse permanent impacts would occur. | Alternative 3 (Design Options A and B) is not a growth inducing project. The proposed Project would not establish new homes, result in permanent employment opportunities, or lead to substantial growth that have not already been projected. Additionally, the Project is not proposing to build new roadways to increase capacity and the City is primarily built-out. It is unlikely that these roadway improvements would encourage growth within the area surrounding the Project that is not already projected or planned for. Therefore, the Project would not increase population, housing, or employment under Alternative 3 (Design Options A and B) and no adverse permanent impacts would occur. | No avoidance, minimization, and/or mitigation measures are required. |
| Community Impacts/ Community Character and Cohesion (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternative 2 (Design Options A and B) would create impacts during construction. These temporary impacts include traffic delays for public transit, vehicular and pedestrian circulation, and the management of homeless populations. Additionally portions of Cesar E. Chavez Park, the LARIO Trail, and LB MUST will be temporarily closed.<br><br>In addition, the entrance to the staff parking lot along 7th Street for Thomas A. Edison Elementary would be relocated along 6th Street, and improvements to drop off locations around the school would be implemented. Continued access to the staff parking lot during construction would be available, and improvements to the entrance would be conducted during the summer when school is not in session. Additional coordination during final design would be required to establish the drop off locations and the timing of construction improvements near Thomas A. Edison Elementary.<br><br>With the inclusion of a Traffic Management Plan (TMP) identified as a Project Feature in Table S-1, and the implementation of Measures LU-1, PR-11 through PR-19, CI-2 and CI-3, no adverse temporary impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, with the inclusion of a Traffic Management Plan (TMP) identified as a Project Feature in Table S-1, and the implementation of Measures LU-1, PR-11 through PR-19, CI-2 and CI-3, no adverse temporary impacts are anticipated. | Measures LU-1, PR-11 through PR-19, CI-2 and CI-3 |
| Community Impacts/ Community Character and Cohesion (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternative 2 (Design Options A and B) would result in partial acquisitions of Cesar E. Chavez Park to widen southbound West Shoreline Drive to accommodate two way traffic. However, northbound West Shoreline Drive will be removed and incorporated into Cesar E. Chavez Park as parkland. With the removal of the 6th Street off-ramp and construction of the project, two murals located on the off-ramp will be relocated and homeless populations within the Project limits would be managed through implementation of an Outreach and Engagement Plan. With the implementation of Measure TR-1 and Measures CI-1 and CI-2, no adverse permanent impacts are anticipated. | Alternative 3 (Design Options A and B) would result similar impacts to Alternative 2 (Design Option A and B). With the implementation of Measure TR-1 and Measures CI-1 and CI-2, no adverse permanent impacts are anticipated. | Measure TR-1, CI-1 and CI-2 |
| Community Impacts Relocation (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternative 2 (Design Options A and B) would involve impacts to property as a result of construction activities (i.e. TCEs, temporary staging, and detours for temporary closures or limited access). However, these areas would be restored to their original condition or better upon completion of construction. Therefore, no adverse temporary impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts to Alternative 2 (Design Option A and B). Therefore, no adverse temporary impacts are anticipated. | No avoidance, minimization, and/or mitigation measures are required. |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Community Impacts Relocation (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Build Alternative 2 (Design Options A and B) would only involve partial acquisitions of non-residential properties. No partial acquisitions would result in the displacement and relocation of these non-residential properties. Partial acquisition for properties involving City or government owned properties would be handled through the right-of-entry or encroachment permits from the City. Therefore, with the implementation of Measure CI-4, addressing partial acquisition of private property, impacts related to partial acquisitions would be reduced and no adverse permanent impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, with the implementation of Measure CI-4, addressing partial acquisition of private property, impacts related to partial acquisitions would be reduced and no adverse permanent impacts are anticipated. | Measure CI-4 |
| Community Impacts Environmental Justice (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternative 2 (Design Options A and B) would result in temporary impacts related to traffic, noise, vibration, and air quality to identified environmental justice populations within the Community Impacts Study Area. However, the Project would not displace any residents or businesses. The inclusion of project features as seen in Table S-1, and Measures LU-1, AQ-1, AQ-2, and N-1 would reduce potential construction traffic, air quality, and noise impacts to the surrounding community; thus no adverse temporary impacts are anticipated. | Alternative 3 (Design Options A and B) would result similar impacts as Alternative 2 (Design Option A and B). Therefore, with the inclusion of project features as seen in Table S-1, and Measures LU-1, AQ-1, AQ-2, and N-1 would reduce potential construction traffic, air quality, and noise impacts to the surrounding community; thus no adverse temporary impacts are anticipated. | Measures LU-1, AQ-1, AQ-2, and N-1 |
| Community Impacts Environmental Justice (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Build Alternative 2 (Design Options A and B) is not a capacity enhancing transportation project and proposes safety and efficiency improvements to existing infrastructure. In addition, implementation of Build Alternative 2 (Design Options A and B) would result in Cesar E. Chavez Park becoming one continuous park space and would provide additional recreational opportunities for the community. The Project would not result in increased vehicle emissions during the operational period. In addition, the Project would not permanently displace any residents or businesses within the study area, nor cause disproportionately high and adverse effects on any minority or low-income populations.<br><br>Although the Project fully fulfills the basic requirements of 23 Code of Federal Regulations (CFR) 772, additional design features may be incorporated during final design of the bridge to further reduce potential noise impacts.<br><br>Therefore, with the implementation of minimization measure N-2, no permanent adverse indirect impacts to the community and environmental justice populations from noise are anticipated. | Build Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). With the implementation of minimization measure N-2, no permanent adverse indirect impacts to the community and environmental justice populations from noise are anticipated | Measure N-2 |
| Utilities and Emergency Services (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternatives 2 (Design Options A and B) would result in temporary construction-related impacts to traffic, overhead SCE transmission lines, and to Los Angeles County Flood Control District (LACFCD) property. The inclusion of project features as seen in Table S-1, and Measure U-1through U-2 would reduce temporary impacts to utilities and emergency services. Therefore, no adverse temporary adverse impacts are anticipated. | Alternatives 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, with the inclusion of project features as seen in Table S-1 and implementation of Measure U-1 through U-2, no adverse temporary impacts are anticipated. | Measure U-1 and U-2 |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Utilities and Emergency Services (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Build Alternative 2 (Design Options A and B) would impact the following utility resources through partial acquisitions, relocations, or aerial easements: LACFCD Property, SCE Transmission Lines, Oxy Oil Facility, and the 6th Street Pump Station. However, no long term interruptions in utility services are anticipated under the operation of the proposed Project. With the inclusion of project features as seen in Table S-1 and implementation of Measure U-3, no adverse permanent impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Thus, no long term interruptions in utility services are anticipated under the operation of the proposed Project. With the inclusion of project features as seen in Table S-1 and implementation of Measure U-3, no adverse permanent impacts are anticipated. | Measure U-3 |
| Traffic and Transportation/ Pedestrian and Bicycle Facilities (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternative 2 (Design Options A and B) would cause to traffic delays and temporary closures impacting roadways, public transportation, and bicycle/pedestrian facilities. With the inclusion of a Traffic Management Plan (TMP) identified as a Project Feature in Table S-1 and implementation of Measure LU-1, and Measures PR-11 through PR-16, no adverse temporary impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). With the inclusion of a Traffic Management Plan (TMP) identified as a project feature in Table S-1 and implementation of Measure LU-1, and Measures PR-11 through PR-16, no adverse temporary impacts are anticipated. | Measure LU-1, PR-11 through PR-16 |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2<br>(Design Option A and Design Option B) | Alternative 3 – Preferred Alternative<br>(Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Traffic and Transportation/ Pedestrian and Bicycle Facilities (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. Therefore, no permanent impacts on public transportation or bicycle/pedestrian facilities are anticipated. However Alternative 1 (No Build) would not be consistent with future growth projections and planned projects. Therefore, a permanent impact on VMT and VHT is anticipated. | Under Alternative 2 (Design Options A and B), the only intersection that will not operate at satisfactory LOS and meets the two criteria thresholds indicating adverse impacts, as identified above, is at the intersection of Pier B Street/Pico Avenue at SR-710 Ramps/9th Street intersection.<br><br>This intersection will continue to operate at LOS F during the AM Peak hour for all the scenarios. Since the intersection was already operating at an unsatisfactory LOS under the existing condition, the operational and capacity issues are due to the existing system deficiencies and is not due to the newly added trips attributed to the proposed Project.<br><br>Although, the proposed Project under the build conditions would have not adversely impact any of the study intersections, poor level of service and congestion in the Downtown Long Beach traffic study area would still result at the Pier B Street/Pico Avenue at SR-710 Ramps/9th Street intersection.<br><br>However, based on the Final Environmental Impact Report (EIR) for the Pier B On-Dock Rail Support Facility Project (Pier B Project), certified on January 22, 2018, the improvements as part of the 12th Street Alternative (or the selected Pier B Project Alternative) would include of the closure of 9th Street, which is the east leg of the Pier B Street/Pico Avenue at SR-710 Ramps/9th Street intersection. The Final Pier B EIR states that the opening year is 2025, which is the same Opening Year as the proposed Project.<br><br>Therefore, it is assumed that the existing system deficiencies identified at the Pier B Street/Pico Avenue at SR-710 Ramps/9th Street intersection would be eliminated prior to the Opening Year or the proposed Project and thus, adverse traffic impacts at this intersection are no longer anticipated under the 2025 and 2035 Build Condition for the proposed Project.<br><br>Due to roadway improvements, the proposed Project would result in a permanent loss of 58 street parking spaces along 6th Street and 7th Street (between Nylic Court and Lime Avenue) and Magnolia Avenue (between Ocean Boulevard and West Broadway). The Project would also implement AM and PM peak hour restrictions on 173 street parking spaces along 7th Street, as identified in Minimization Measure TR-1. During non-peak hours, 7th Street would maintain two through lanes of traffic, thereby maintaining street parking during non-peak hours.<br><br>Furthermore, adjacent uses such as commercial and residential developments, have their own dedicated parking spaces, lots, or nearby public parking facilities within walking distance. Although there would be a loss in available street parking, improvements along these streets would improve safety particularly along 6th and 7th Street by slowing down traffic and providing new connections to recreational resources throughout the Project limits. With the implementation of Minimization Measure TR-1, it is not anticipated that the permanent loss of street parking would result in substantial adverse impacts.- | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, with the implementation of Measure TR-1, no adverse permanent impacts are anticipated. | Measure TR-1 |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Visual and Aesthetics (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternative 2 (Design Options A and B) would result in temporary visual impacts associated with construction materials and staging, development of temporary roadside barriers, truck hauling, excavation, removal of existing mature plantings, and construction and detour signage. With the inclusion of Measures VIS-1 and VIS-2, no adverse temporary impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts to Alternative 2 (Design Options A and B). Therefore, with the implementation of Measures VIS-1 and VIS-2, no adverse temporary impacts are anticipated. | Measures VIS-1 and VIS-2 |
| Visual and Aesthetics (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternative 2 (Design Options A and B) would include views of the new Shoemaker Bridge, the structures comprising of either Design Option A (roundabout) or Design Option B (“Y” Interchange), removal of existing mature plantings, and additional useable park space in Cesar E. Chavez Park. The existing Shoemaker Bridge will be repurposed for open space/park use, which provides an additional benefit to viewers using roadways within Project limits.<br><br>Alternative 2 (Design Options A and B) would result in additional permanent hardscape elements, including bridge and ramp piers, roadways, and the new Shoemaker Bridge. Portions of Build Alternative 2 (Design Options A and B) south of Ocean Boulevard and east of the LA River are also located within California Coastal Commission (CCC) jurisdiction. As a result of Alternative 2 (Design Options A and B), existing lighting on the streets and along the ramps would be modified or relocated. With the implementation of Measures LU-2, and Measures VIS-1 through VIS-4, no adverse permanent impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts to Alternative 2 (Design Option A and B), with the exception of the removal of the existing Shoemaker Bridge. Therefore, with the implementation of Measure LU-2, and Measures VIS-1 through VIS-4, no adverse permanent impacts are anticipated. | Measure LU-2, VIS-1 through VIS-4 |
| Cultural Resources (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternative 2 (Design Options A and B) would require ground disturbing construction work. These construction activities could result in impacts to unknown buried cultural materials or human remains. However, any direct or indirect impacts to potentially buried resources would be considered permanent; therefore, an analysis of direct or indirect temporary impacts to cultural resources is not applicable. | Alternative 3 (Design Options A and B) will result in similar impacts to Alternative 2 (Design Option A and B), with the exception of the removal of the existing Shoemaker Bridge. Therefore, similar to Alternative 2 (Design Options A and B), an analysis of direct or indirect temporary impacts to cultural resources is not applicable. | No avoidance, minimization, and/or mitigation measures are required. |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Cultural Resources (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | The construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would require ground disturbance to replace the existing Shoemaker Bridge and to construct associated ramp alterations, pedestrian and bicycle improvements, street reconfigurations, and street improvements in the area.<br><br>Four of the evaluated built environment resources do not meet NRHP or CRHR eligibility criteria. Therefore, these four evaluated built environment resources are not considered historic properties for the purposes of Section 106 or CEQA. Alternatives 2 and 3 (Design Options A and B) would not result in any alterations to the four evaluated built environment resources. Therefore, it is anticipated that implementation of Alternatives 2 or 3 (Design Options A and B) would not cause a substantial adverse change on these four evaluated built environment resources.<br><br>The LA River Flood Channel is assumed eligible under NRHP and CRHR Criterion A for its association with flood control in the region and its role in the development of river-adjacent areas in the greater Los Angeles area as well as under NRHP and CRHR Criterion C as representing a significant and distinguishable entity whose components may lack individual distinction. Therefore, the LA River Flood Channel is assumed to be eligible for listing in the NRHP for the purposes of the Project only. The LA River Flood Channel is assumed to be a historic property under Section 106 and is considered a historical resource for purposes of CEQA. Alternatives 2 and 3 (Design Options A and B) would result in grade-separated crossing improvements to the LA River Flood Channel, including an aerial easement for a bridge and the construction of a pier within the boundary of the LA River Flood Channel. There would be no permanent physical changes to the LA River Flood Channel's intact character-defining features and the new Shoemaker Bridge would not have a substantial effect on the LA River Flood Channel's physical design or setting. Therefore, the Project improvements to the LA River Flood Channel under Alternatives 2 and 3 (Design Options A and B) would have a Finding of No Adverse Effect with the implementation of Measure CR-1, which specifies that the City will comply with Standard Conditions with the implementation of the Secretary of the Interior's Standards (SOIS) Plan for the Treatment of Historic Properties.<br><br>No archaeological resources were identified within the APE, and much of the APE is located on artificial fill or disturbed soils. Given the disturbed condition of the APE, the potential for intact archaeological resources to be present is low. Although considered unlikely, there is the potential to encounter unknown buried cultural materials or human remains during construction of either Alternative 2 or 3. In the event that previously unknown buried cultural materials or human remains are encountered during construction, those materials and remains would be handled as described in Project Features PF-4 and PF-5. Therefore, no substantial adverse impacts are anticipated. | Alternative 3 (Design Options A and B) will result in similar impacts to Alternative 2 (Design Option A and B), with the exception of the removal of the existing Shoemaker Bridge.<br><br>In the event that previously unknown buried cultural materials or human remains are encountered during construction, those materials and remains would be handled as described in Project Features PF-4 and PF-5. Impacts to the LA River Flood Channel that occur under Alternative 2 (Design Options A and B) will also occur under Alternative 3 (Design Options A and B). However, with the implementation of avoidance measure CR-1, no substantial adverse impacts are anticipated. | Measure CR-1 |
| Hydrology and Floodplain (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternative 2 (Design Options A and B) would involve encroachments into the existing LA River, and construction may impact natural and beneficial floodplain values associated with fish, wildlife, outdoor recreation, and water quality maintenance. Construction would result in the temporary closure of recreational facilities, impacts to the water quality and natural habitat due to construction of the replacement bridge, and impacts | Alternative 3 (Design Options A and B) would result in similar impacts to Alternative 2 (Design Option A and B) with the exception that under Alternative 3, the existing Shoemaker Bridge would be fully removed. The full removal of the existing bridge will result in a slightly larger temporary disturbance area within the LA River Channel. Thus, with the inclusion of project features as seen in Table S-1; and the | Measures NC-1 through NC-3, NC-5, AN-1 through AN-3, PR-13 through PR-18, U-2, and TE-1 through TE-6 |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| | | resulting in the erosion of soil and the LA River channel banks due to partial removal of the existing bridge which will require excavation of the LA River Channel bottom. In addition, oil, grease, and chemical pollutants from construction activities and vehicles could also enter the LA River from accidental spills or from stormwater runoff. With the inclusion of project features as seen in Table S-1; and the implementation of Measures NC-1 through NC-3, NC-5, AN-1 through AN-3, PR-13 through PR-18, U-2, and TE-1 through TE-6, no adverse temporary impacts are anticipated. | implementation of Measures NC-1 through NC-3, NC-5, AN-1 through AN-3, PR-13 through PR-18, U-2, and TE-1 through TE-6, no adverse temporary impacts are anticipated. | |
| Hydrology and Floodplain (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternative 2 (Design Options A and B) would result in permanent impacts on deepwater aquatic habitat and LB MUST through the placement of support structures for the proposed new bridge and terminus, Cesar E. Chavez Park for the widening of southbound West Shoreline Drive to accommodate two way traffic and the closure and conversion of northbound West Shoreline Drive into parkland, and to the LARIO Trail for a permanent aerial easement. The Project would also require encroachment within the 100-year floodplain in the LA River. The new bridge would result in a minimal impact on floodplains with a maximum increase in water surface elevation of 2 inches, which would not increase the floodplain extent beyond the existing levee capacity to contain all flows within the LA Flood Channel. However, Alternatives 2 (Design Options A and B) would not change the capacity of the LA River to carry water, nor result in a measurable change to the 100-year floodplain elevation. With the implementation of Measures NC-4, PR-11 and PR-18, no adverse permanent impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts to Alternative 2 (Design Option A and B). Therefore, with the implementation of Measures NC-4, PR-11 and PR-18, no adverse permanent impacts are anticipated. | Measures NC-4, PR-11 and PR-18 |
| Water Quality and Stormwater Runoff (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternative 2 (Design Options A and B) would require the construction of the new Shoemaker Bridge over the LA River and demolition of a portion of the existing Shoemaker Bridge. Construction activities associated with Alternative 2 (Design Options A and B) would disturb river sediment and soil and may result in impacts that include solid materials in surface runoff into the LA River Channel; an increase in turbidity; increase in oil, grease, and chemical pollutants; soil erosion; impacts to groundwater during dewatering operation; impacts to aquatic life; and potential spreading of invasive plant species. With the inclusion of project features as seen in Table S-1, and the implementation of Measures NC-3 through NC-5, and Measures IS-2 and IS-3, no adverse temporary impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts to Alternative 2 (Design Options A and B). Therefore, with the inclusion of project features as seen in Table S-1, and the implementation of Measures NC-3 through NC-5, and Measures IS-2 and IS-3, no adverse temporary impacts are anticipated. | Measures NC-3 through NC-5, IS-2 and IS-3 |
| Water Quality and Stormwater Runoff (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternative 2 (Design Options A and B) would not impact substrate, turbidity, storm wave, and erosion buffers, aquifer recharge/groundwater, or invasive species after implementation of final design. The Project would result in a permanent decrease in 10 acres of impervious surfaces and a permanent increase in pervious surfaces. Existing project design features related to water quality would minimize the impacts related to oil, grease, and chemical pollutants. With the inclusion of project features as seen in Table S-1, and the implementation of Measure NC-4, no adverse permanent impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impact to Alternative 2 (Design Options A and B), with the exception that under Alternative 3 (Design Options A and B), new aquatic habitat could become available where the existing bridge support structure would be fully removed. Therefore, with the inclusion of project features as seen in Table S-1, and the implementation of Measure NC-4, no adverse permanent impacts are anticipated. | Measure NC-4 |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Geology, Seismic, and Topography (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Under Alternative 2 (Design Options A and B), excavated soil would be exposed, and there would be an increased potential for soil erosion compared to existing conditions. Additionally, during a storm event, soil erosion could occur at an accelerated rate. The proposed project under Alternative 2 would be required to adhere to the requirements of the general construction permit and implement erosion and sediment control BMPs identified in the Project Stormwater Pollution Prevention Plan (SWPPP) to keep sediment from moving off site into receiving waters.<br><br>The construction activities associated with Alternative 2 (Design Options A and B) could be affected by ground motion, liquefaction, and possibly ground deformation if an earthquake event were to occur during construction. However, with the implementation of safe construction practices and compliance with Caltrans and California Division of Occupational Safety and Health Administration (Cal-OSHA) requirements, inclusion of project features as seen in Table S-1, no adverse temporary impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, with inclusion of project features as seen in Table S-1, no adverse temporary impacts are anticipated. | No avoidance, minimization, and/or mitigation measures are required. |
| Geology, Seismic, and Topography (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternative 2 (Design Options A and B) is within a seismically active zone as well as a potential liquefaction hazard zone. Due to the varying and potentially high groundwater elevations in the area and the presence of loose/soft soils at the Project limits, the potential for liquefaction and lateral spreading during a design level earthquake is considered high. Additionally, the project is located in an area with expansive and possible corrosive soils. There is a medium risk that Alternative 2 (Design Options A and B) are at risk of inundation from a tsunami. However, through existing project design and the implementation inclusion of Measures GEO-1 and GEO-2 the potential impacts of geotechnical and soils conditions on structures constructed would be minimized; thus, no adverse permanent impacts would be anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, through existing project design and the implementation inclusion of Measures GEO-1 and GEO-2 the potential impacts of geotechnical and soils conditions on structures constructed would be minimized; thus, no adverse permanent impacts would be anticipated. | Measures GEO-1 and GEO-2 |
| Paleontology (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternative 2 (Design Options A and B) would require ground disturbance and modification to existing freeway and local street structures, which could directly or indirectly impact paleontological resources. The potential impacts to paleontological resources are considered permanent direct or indirect impacts. Therefore, any analysis of direct or indirect temporary impacts is not applicable. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). The potential impacts to paleontological resources are considered permanent direct or indirect impacts. Therefore, any analysis of direct or indirect temporary impacts is not applicable. | No avoidance, minimization, and/or mitigation measures are required. |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Paleontology (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternative 2 (Design Options A and B) is within a highly developed and disturbed area. The project limits is underlain by multiple geological units, some of which have high potential to contain significant paleontological resources based on known fossil collecting localities and information from published paleontological and geological literature. Surface disturbing activities such as grading and excavation have the potential to cause adverse effects on nonrenewable surface and subsurface paleontological resources.<br><br>Potential permanent impacts from Alternative 2 (Design Options A and B) would include damage to previously unknown paleontological resources during grading and pile driving, destruction of rock units that may contain paleontological resources, loss of contextual data associated with paleontological resources, and loss of associations between paleontological resources. Implementation of Measures PAL-1 through PAL-5, would reduce substantial adverse permanent impacts to paleontological resources through the preservation of scientific specimens and data collected. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Implementation of Measures PAL-1 through PAL-5 would reduce substantial adverse permanent impacts to paleontological resources through the preservation of scientific specimens and data collected. | Measures PAL-1 through PAL-5 |
| Hazardous Waste and Materials (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternative 2 (Design Options A and B) would involve disturbance of existing soils and structures; therefore, hazardous soil contaminants and structural materials (Aerially Disposed Lead [ADL], creosote and pentachlorophenol, asbestos-containing materials/lead based paint] [LBP], lead and chromium, and polychlorinated biphenyls [PCBs]) may be encountered during Project construction. There is also a potential for contaminated groundwater, underground transmission lines, and other unknown hazards to be encountered during construction based on the past uses within and adjacent to the Project limits.<br><br>With the inclusion of project features as shown in Table S-1, including adherence to relevant utility line/telephone pole removal guidelines, ADL testing, LBP surveys, chromium sampling, adherence to hazardous waste handling guidelines set forth by Caltrans, and the preparation of health and safety, construction contaminant management, and construction contingency plans as seen in Table S-1; and the implementation of Measures HAZ-1 through HAZ-0, no adverse temporary impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, with the inclusion of project features as shown in Table S-1, including adherence to relevant utility line/telephone pole removal guidelines, ADL testing, LBP surveys, chromium sampling, adherence to hazardous waste handling guidelines set forth by Caltrans, and the preparation of health and safety, construction contaminant management, and construction contingency plans as seen in Table S-1; and the implementation of Measures HAZ 1 through HAZ-9, no adverse temporary impacts are anticipated. | Measures HAZ-1 through HAZ-9 |
| Hazardous Waste and Materials (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Build Alternative 2 (Design Options A and B), once in operation, would be required to follow applicable regulations with respect to the use, storage, handling, transport, and disposal of potentially hazardous materials during routine maintenance. Therefore, the operation of the proposed project will not result in adverse permanent impacts related to hazardous waste or materials. | Build Alternative 3 (Design Options A and B), once in operation, would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, the operation of the proposed project will not result in adverse permanent impacts related to hazardous waste or materials. | No avoidance, minimization, and/or mitigation measures are required. |
| Air Quality (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternative 2 (Design Options A and B) would result in the generation of construction related emissions. During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment also are anticipated. With the inclusion of project features as seen in Table S-1 and the implementation of Measure AQ-1 through AQ-4, no adverse permanent impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Options A and B). Therefore, with the inclusion of project features as seen in Table S-1 and the implementation of Measure AQ-1 through AQ-4, no adverse permanent impacts are anticipated. | Measures AQ-1 through AQ-4 |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2<br>(Design Option A and Design Option B) | Alternative 3 – Preferred Alternative<br>(Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Air Quality (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternative 2 (Design Options A and B) is expected to improve traffic flow and reduce delay and congestion. The Project is also not adding capacity to the existing circulation network. No hot spots for CO, PM2.5, or PM10 would occur as a result of the Project. Thus, no adverse permanent impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Options A and B). Thus, no adverse permanent impacts are anticipated. | No avoidance, minimization, and/or mitigation measures are required. |
| Noise (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternative 2 (Design Option A and B) would result in short-term noise impacts during Project construction. The closest sensitive receivers are within 50 feet of the Project construction areas and may be subject to short-term noise levels of 91 A-weighted decibels (dBA) maximum instantaneous noise level (Lmax) or higher that are generated by construction activities. With the inclusion of project features as seen in Table S-1 and the implementation of Measure N-1, no adverse temporary impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Options A and B). With the inclusion of project features as seen in Table S-1 and the implementation of Measure N-1, no adverse temporary impacts are anticipated. | Measure N-1 |
| Noise (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternative 2 (Design Options A and B) may result in potential long-term noise impacts associated with Project operations, which are solely from traffic noise. Traffic noise was evaluated for the worst-case traffic condition.<br><br>With implementation of the proposed Project, 45 of 189 modeled receptors would approach or exceed the 67 dBA equivalent continuous sound level (Leq) Noise Abatement Criteria (NAC) under the proposed Project. Also, of the 189 modeled receptor locations, no receptors under Build Alternative 2 (Design Options A and B) would experience a "substantial increase" in noise of 12 dB or more over their corresponding modeled existing noise level.<br><br>Because the proposed project setting is highly urbanized and because of the proximity of the receptors to the highway, the magnitude of the noise increase from the Project is not considered substantial. Therefore, no adverse permanent impacts are anticipated.<br><br>Although the Project fully fulfills the basic requirements of 23 CFR 772, additional design features may be incorporated during final design of the bridge to further reduce potential noise impacts. With the implementation of minimization measure N-2, no adverse effects from noise are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). With the implementation of Mitigation Measure N-2, no adverse effects from noise are anticipated. | Measure N-2 |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2<br>(Design Option A and Design Option B) | Alternative 3 – Preferred Alternative<br>(Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Energy (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated | Build Alternative 2 (Design Options A and B) would result in short-term energy consumption related to the manufacture of construction materials, the use of construction equipment that requires petroleum fuels, and the use of construction workers' motor vehicles as they travel to and from the site. Construction activities would last approximately three years. Thus, construction-related energy consumption anticipated under Build Alternative 2 (Design Option A and B) would be finite and limited and would have an incremental impact on area energy supplies. With the inclusion of project features as seen in Table S-1 and Measure E-1, no adverse temporary impacts are anticipated. | Build Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). With the inclusion of project features as seen in Table S-1 and Measure E-1, no adverse temporary impacts are anticipated. | Measure E-1 |
| Energy (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Build Alternative 2 (Design Options A and B) does not increase capacity, and thus does not increase traffic using the bridge and associated downtown connectors, so a net increase in energy consumption is not anticipated. In addition, when balancing energy used during construction and operation against energy saved by relieving congestion and other transportation efficiencies, the Project would not have substantial energy impacts. Therefore, no adverse permanent impacts are anticipated. | Build Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, no adverse permanent impacts are anticipated. | No avoidance, minimization, and/or mitigation measures are required. |
| Natural Communities (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated | Alternative 2 (Design Option A) would result in 7.53 acres of temporary impacts to deepwater aquatic habitat through the construction of the new Shoemaker Bridge. Alternative 2 (Design Option B) would result in 7.56 acres of temporary impacts to deepwater aquatic habitat. Areas of temporary impacts will only be impacted during construction.<br><br>Alternative 2 (Design Options A and B) will also result in temporary indirect impacts from construction-related impacts, such as the temporary reduction in benthic invertebrate fauna, an increased level of suspended solids from disruption of the soft-bottom, debris, potential fuel spills from construction equipment, and activities of equipment or personnel outside designated construction areas, as well as operation impacts including those on adjacent habitats caused by construction noise and vibration, storm water runoff, traffic, and litter.<br><br>In addition, construction may indirectly impact deepwater aquatic habitat permanently through enhancing the germination and proliferation of nonnative invasive plant species. Indirect impacts are difficult to quantify because they are a result of normal activities and can vary day to day. With the inclusion of Project features as seen in Table S-1 and the implementation of Measures NC-1 through NC-5, and IS-3, no adverse temporary impacts are anticipated. | Alternative 3 (Design Option A) would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, with the inclusion of project features as seen in Table S-1 and the implementation of Measures NC-1 through NC-5, and IS-3, no adverse temporary impacts are anticipated. | Measures NC-1 through NC-5, and IS-3 |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Natural Communities (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternative 2 (Design Options A and B) will result in a permanent net loss of 0.47 or 0.44 acre of waters of the U.S. under Design Options A and B, respectively. Four support structures would be removed below the invert of the LA River Channel under Alternative 2 (Design Options A and B). Estuarine habitat would be subject to a permanent shade increase of 0.73 acres would occur under Alternative 2 (Design Option A) and 0.68 acres under Alternative 2 (Design Option B).<br><br>However, given that the bridge is oriented in a northeast southwest direction and well above the water's surface, the increase in shading impacts would still be considered minimal. Additionally, species utilizing the habitat are adapted to large ranges in salinity, temperature, and dissolved oxygen, as indicated by their ability to utilize a wide range of habitats from open ocean to shallow estuaries. With the implementation of Measures NC-1 through NC-5, IS-2, and IS-3, no adverse permanent impacts area anticipated. | Alternative 3 (Design Options A and B) would result in a permanent net loss of 0.45 or 0.42 acre of waters of the U.S. under Design Options A and B, respectively. Five support structures would be removed below the invert of the LA River Channel under Alternative 3 (Design Options A and B) since the existing Shoemaker Bridge would be fully removed would result in a permanent net loss of 0.44 acre of deepwater aquatic habitat.<br><br>Estuarine habitat would be subject to a permanent shade increase would occur under Alternative 3 (Design Option A) and 0.45 acres under Alternative 3 (Design Option B). However, given that the bridge is oriented in a northeast southwest direction and well above the water's surface, the increase in shading impacts would still be considered minimal. Additionally, species utilizing the habitat are adapted to large ranges in salinity, temperature, and dissolved oxygen, as indicated by their ability to utilize a wide range of habitats from open ocean to shallow estuaries. With the implementation of Measures NC-1 through NC-5, IS-2, and IS-3, no adverse permanent impacts area anticipated. | Measures NC-1 through NC-5, IS-2, IS-3 |
| Wetlands and Other Waters of the United States (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated | Alternative 2 (Design Options A and B) would result in direct temporary impacts to non-wetland waters (deepwater aquatic habitat) through the construction and placement of support structures for the proposed new bridge and the removal of four support structures for the partial removal of the existing bridge. Areas of temporary impacts will only be impacted during construction.<br><br>Alternative 2 (Design Option A) would result in up to 7.53 acres of temporary impacts on non-wetland waters of the U.S. Alternative 2 (Design Option B) would result in up to 7.56 acres of temporary impacts on non-wetland waters of the U.S. Temporary impacts are slightly less for Section 10 waters, including 7.28 acres for Build Alternative 2 (Design Option A) and 7.31 acres for Build Alternative 2 (Design Option B).<br><br>Temporary impacts on RWQCB jurisdiction would be the same as impacts on USACE jurisdiction. Alternative 2 (Design Option A) would result in up to 8.45 acres of temporary impacts on CDFW streambed. Alternative 2 (Design Option B) would result in up to 8.48 acres of temporary impacts on CDFW streambed. With the implementation of Measures NC-1 and NC-5, no adverse temporary impacts are anticipated. | Alternative 3 (Design Options A and B) would result in direct temporary impacts to non-wetland waters (deepwater aquatic habitat) through the construction and placement of support structures for the proposed new bridge and the removal of five support structures for the partial removal of the existing bridge. Areas of temporary impacts will only be impacted during construction.<br><br>Alternative 3 (Design Option A) would result in up to 7.53 acres of temporary impacts on non-wetland waters of the U.S. Build Alternative 3 (Design Option B) would result in up to 7.56 acres of temporary impacts on non-wetland waters of the U.S. Temporary impacts are slightly less for Section 10 waters, including 7.28 acres for Build Alternative 3 (Design Option A) and 7.31 acres for Build Alternative 3 (Design Option B).<br><br>Temporary impacts on RWQCB jurisdiction would be the same as impacts on USACE jurisdiction. Build Alternative 3 (Design Option A) would result in up to 8.45 acres of temporary impacts on CDFW streambed. Build Alternative 3 (Design Option B) would result in up to 8.48 acres of temporary impacts on CDFW streambed.<br><br>Under Alternative 3 (Design Options A and B), the existing Shoemaker Bridge and support structures will be completely removed below the invert of the channel. Although this increases the area of temporary impacts from the demolition, new waters of the U.S. will become available upon project completion. With the implementation of Measures NC-1 and NC-5, no adverse temporary impacts are anticipated. | Measures NC-1 and NC-5 |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Wetlands and Other Waters of the United States (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternative 2 (Design Options A and B) would result in direct permanent impacts from the installation of structures to support the new Shoemaker Bridge (i.e., columns). Four support structures would be removed below the invert of the LA River Channel under Alternative 2 (Design Options A and B). Alternative 2 (Design Options A and B) will also result in a loss of waters of the U.S.<br><br>Alternative 2 would both result in a permanent net loss of 0.47 or 0.44 acre of waters of the U.S. under Design Options A and B, respectively. Permanent impacts on RWQCB jurisdiction would be the same as impacts on USACE jurisdiction.<br><br>Prior to construction, the City will submit a Preconstruction Notification form to USACE to obtain coverage under a Nationwide Permit pursuant to Section 404 of the CWA, a certification of water quality or waiver from the Los Angeles RWQCB pursuant to Section 401 of the CWA and obtain a Streambed Alteration Agreement from, the CDFW. Additionally, with the implementation of Measures NC-1 and NC-4, no adverse permanent impacts are anticipated. | Alternative 3 (Design Options A and B) would result in direct permanent impacts from the installation of structures to support the new Shoemaker Bridge (i.e., columns). Five support structures would be removed below the invert of the LA River Channel under Alternative 3 (Design Options A and B). Alternative 3 (Design Options A and B) will also result in a loss of waters of the U.S.<br><br>Alternative 3 would both result in a permanent net loss of 0.45 or 0.42 acre of waters of the U.S. under Design Options A and B, respectively. Permanent impacts on RWQCB jurisdiction would be the same as impacts on USACE jurisdiction.<br><br>Prior to construction, the City will submit a Preconstruction Notification form to USACE to obtain coverage under a Nationwide Permit pursuant to Section 404 of the CWA, a certification of water quality or waiver from the Los Angeles RWQCB pursuant to Section 401 of the CWA and obtain a Streambed Alteration Agreement from, the CDFW. Additionally, with the implementation of Measures NC-1 and NC-4, no adverse permanent impacts are anticipated. | Measures NC-1 and NC-4 |
| Plant Species (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated. | Alternative 2 (Design Options A and B) would not result in impacts to special status plant species. Southern tarplant is considered absent from the BSA. Therefore, no adverse temporary impacts are anticipated. | Alternative 3 (Design Options A and B) would also will not result in impacts to special status plant species. Therefore, no adverse temporary impacts are anticipated. | No avoidance, minimization, and/or mitigation measures are required. |
| Plant Species (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternative 2 (Design Options A and B) will not result in impacts to special status plant species. Southern tarplant is considered absent from the BSA. Therefore, no adverse permanent impacts are anticipated. | Alternative 3 (Design Options A and B) would also not result in impacts to special status plant species. Therefore, no adverse permanent impacts are anticipated. | No avoidance, minimization, and/or mitigation measures are required. |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Animal Species (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated | Alternative 2 (Design Options A and B) is not expected to result in direct temporary impacts on California sea lions. However, the Project may have indirect and temporary impacts through incidental harassment because of the temporary loss of potential foraging habitat during construction. With the inclusion of project features as seen in Table S-1 and the implementation of Measures NC-1 through MC-4, no adverse temporary impacts are anticipated.<br><br>Alternative 2 (Design Options A and B) is not expected to result in direct temporary impacts on riparian/aquatic special-status species. However, the Project may have indirect and temporary impacts on riparian/aquatic special-status species through the temporary loss of potential foraging habitat. With the inclusion of project features as seen in Table S-1 and the implementation of Measures AN-1 and NC-1 through MC-4, no adverse temporary impacts are anticipated.<br><br>Although low, there is a small potential for bat mortality to occur during bat exclusion efforts and construction. Additionally, the Project may have indirect and temporary impacts on these special status species through the temporary loss of potential day and night roosting habitat. With the inclusion of project features as seen in Table S-1 and the implementation of Measures AN-1 through AN-3, no adverse temporary impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, with the inclusion of project features as seen in Table S-1 and the implementation of Measures AN-1 through AN-3, and NC-1 through NC-4, no adverse temporary impacts are anticipated. | Measures AN-1 through AN-3, and NC-1 through NC-4 |
| Animal Species (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternative 2 (Design Options A and B) is not expected to result in direct permanent impacts on California sea lions, but is expected to result in a permanent loss of 0.47 or 0.44 acre of deepwater aquatic habitat under Build Alternative 2 (Design Options A and B).<br><br>New bridge designs could result in occasional bird strikes, including migratory birds. With the inclusion of a project design feature that specifically avoids and minimizes impacts on California least terns, no noticeable changes in bird strike frequency of migratory birds is expected to occur. With the inclusion of project features as seen in Table S-1 and the implementation of Measures NC-1 through NC-4, no adverse permanent impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, with the inclusion of project features as seen in Table S-1 and the implementation of Measures NC-1 through NC-4, no adverse permanent impacts are anticipated. | Measures NC-1 through NC-4 |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Threatened and Endangered Species (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated | Alternatives 2 and 3 (Design Options A and B) are not expected to result in direct temporary impacts on western snowy plovers and California least terns because of the lack of suitable nesting habitat. Foraging western snowy plovers and California least terns are expected to move out of the BSA during construction. This may indirectly and temporarily limit foraging habitat for western snowy plovers and California least terns during construction. With the implementation of PF 18, PF-80 through PF-83, and Measures TE-1 through TE-6, temporary impacts are not anticipated to occur to western snowy plovers and California least terns during construction.<br><br>However, Alternatives 2 (Design Options A and B) would not result in any direct temporary impacts on southern California steelhead since this species does not occur in the LA River at this time.<br><br>Additionally, Alternative 2 (Design Option A) will temporary impact up to 7.53 acres of deepwater aquatic habitat, while Build Alternative 2 (Design Option B) would result in up to 7.56 acres of temporary impacts on deepwater aquatic habitat. Effects on EFH associated with construction activities would be avoided or minimized with the inclusion of project features PF-6 through PF-38 and the implementation of Measures NC-1 through NC-3. Therefore, no adverse temporary impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, with the inclusion of project features as seen in Table S-1 and the implementation of Measures NC-1 through NC-3, TE-1 through TE-6, no adverse temporary impacts are anticipated. | Measures NC-1 through NC-3, and Measures TE-1 through TE-6 |
| Threatened and Endangered Species (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternatives 2 and 3 (Design Options A and B) are not expected to result in direct permanent impacts on western snowy plover and California least terns because of the lack of suitable nesting habitat. Foraging habitat for least terns is found within and along the LA River. To ensure bird safety during construction of the proposed Shoemaker Bridge under Alternatives 2 and 3 (Design Options A and B), avoidance measures TE-7 and TE-8 would be implemented to minimize impacts on bird species, including western snowy plover and least terns, that fly up and down the LA River.<br><br>Long term effects on potential southern California steelhead habitat would be minimal and include the loss of up to 0.47 acre of potential habitat as a result of new bridge pier construction if this species were to be reintroduced to the LA River in the future. This is a small amount of habitat in relation to the overall size of the LA River. The ability for southern California steelhead to migrate upstream and downstream would be maintained post construction.<br><br>The Project would result in minimal loss of potential future southern California steelhead habitat, but would not restrict future migration of this species through the Project area following Project completion.<br><br>Alternative 2 would both result in a permanent net loss of 0.47 or 0.44 acre of deepwater aquatic habitat under Design Options A and B, respectively.<br><br>With the inclusion of project features as seen in Table S-1 and the implementation of Measures TE-7 and TE-8, no adverse permanent impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, with the inclusion of project features as seen in Table S-1 and the implementation of Measures TE-7 and TE-8, no adverse permanent impacts are anticipated. | Measures TE-7 and TE-8 |
| Invasive Species (Temporary) | Alternative 1 (No Build) does not involve the construction of the project. No temporary impacts are anticipated | Impacts related to invasive species are considered permanent impacts because the introduction of invasive species into previously undisturbed areas would result in permanent impacts to the habitat. See permanent Impacts. | Impacts related to invasive species are considered permanent impacts because the introduction of invasive species into previously undisturbed areas would result in permanent impacts to the habitat. See permanent Impacts. | No avoidance, minimization, and/or mitigation measures are required. |

**Table S-7. Summary of Potential Impacts by Alternatives**

| Potential Impact | No Build Alternative | Alternative 2 (Design Option A and Design Option B) | Alternative 3 – Preferred Alternative (Design Option A [Preferred] and Design Option B) | Avoidance, Minimization, and/or Mitigation Measures |
|---|---|---|---|---|
| Invasive Species (Permanent) | Alternative 1 (No Build) does not involve the construction of the project. No permanent impacts are anticipated. | Alternative 2 (Design Options A and B) has the potential to spread invasive species by the entering and exiting of construction equipment contaminated by invasive species, disturbances to soil surfaces, and improper removal and disposal of invasive species that result in the seed being spread along the highway. Invasive species also have the potential to be included in seed mixtures and mulch. With the implementation of Measures IS-1 through IS-5, no adverse permanent impacts are anticipated. | Alternative 3 (Design Options A and B) would result in similar impacts as Alternative 2 (Design Option A and B). Therefore, with the implementation of Measures IS-1 through IS-5, no adverse permanent impacts are anticipated. | Measures IS-1 through IS-5 |

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# Chapter 1 Project Description

## 1.1 Introduction

The City of Long Beach (City) is the lead agency under the California Environmental Quality Act (CEQA), and the California Department of Transportation (Caltrans) is the lead agency under the National Environmental Policy Act (NEPA) as assigned by the Federal Highway Administration (FHWA), in accordance with NEPA (42 United States [U.S.] Code [USC] 4321 et seq.); and the Council on Environmental Quality (CEQ) Regulations implementing NEPA (40 Code of Federal Regulations [CFR] 1500–1508).

The City, in cooperation with Caltrans, is proposing to replace the Shoemaker Bridge (West Shoreline Drive) in the City of Long Beach, California. A regional location map is included on Figure 1-1. The Shoemaker Bridge Replacement Project (Project) is an early action project (EAP) of the Interstate 710 (I-710) Corridor Project and is located at the southern end of State Route 710 (SR-710) in the City and is bisected by the Los Angeles River (LA River).

Alternative 1 (No Build) and Alternatives 2 and 3 (Design Options A and B) to replace the existing Shoemaker Bridge are being evaluated as part of the proposed Project. The primary difference between Alternative 2 and Alternative 3 is that Alternative 2 proposes to repurpose a portion of the existing Shoemaker Bridge for a nonmotorized use, and Alternative 3 proposes removal of the existing bridge. Additionally, two design options for a roundabout (Design Option A) or "Y" intersection (Design Option B) at the easterly end of the bridge would be evaluated in Alternatives 2 and 3.

Alternatives 2 and 3 would include vista point along the south side of the new bridge and also provide improvements along associated roadway connectors to downtown Long Beach, West Shoreline Drive from SR-710, and portions of 3rd Street, 6th Street, 7th Street, and West Broadway from Cesar E. Chavez Park to Magnolia Avenue. The proposed improvements may include additional street lighting, restriping, turn lanes, bicycle, pedestrian, and streetscape improvements. Additionally, as an EAP of the I-710 Corridor Project, Alternatives 2 and 3 would evaluate the impacts from the closure of the 9th and 10th Street ramp connections into downtown Long Beach. The Project location and Project limits are illustrated on Figure 1-2 and Figure 1-3.

The proposed Project is included in the 2019 Federal Transportation Improvement Program (FTIP) as follows:

> I-710 Improvements/Shoemaker Bridge Replacement – Replace the existing Shoemaker bridge with a new bridge. The new bridge will be reduced to have two mixed-flow lanes in the NB and in the SB directions to tie the flow into I-710. The new bridge will also include pedestrian and bicycle access. Additionally, bicycle, pedestrian, and street enhancements will be provided on adjacent thoroughfares.

Multiple conceptual designs were originally developed for the proposed Project, and two alternatives (identified as Alternatives 1 and 2 in the Project Study Report [PSR]) were carried forward for evaluation in the now-completed PSR phase of the proposed Project (URS Corporation, Inc. [URS] 2008). After the PSR phase was completed, a hybrid alternative was carried forward for detailed environmental analysis based on feedback from the City, Caltrans, and FHWA. This chapter provides descriptions of the previous Project studies conducted to date, the project

alternatives being carried forward in this environmental document, and the project alternatives previously considered but eliminated.

Currently, Shoemaker Bridge is under jurisdiction of the City and serves as the extension of West Shoreline Drive within downtown Long Beach to the SR-710 corridor. I-710 transitions into SR-710 south of Pacific Coast Highway. Since the existing Shoemaker Bridge is within City right-of-way (ROW), the City serves as the lead agency under CEQA. However, since the new Shoemaker Bridge would require federal funding and would be transferred to Caltrans for future ownership and maintenance, Caltrans serves as a responsible agency under CEQA, as well as the lead agency under NEPA.

### 1.1.1 Project Setting

Shoemaker Bridge connects SR-710 from the west to downtown Long Beach to the east and functions as a very important local and regional gateway to the City and the north via SR-710. The limits of the proposed Project lie between the Port of Long Beach (POLB) and downtown Long Beach.

The area within the Project limits contains a mix of land uses. The area south of West Broadway and east of the LA River is characterized by commercial development typical of a downtown area. The area north of West Broadway includes residential development, Cesar E. Chavez Park, Cesar E. Chavez Elementary School, and industrial development adjacent to the LA River. Cesar E. Chavez Park is located south of Shoemaker Bridge and is currently separated from open space areas along the LA River by West Shoreline Drive. The west side of the LA River includes the POLB and supporting industrial development. Figure 1-3 shows the setting and the design of the proposed Project.

For the purposes of this document, Alternative 1 (No Build) is used as the NEPA baseline condition for comparing physical environment and baseline setting for each environmental issue area. Alternative 1 (No Build) will serve as the baseline condition to evaluate the potential for adverse impacts within Chapter 2. The CEQA baseline condition, which was based on existing conditions at the time of the Notice of Preparation dated April 1, 2016, is discussed further within Chapter 3, California Environmental Quality Act Evaluation. The only difference between the NEPA baseline condition and CEQA baseline condition is that the NEPA baseline condition assumes planned Long Beach Municipal Urban Stormwater Treatment (LB MUST) project whereas the CEQA baseline condition does not.

## 1.2 Purpose and Need

### 1.2.1 Purpose of the Project

The purpose of the proposed Project is to:

- Provide a structure and highway facility that meets current structural and geometric design standards
- Provide a facility that is compatible with planned freeway improvements and downtown development projects
- Improve connectivity from the downtown area to surrounding communities and adjacent recreational use areas
- Improve safety and operations for all modes of transportation

The Project limits are generally bounded by 9th Street and 10th Street ramp connections and West Shoreline Drive to the west, Magnolia Avenue to the east, Ocean Boulevard and West Shoreline Drive to the south, and Anaheim Street to the north. The Project limits on the east side extend beyond Magnolia Avenue along Anaheim Street and 6th and 7th Streets to Atlantic Boulevard.

The proposed Project would reconstruct Shoemaker Bridge and realign local street connections to the bridge. The proposed Project limits serve as logical termini, or rational end points for transportation improvements and is sufficient to evaluate the environmental impacts of the connections that originate in downtown Long Beach at the south end and terminate at the bridge's connection to SR-710 at the north end because the Project purpose is to modernize the structure and geometrics of the bridge and to facilitate planned projects adjacent to the bridge. If the other planned projects, such as the I-710 Corridor Project, or other foreseeable transportation improvements are not constructed, the proposed Project would still address the need to bring the bridge structure and roadway up to current design standards. The Shoemaker Bridge replacement and connection modifications are not dependent on other planned projects because local street connections would be made to existing facilities. As such, the proposed Project is considered to have independent utility.

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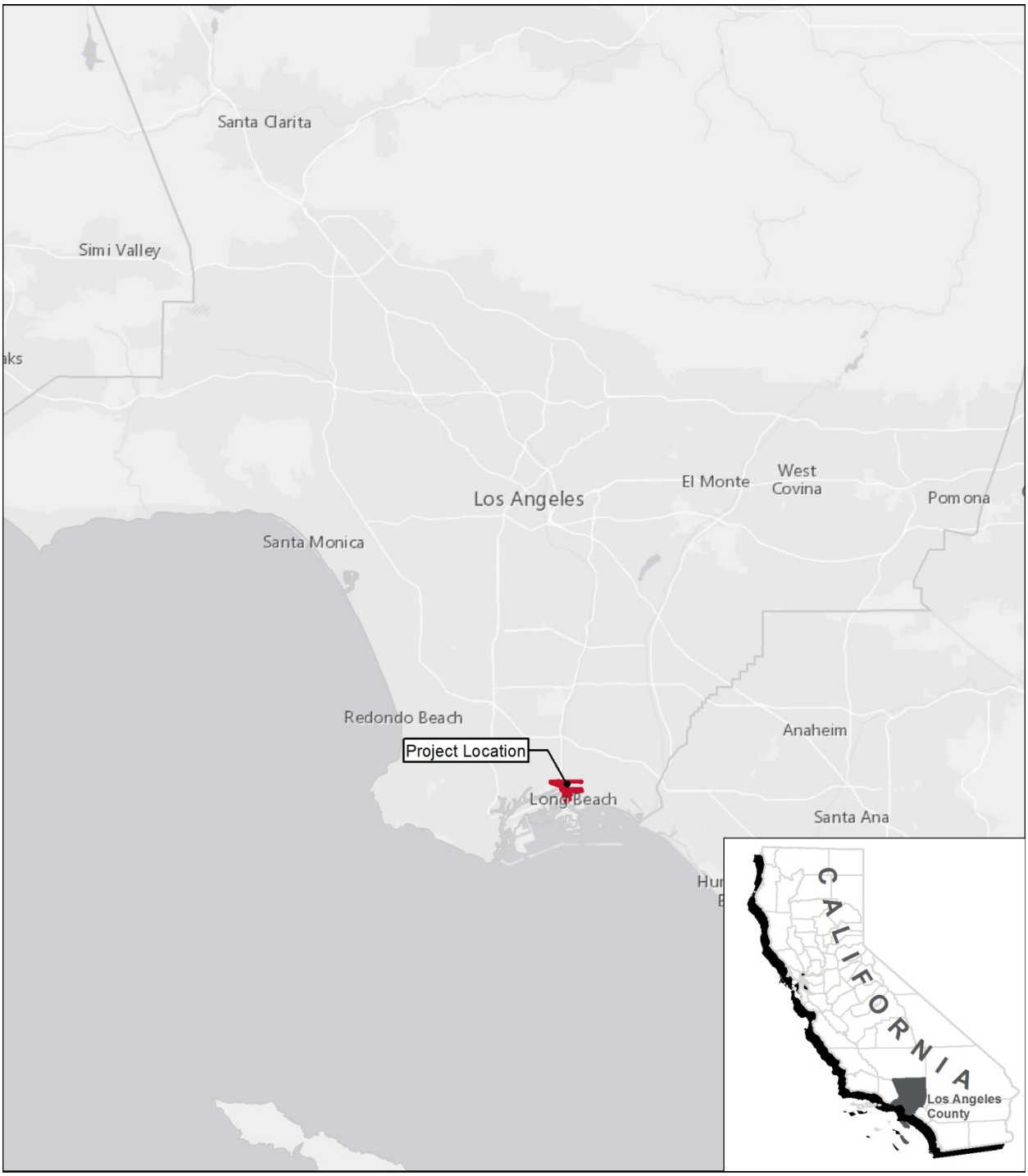


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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 1-1. Regional Location**

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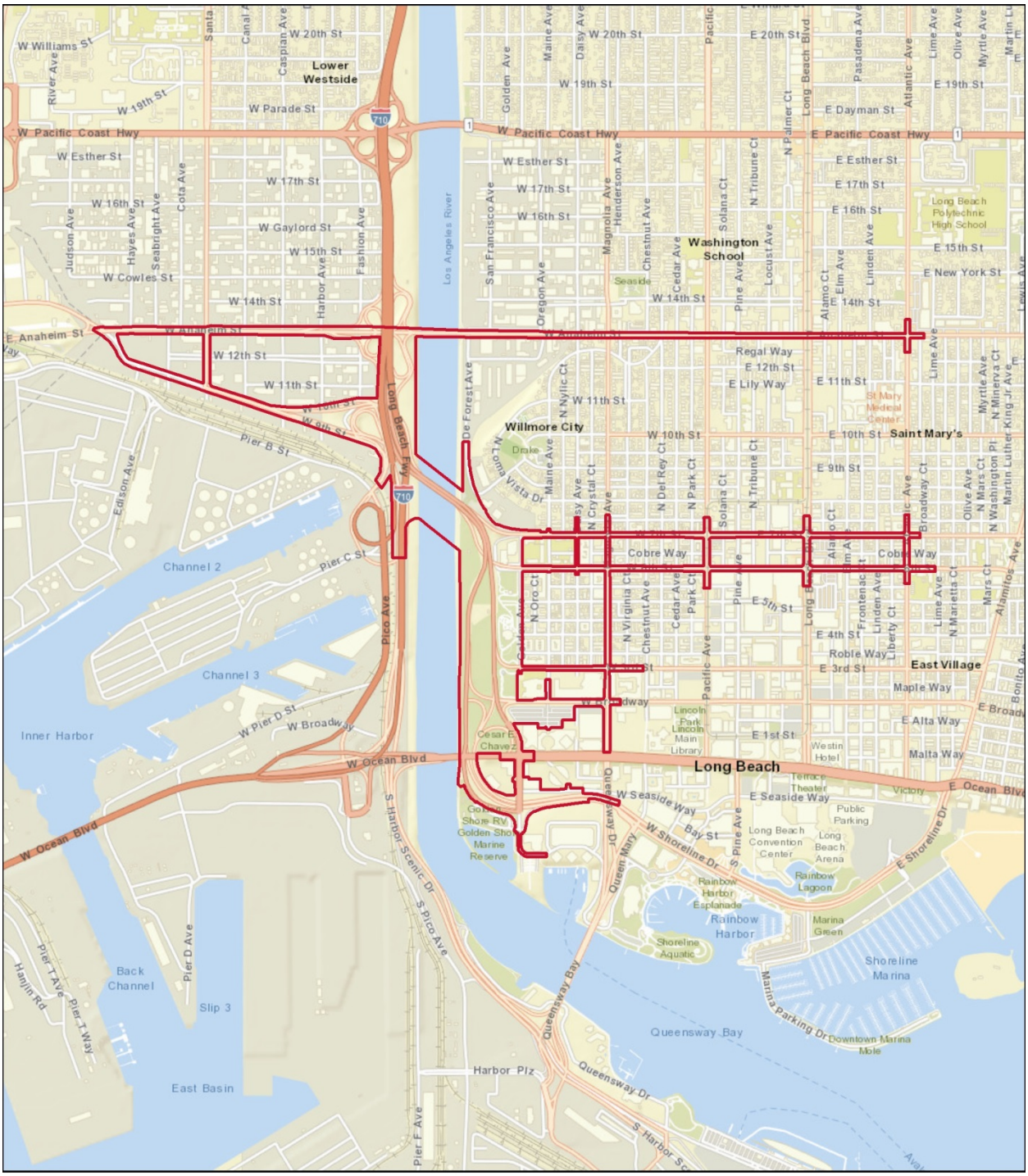


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*Shoemaker Bridge Replacement Project*

**Figure 1-2. Project Limits**

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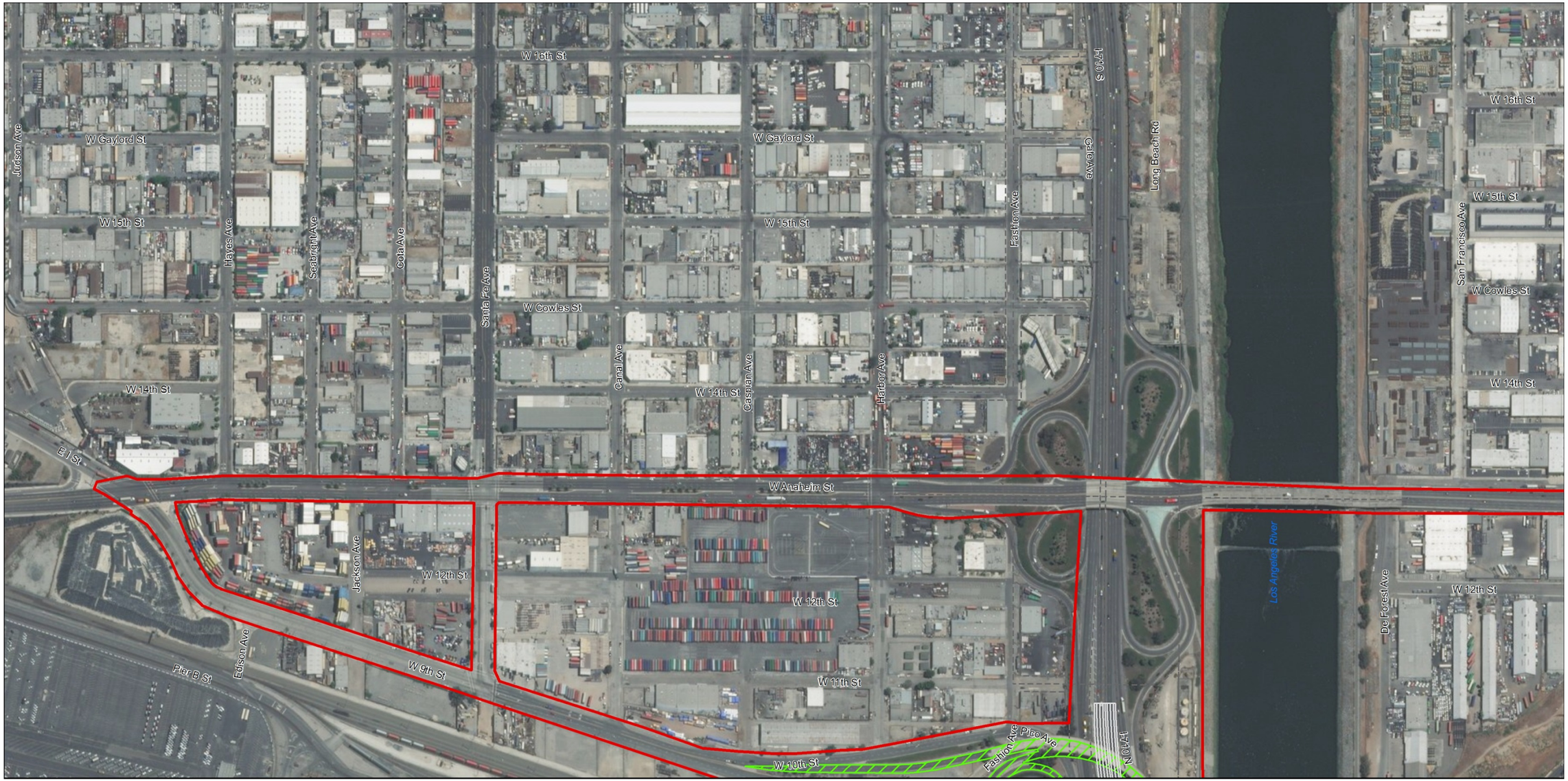


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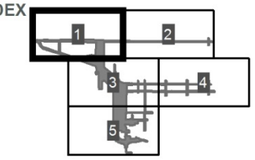
**LEGEND**

- Proposed Retaining Wall
- Proposed Right-of-Way
- Permanent Slope Easement
- Roadway Improvements
- Repurpose of Existing Bridge Under Alt 2
- Removal of Existing Bridge Under Alt 3
- Project Limits
- Streets To Be Removed
- Existing Right-of-Way
- Temporary Road Construction and Staging
- Proposed Shoemaker Bridge
- Temporary Construction Easement
- Potential Staging Area

**MAP INDEX**

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*Shoemaker Bridge Replacement Project*

**Figure 1-3. Project Design Features of Alternatives 2 and 3**
**Sheet 1 of 5**

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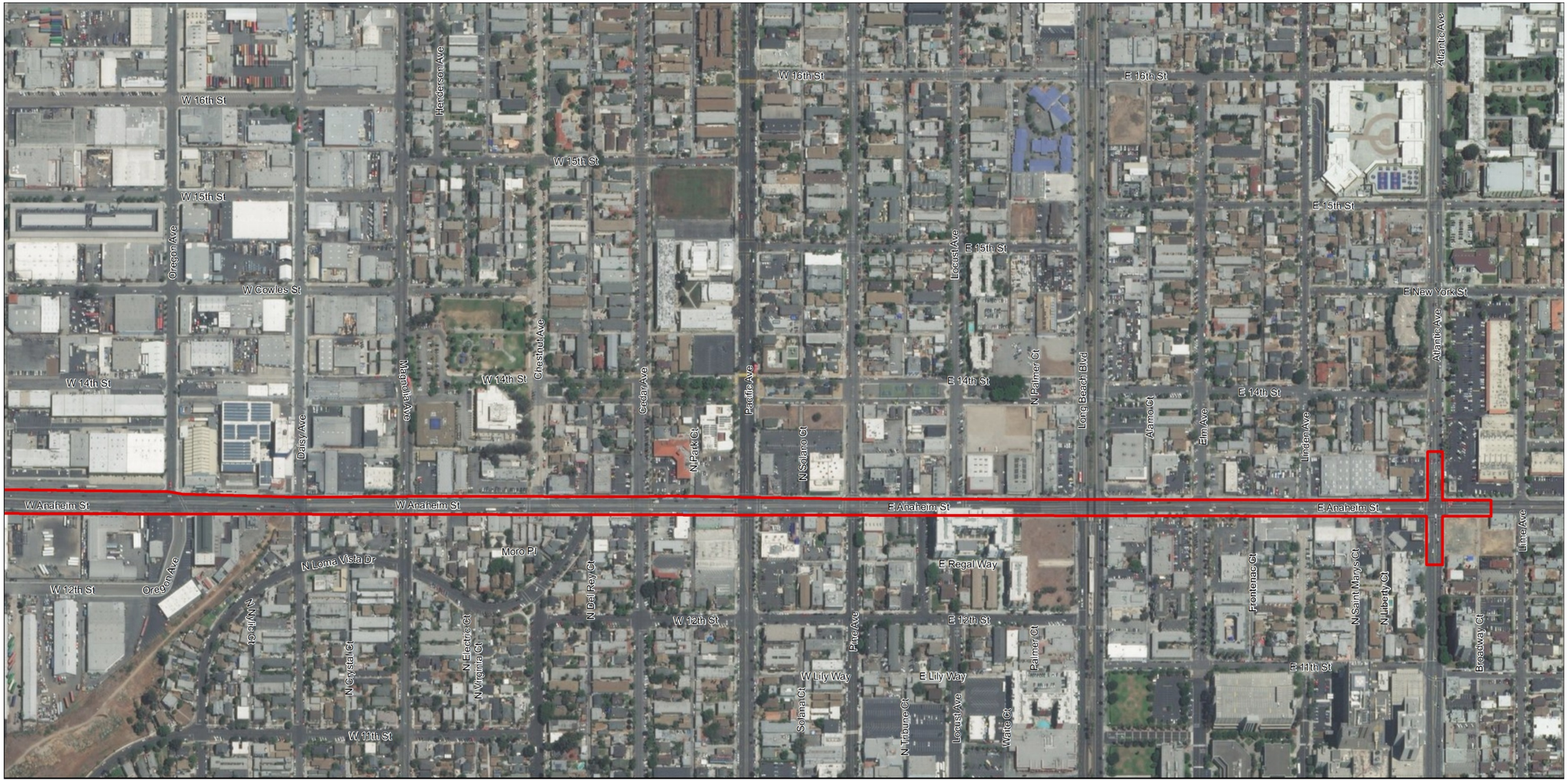


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**LEGEND**

- Proposed Retaining Wall
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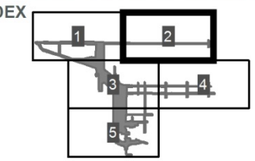
**MAP INDEX**

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*Shoemaker Bridge Replacement Project*

**Figure 1-3. Project Design Features of Alternatives 2 and 3**
**Sheet 2 of 5**

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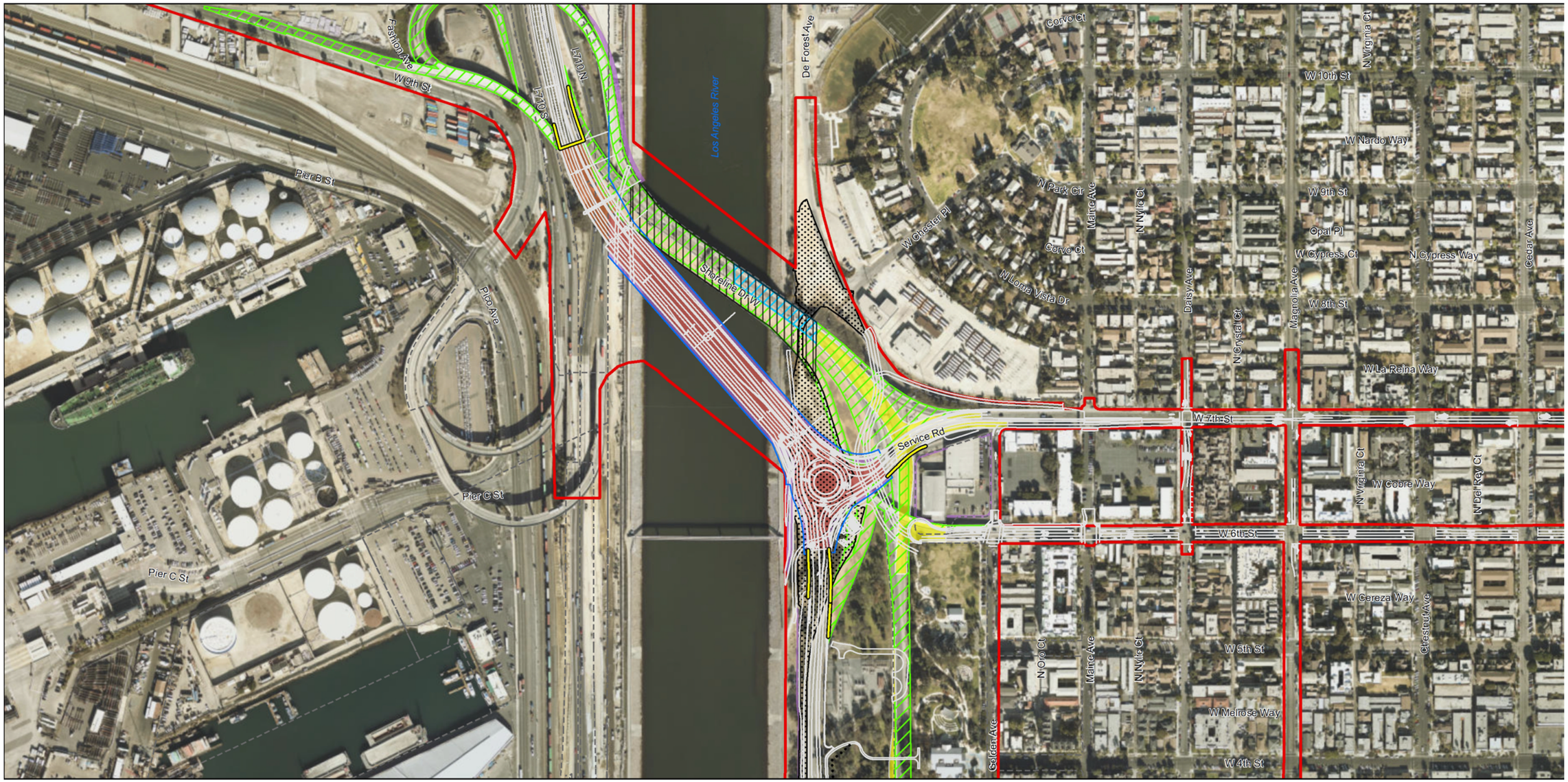


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*Shoemaker Bridge Replacement Project*

**Figure 1-3. Project Design Features of Alternatives 2 and 3**
**Sheet 3A of 5**

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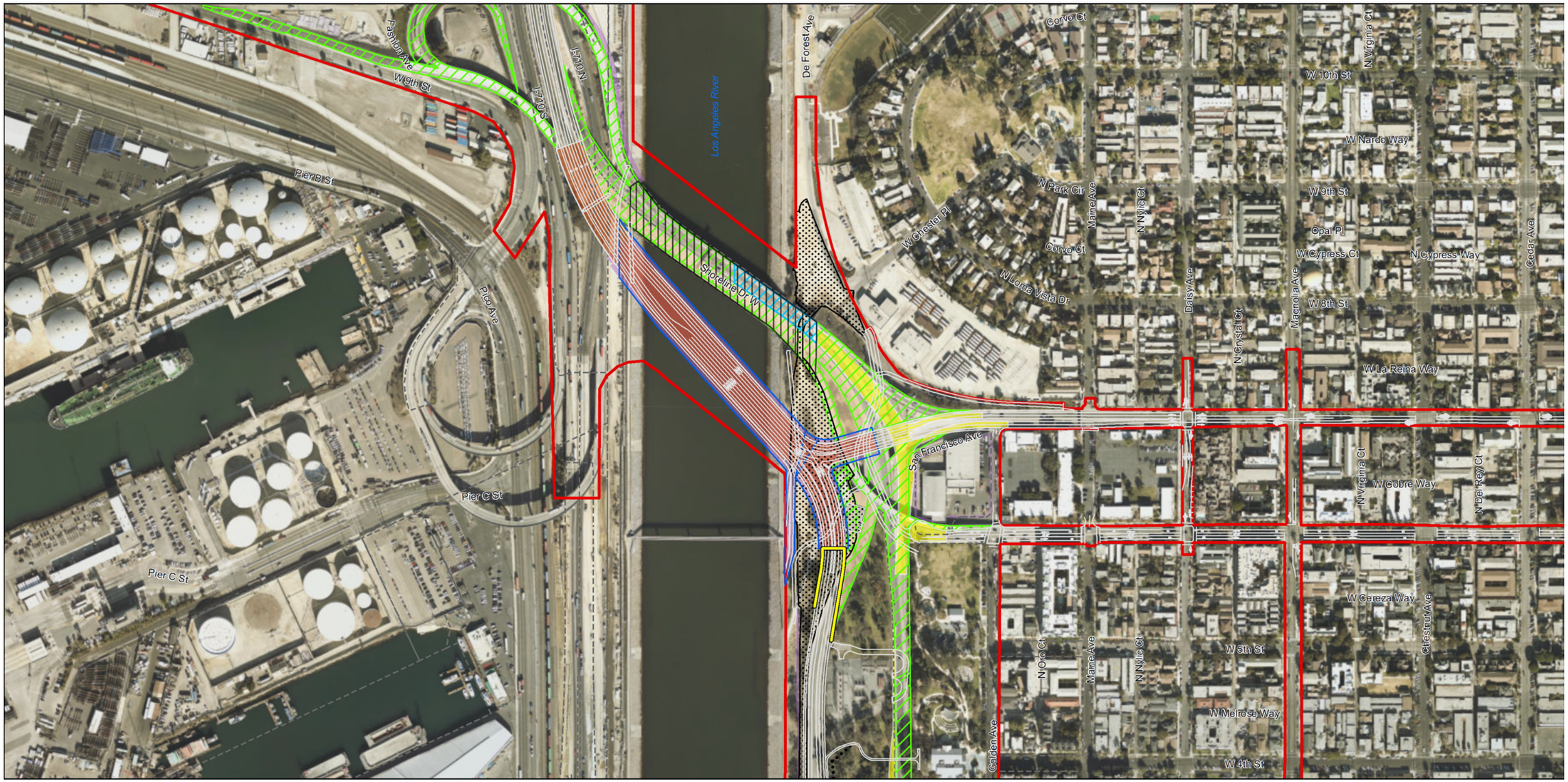


LEGEND

- Proposed Retaining Wall
- Proposed Right-of-Way
- Permanent Slope Easement
- Roadway Improvements
- Repurpose of Existing Bridge Under Alt 2
- Removal of Existing Bridge Under Alt 3
- Project Limits
- Streets To Be Removed
- Existing Right-of-Way
- Temporary Road Construction and Staging
- Proposed Shoemaker Bridge
- Temporary Construction Easement
- Potential Staging Area
- Long Beach MUST Project

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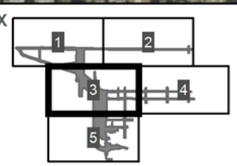
MAP INDEX




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 1-3. Project Design Features of Alternatives 2 and 3**
**Sheet 3B of 5**

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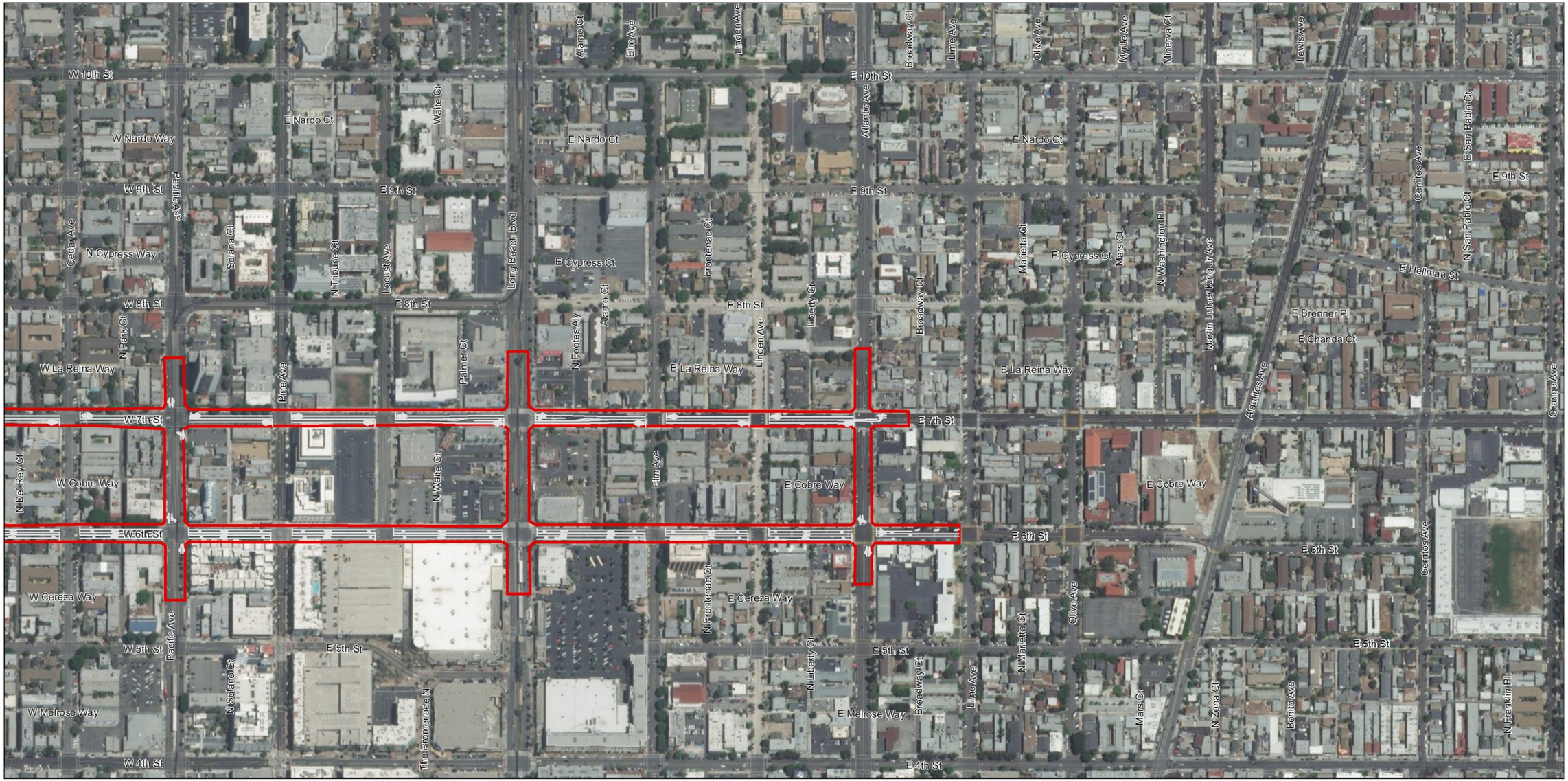


**LEGEND**

- Proposed Retaining Wall
- Proposed Right-of-Way
- Permanent Slope Easement
- Roadway Improvements
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- Removal of Existing Bridge Under Alt 3
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- Temporary Construction Easement
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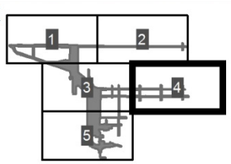
0 Feet 400

MAP INDEX




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 1-3. Project Design Features of Alternatives 2 and 3**
**Sheet 4 of 5**

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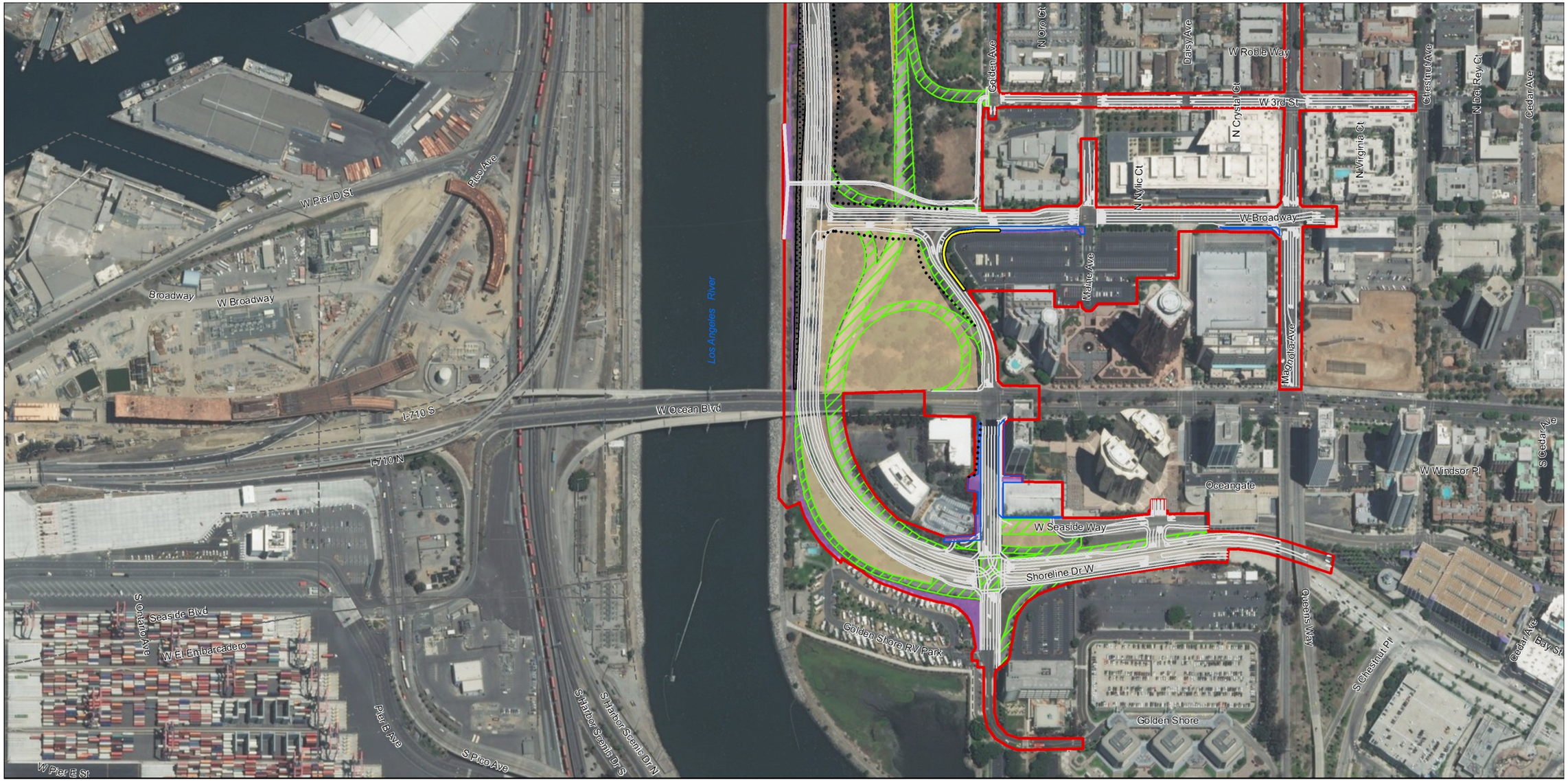


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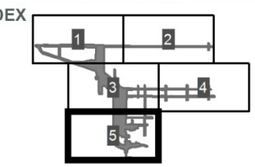
**LEGEND**

- Proposed Retaining Wall
- Proposed Right-of-Way
- Permanent Slope Easement
- Roadway Improvements
- Repurpose of Existing Bridge Under Alt 2
- Removal of Existing Bridge Under Alt 3
- Project Limits
- Streets To Be Removed
- Existing Right-of-Way
- Temporary Road Construction and Staging
- Proposed Shoemaker Bridge
- Temporary Construction Easement
- Potential Staging Area
- Long Beach MUST Project

MAP INDEX




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 1-3. Project Design Features of Alternatives 2 and 3**
**Sheet 5 of 5**

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### 1.2.2 Need for the Project

The existing Shoemaker Bridge has structural deficiencies and an accident rate in excess of the average for comparable facilities because of nonstandard geometric features that cannot be upgraded to current state highway standards. The Project is needed to improve safety, operations, and connectivity between downtown Long Beach and regional transportation facilities. It is also needed to accommodate planned improvements in the area, such as the City's planned improvements to Cesar E. Chavez and Drake Parks.

If the existing Shoemaker Bridge were to continue to be used for vehicular traffic, the existing nonstandard features would remain, and the existing bridge alignment would preclude planned improvements by other locally and regionally significant projects, specifically, the I-710 Corridor Project. The implementation of the proposed Project would provide consistency with the improvements proposed as part of the I-710 Corridor Project. The I-710 Corridor Improvement Project proposes improvements to SR-710 in City of Long Beach between Ocean Boulevard and SR 60. That project would include widening the freeway by adding up to two lanes in each direction, improving interchange connections, and upgrading nonstandard features (lane widths, merging distance, etc.) to current Highway Capacity Manual standards. That project also includes alternatives to add a four-lane separated freight movement corridor.

In addition, the proposed improvements would provide consistency with the Mobility Element of the City of Long Beach General Plan (City of Long Beach 2013) and meet the needs for traffic safety and accommodating the projected increase in demand for non-motorized transportation facilities within the City.

#### 1.2.2.1 Roadway Deficiencies

The existing Shoemaker Bridge was constructed in 1953 and needs to be reconstructed to bring the structure up to current structural design standards consistent with American Association of State Highway and Transportation Officials (AASHTO) Load Resistance Factor Design (LRFD) Bridge Design Specification, 2012 (Sixth Edition) with California Amendments (AASHTO-CA BDS-6), and current roadway design standards, consistent with Caltrans Highway Design Manual (HDM) design standards (Caltrans 2018a). The following items are assessed in the evaluation of the existing structure: the deck condition is poor, the bridge rails do not meet current standards, and the deck geometry is characterized as tolerable. Additionally, local traffic entering and exiting from ramps on either end of the bridge, northbound (NB) and southbound (SB), have weaving distances that do not meet current standards. Accidents occurring on the bridge and ramps may be attributed in part to the short weaves.

Replacement of the bridge and realignment of connectors in accordance with current Caltrans HDM standards would reduce the potential for accidents and modernize the roadway and structural design while accommodating future planned projects, such as the I-710 Corridor Project and the Drake-Chavez Greenbelt Project.

#### Traffic Accidents

Traffic accident data was assembled from Caltrans' Traffic Accident and Surveillance Analysis Systems (TASAS) database. Data was collected for a 36-month period from January 1, 2015, through December 31, 2017 for SR-710 mainline segment within the study area. Accident data presented in Table 1-1 compares actual accident rates on the mainline segment to its corresponding state average rates. Accident rates are expressed as number of accidents per million vehicle miles.

Table 1-1 indicates that the SR-710 segment in the northbound direction has a total accident rate that is substantially higher than the state average rate while the SR-710 segment in the southbound direction has a total accident rate that is higher than the state average.

**Table 1-1. Freeway Mainline Accident Data for State Route-710**

| PM | Location | Number of Accidents | | | | Actual Accident Rates [1] | | | Average Accident Rates [1] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | T | F | I | F+I | F | F+I | T | F | F+I | T |
| ***NB*** | | | | | | | | | | | |
| PM 6.00 to 6.40 | SR-710 | 38 | 0 | 6 | 6 | 0.00 | **0.25** | ***1.57*** | 0.003 | 0.22 | 0.69 |
| ***SB*** | | | | | | | | | | | |
| PM 6.00 to 6.40 | SR-710 | 19 | 0 | 4 | 4 | 0.00 | 0.17 | **0.79** | 0.003 | 0.22 | 0.69 |

Source: Caltrans District 7 TASAS Table B (January 1, 2015 to December 31, 2017)
Notes:
[1] The accident rate is the number of accidents per million vehicle-miles.
**Bold** indicates an actual accident rate that is higher than the state average accident rate for the segment.
***Bold/Italic/Underline*** indicates actual accident rate that is significantly higher than the state average accident rate for the segment.
F=fatal; I=injury; NB=northbound; PM=post mile; SB=southbound; T=total

Accident data was collected for a 36-month period from January 1, 2015, through December 31, 2017, for Shoreline Drive ramps. Similar to mainline accident data, ramp accident rates were compared to the state average rates at the corresponding ramp locations. Table 1-2 presents accident data for each ramp location. The data indicates that both ramp locations have actual accident rates that are lower than average rates that are lower than state average rates.

**Table 1-2. Freeway Ramp Accident Data for State Route-710**

| PM | Location | Number of Accidents | | | | Actual Accident Rates [1] | | | Average Accident Rates [1] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | T | F | I | F+I | F | F+I | T | F | F+I | T |
| ***NB*** | | | | | | | | | | | |
| 6.228 | Shoreline Drive NB On-Ramp | 5 | 0 | 1 | 1 | 0.000 | 0.03 | 0.16 | 0.002 | 0.11 | 0.32 |
| ***SB*** | | | | | | | | | | | |
| 6.272 | Shoreline Drive SB Off-Ramp | 1 | 0 | 1 | 1 | 0.000 | 0.03 | 0.03 | 0.003 | 0.15 | 0.45 |

Source: Caltrans District 7 TASAS Table B (January 1, 2015 to December 31, 2017)
Notes:
[1] The accident rate is the number of accidents per million vehicle-miles.
F=fatal; I=injury; NB=northbound; PM=post mile; SB=southbound; T=total

Evaluation of freeway mainline accident data based on collision type presented in Table 1-3 reveals that the most common type of collisions reported for NB SR-710 was sideswipe followed by hitting an object and rear end. On SB SR-710, the most common collision type was sideswipe followed by hitting an object and rear end.

**Table 1-3. Freeway Mainline Type of Collision for State Route-710**

| PM | Location | Type of Collision | Head-on | Sideswipe | Rear End | Broadside | Hit Object | Overturn | Auto-pedestrian | Other | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ***NB*** | | | | | | | | | | | |
| PM 6.00 to 6.40 | SR-710 | Total | 0 | 22 | 6 | 0 | 8 | 2 | 0 | 0 | 38 |
| | | Percent (%) | 0.0 | ***57.9*** | 15.8 | 0.0 | **21.0** | 5.3 | 0.0 | 0.0 | 100 |
| ***SB*** | | | | | | | | | | | |
| PM 6.00 to 6.40 | SR-710 | Total | 0 | 9 | 3 | 1 | 6 | 0 | 0 | 0 | 19 |
| | | Percent (%) | 0.0 | ***47.3*** | 15.8 | 5.3 | **31.6** | 0.0 | 0.0 | 0.0 | 100 |

Source: Caltrans District 7 TASAS Selective Accident Retrieval (TSAR) (January 1, 2015 to December 31, 2017)
Notes:
***Bold/Italic/Underline*** indicates most occurring type of collision
**Bold** indicates second most occurring type of collision

Evaluation of freeway ramp accident data presented in Table 1-4 reveals that the most common type of collision reported for NB SR-710 on-ramp from Shoreline Drive was rear-end followed equally by hitting an object, head-on, and auto-pedestrian. For SB SR-710 off-ramp to Shoreline Drive, hitting an object was the type of collision of the only reported accident.

**Table 1-4. Freeway Ramp Type of Collision for State Route-710**

| PM (post mile) | Location | Type of Collision | Head-on | Sideswipe | Rear End | Broadside | Hit Object | Overturn | Auto-pedestrian | Other | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Northbound*** | | | | | | | | | | | |
| 6.228 | Shoreline Drive On-Ramp | Total | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 5 |
| | | Percent (%) | **20.0** | 0.0 | ***40.0*** | 0.0 | **20.0** | 0.0 | **20.0** | 0.0 | 100 |
| ***Southbound*** | | | | | | | | | | | |
| 6.272 | Shoreline Drive Off-Ramp | Total | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| | | Percent (%) | 0.0 | 0.0 | 0.0 | 0.0 | ***100*** | 0.0 | 0.0 | 0.0 | 100 |

Source: Caltrans District 7 TASAS Accident Retrieval (TSAR) (January 1, 2015 to December 31, 2017)
***Bold/Italic/Underline*** indicates most occurring type of collision
**Bold** indicates second most occurring type of collision

### 1.2.2.2 Social Demand and Economic Development

The City completed the Final Program Environmental Impact Report (PEIR) for the Downtown Plan (DTP) in November 2011. The Project is located within the DTP, which replaces the existing PD-30 planned development ordinance and incorporates zoning, development standards, and design guidelines to guide new development consistent with the community vision for downtown Long Beach. The DTP is bounded by the LA River to the west, Ocean Boulevard to the south, a portion of Anaheim Street to the north, and land on both sides of Alamitos Avenue on the east (City of Long Beach Planning n.d.).

The fully implemented DTP could increase the density and intensity of existing downtown Long Beach land uses implementing the following:

- Approximately 5,000 new residential units
- 1.5 million square feet of new office, civic, cultural, and similar uses
- 384,000 square feet of new retail
- 96,000 square feet of restaurants
- 800 new hotel rooms

The additional development assumed in the DTP could occur over a 25-year time period. The plan would also enhance mobility for pedestrians, bicyclists, and transit users, while providing a balanced multi-modal transportation system (Long Beach Development Services 2008). The Project would accommodate these improvements to help facilitate the connections proposed in the Drake-Chavez Greenbelt Project, which would provide pedestrian connections to the surrounding neighborhood and a bicycle path connection to the Los Angeles River and Rio Hondo (LARIO) Trail.

Shoemaker Bridge provides a vital connection between SR-710 on the west side of the LA River and downtown Long Beach, on the east side of the LA River. The SR-710 mainline continues south past Shoemaker Bridge on the west side of the LA River and provides connections to the POLB and the Port of Los Angeles via local streets and the Terminal Island Bridge. In addition to housing the City's government core (City government offices, main library, courthouse, convention center, and police headquarters), downtown Long Beach is a major tourist destination with unique attractions (Pine Avenue, Pike Place, Long Beach Aquarium, Shoreline Village, and the Queen Mary).

#### 1.2.2.3 Modal Interrelationships and System Linkages

I-710 serves as the principal transportation connection for goods movement between the Port of Los Angeles and POLB, located at the southern terminus of I-710, and the Burlington Northern Santa Fe (BNSF) Railway/Union Pacific Railroad (UP Railroad) rail yards in the Cities of Commerce and Vernon. I-710 also provides key interstate commerce connections to east-west freeways (I-405, SR-91, I-105, SR-60, I-10, and I-5). SR-710 and the Shoemaker Bridge provide the primary connection between I-710 and downtown Long Beach.

Within the city, public transportation is provided by Long Beach Transit (LBT), the City, and Los Angeles County Metropolitan Transportation Authority (Metro). LBT is the principal provider of public transportation in the city and provides transportation via bus, shuttle, and water taxi.

The following are descriptions of each service provided by LBT:

- LBT currently operates 34 bus routes and nearly 2,000 bus stops. LBT bus routes offer connections to local rail service and to the neighboring Cities of Carson, Compton, Paramount, Bellflower, Artesia, Cerritos, Hawaiian Gardens, and Norwalk.
- The Passport Shuttle is a free local bus service that serves various neighborhoods in Long Beach, including California State University, Long Beach (CSULB), downtown Long Beach, and Pine Avenue.
- The AquaLink water taxi has four stops and ferries up to 75 passengers to the most popular Long Beach Harbor and Alamitos Bay Landing attractions. The AquaLink operates daily from May 21 to September 5 and on weekends September 9 to October 30 (Long Beach Transit n.d.).
- The AquaBus water taxi, which ferries up to 49 passengers to the most popular attractions on the Long Beach Waterfront, stops at five locations, including the Aquarium of the Pacific and the Queen Mary. The AquaBus operates daily from May 21 to September 5 and on weekends from September 9 to October 30 (Long Beach Transit n.d.).

In addition to services provided by LBT, the City administers a Dial-A-Lift service, which offers a curb-to-curb, shared-ride transit service exclusively for the mobility-impaired residing in and traveling throughout the cities of Long Beach, Lakewood, and Signal Hill.

Metro operates the Blue Line light rail in the city, which connects downtown Long Beach to downtown Los Angeles. The north-south Blue Line connects to east-west lines, such as the Red Line in downtown Los Angeles and the Green Line in Willowbrook. There are eight Blue Line stations located in the City. The Transit Mall and Pacific Stations are located within the neighborhoods adjacent to the Project limits, at Pacific Avenue/1st Street and Pacific Avenue/5th Street, respectively.

Portions of the LARIO Trail (a Class I Bikeway) are located within and adjacent to the proposed Project limits. Access points to the LARIO Trail are located throughout the City; however, two access points are located within or adjacent to the proposed Project. One access point is located adjacent to the Southern California Edison (SCE) substation and another is located just north of Shoemaker Bridge near DeForest Avenue, on the east side of the LA River.

In addition, other Class I, II, and III Bikeways are located throughout the City and the neighborhoods adjacent to the proposed Project limits. Class I Bikeways are located along West Shoreline Drive, West Broadway, and 3rd Street. Class II Bikeways are located along 6th Street and 7th Street. Class III Bikeways are located along Pacific Avenue and Chestnut Avenue.

The proposed Project would improve connectivity and access between the western portion of Long Beach, which is primarily comprised of the POLB and rail facilities, to downtown Long Beach by improving existing trail and bikeways. These improvements would provide the surrounding communities safer and more efficient access to mass transit.

#### 1.2.2.4 Independent Utility and Logical Termini

The proposed Project would reconstruct Shoemaker Bridge and realign local street connections to the bridge. The proposed Project termini are sufficient to evaluate the environmental impacts of the connections that originate in downtown Long Beach at the south end and terminate at the bridge's connection to SR-710 at the north end because the Project purpose is to modernize the structure and geometrics of the bridge and to facilitate planned projects adjacent to the bridge. If the other planned projects or other foreseeable transportation improvements are not constructed, the proposed Project would still address the need to bring the bridge structure and roadway up to current design standards. The Shoemaker Bridge replacement and connection modifications are not dependent on other planned projects because local street connections would be made to existing facilities. As such, the proposed Project is considered to have independent utility.

## 1.3 Project Description

As shown previously on Figure 1-3, the proposed Project limits on SR-710 extend from the eastern abutment of Shoemaker Bridge at the LA River to the 10th Street off-ramp (PM 6.0 to PM 6.4). On local streets, the north-south Project limits are on Golden Shore from 600 feet south of West Shoreline Drive in the south to Anaheim Street in the North. The east-west Project limits on local streets are from Atlantic Boulevard in the East to the Anaheim Street and 9th Street intersection in the West. The proposed Project would reconstruct Shoemaker Bridge ramp structures and realign West Shoreline Drive.

The City, in cooperation with Caltrans, is proposing to replace the Shoemaker Bridge (West Shoreline Drive) in the City of Long Beach, California. The proposed Project is an EAP of the I-710 Corridor Project and is located at the southern end of SR-710 in the City and is bisected by the LA River. Three alternatives, Alternative 1 (No Build) and Alternatives 2 and 3 (Design Options A and B), are being evaluated as part of the proposed Project. Alternatives 2 and 3 would replace the existing Shoemaker

Bridge over the LA River with a new bridge constructed just south of the existing bridge. In Alternatives 2 and 3, the Shoemaker Bridge would accommodate bicycle and pedestrian use and would include the evaluation of design options for a roundabout (Design Option A) or a "Y" intersection (Design Option B) at the easterly end of the new bridge. The primary difference between Alternatives 2 and 3 is that Alternative 2 includes repurposing a portion of the existing bridge for non-motorized transportation and recreational use, and Alternative 3 includes the removal of the existing bridge.

Alternatives 2 and 3 would also provide improvements to associated roadway connectors to downtown Long Beach and along West Shoreline Drive from SR-710, as well as improvements along portions of 3rd, 6th, and 7th Streets, and West Broadway from Cesar E. Chavez Park to Magnolia Avenue. The proposed improvements may include additional street lighting, restriping, turn lanes, and bicycle, pedestrian, and streetscape improvements. The Project also includes the removal of the Golden Shore Bridge over Shoreline Drive and modifications to Golden Shore to create a new controlled intersection at Golden Shore and Shoreline Drive. Additionally, the Project would also evaluate street improvements on 6th and 7th Streets from Magnolia Avenue to Atlantic Avenue and on Anaheim Street between 9th Street and Atlantic Avenue. As an EAP of the I-710 Corridor Project, Alternatives 2 and 3 would evaluate the impacts from the closure of the 9th Street and 10th Street ramp connections into downtown Long Beach. The Project location and Project limits are illustrated previously on Figure 1-2 and Figure 1-3.

Although most of the modifications and construction would occur within the existing Caltrans or City ROW, a partial property acquisition and aerial easement from the Los Angeles County Flood Control District (LACFCD) would be required. In addition, a small amount of additional ROW and temporary construction easements (TCE) may be required from an existing parking lot to complete the downtown street modifications along West Broadway. To accommodate the removal of the grade separation at Golden Shore and West Shoreline Drive, TCEs may be required along the west and east side of Golden Shore north of West Shoreline Drive. Impacts on parcels are summarized in Table 1-5.

## 1.4 Project Alternatives

This section describes the proposed design alternatives developed by a multidisciplinary team to achieve the proposed Project's purpose while avoiding or minimizing environmental impacts. The alternatives, as described in this section, consist of Alternative 1 (No Build), Alternative 2, and Alternative 3.

### 1.4.1 Alternative 1 (No Build)

Under the Alternative 1 (No Build), the proposed Project improvements would not be implemented; therefore, no construction activities would occur. The existing structure and highway facility would not meet current structural and geometric design standards and, thus, safety and connectivity would not be improved within the Project area.

### 1.4.2 Common Design Features of Alternatives 2 and 3

Alternatives 2 and 3 (Design Options A and B) includes the replacement of the ramp structures that connect to the downtown Long Beach roadway system. These alternatives would evaluate the roundabout design option (Design Option A) and the "Y" intersection design option (Design Option B) at the east end of the proposed bridge. The new bridge would consist of multiple structures, with numerous spans that cross the LA River, the northbound (NB) lanes of SR-710, and the LA River and Rio Hondo (LARIO) Trail. The new ramps would be located approximately 500 feet (measured from

centerline) south of the existing Shoemaker Bridge. A portion of the existing bridge would be repurposed into a non-motorized recreational public space maintained by the City. The bottom of the new river-spanning structures would exceed the existing 43-foot mean high water level (MHWL).

The deck of the new bridge would accommodate two through ramp lanes in each direction, shoulders, barriers, and a bicycle and pedestrian path on the south side of the bridge. Under Design Option B, the bridge would also include two turn lanes in the southbound (SB) direction. On the west side of the river, the ramps would connect on the left side of the freeway, at approximately the same merge and diverge existing ramp locations. On the east side of the river, a roundabout or "Y" intersection would be provided at the ramp termini. The ramp termini would be located at or near the eastern abutment of the river-spanning section of the new Shoemaker Bridge.

#### 1.4.2.1 Local Streets

As shown previously on Figure 1-3, Alternatives 2 and 3 include modifications to 12 local streets including West Shoreline Drive, Ocean Boulevard, Golden Shore/Golden Avenue, West Broadway, 3rd Street, 6th Street, 7th Street, 9th Street, 10th Street, Magnolia Avenue, and Anaheim Street.

**West Shoreline Drive**

At the eastern end of the new bridge, a new roundabout or controlled intersection would be constructed to allow West Shoreline Drive and 7th Street ingress and egress. The existing NB and SB roadbeds of West Shoreline Drive are currently separated by Cesar E. Chavez Park and the SCE Seabright Substation. The NB roadbed would be removed, and the former alignment would be integrated into Cesar E. Chavez Park. The existing SB roadbed, located adjacent to the LA River, would be reconfigured and widened to allow two-way traffic between Ocean Boulevard and 7th Street. Access between the newly configured West Shoreline Drive and the substation would be provided. A new controlled intersection would be introduced on West Shoreline Drive at the termini of West Broadway. The loop ramp connector between NB West Shoreline Drive and Ocean Boulevard would be removed and converted into usable park space. The existing Golden Shore Bridge over Shoreline Drive would be removed, and a new controlled intersection would be created at West Shoreline Drive and Golden Shore.

**3rd Street**

The existing 3rd Street alignment curves to the north through Cesar E. Chavez Park and merges onto NB West Shoreline Drive The proposed realignment of 3rd Street would be revised to end at Golden Avenue. The section of 3rd Street that curves into the park would be removed and converted into usable park space. The street, which currently carries one-way traffic in the westbound (WB) direction, would be reconfigured to allow for two-way traffic between Golden and Magnolia Avenues.

**Ocean Boulevard**

The loop ramp connecting NB West Shoreline Drive and Ocean Boulevard would be removed and converted into usable park space. The Ocean Boulevard and Golden Shore intersection would be modified to accommodate two-way traffic on Golden Shore between Ocean Boulevard and West Broadway.

**Golden Shore/Golden Avenue**

Golden Shore is currently a two-way street from Queensway Drive to Ocean Boulevard. North of Ocean Boulevard, Golden Shore becomes Golden Avenue and the roadway splits, providing connections to and from NB West Shoreline Drive and West Broadway. The proposed Project would

eliminate the existing Golden Shore Bridge over West Shoreline Drive and reconstruct the street at a lower elevation to create a new controlled intersection at West Shoreline Drive. The connector ramps from SB West Shoreline Drive to Golden Shore and from NB Golden Shore to eastbound (EB) West Shoreline Drive would be removed. The intersection of Golden Shore and West Seaside Way would be eliminated. The proposed Project would also eliminate the connection from NB West Shoreline Drive and realign Golden Avenue to provide connections to and from West Broadway. Access from West Broadway to Golden Avenue would be limited to right in and right out only.

### West Seaside Way

West Seaside Way between Golden Shore and Queens Way would be reconfigured, and the controlled intersection at Golden Shore would be eliminated. The street would continue to provide access to parking structures and local office buildings. A new intersection allowing access between Shoreline Drive and West Seaside Way would be constructed approximately 675 feet east of Golden Shore.

### West Broadway

The existing terminus of West Broadway is uncontrolled and diverges from the left side of SB West Shoreline Drive. The portion of West Broadway from West Shoreline Drive to Maine Avenue, including its grade separation structure, would be removed. The connection would be replaced by a controlled intersection at West Shoreline Drive and West Broadway. West Broadway would be configured for two-way traffic from West Shoreline Drive to Magnolia Avenue and feature two lanes in each direction. Going EB, a right turn pocket would be provided on West Broadway at the approach to Magnolia Avenue.

### 6th Street

The existing terminus of 6th Street is uncontrolled and diverges from the right side of SB West Shoreline Drive on the Shoemaker Bridge. The segment of 6th Street from SB West Shoreline Drive to Golden Avenue would be reconfigured to provide access to the warehouse properties located at Topaz Court and Golden Avenue but would not provide connectivity to West Shoreline Drive. The existing grade separation structure would be removed. 6th Street would be converted from one-way WB to two-way traffic flow between Golden Avenue and Atlantic Avenue. Additionally, a new bicycle path would extend from the new 6th Street terminus, providing connections to the LA River Trail and the proposed Shoemaker Bridge. A new roadway would also extend from the existing 6th Street terminus to provide access to Drake Park.

### 7th Street

The existing terminus of 7th Street is uncontrolled and merges on the right-hand-side of NB West Shoreline Drive on the Shoemaker Bridge. The segment of 7th Street from Golden Avenue to West Shoreline Drive, including its grade separation structure, would be removed and reconstructed. The connection would be replaced by a roundabout or “Y” intersection at West Shoreline Drive. 7th Street would be reconfigured from one-way EB to two-way traffic between West Shoreline Drive and Atlantic Avenue and would feature two lanes in each direction.

### 9th Street

The existing terminus of 9th Street is uncontrolled and merges on the right-hand-side of SB Shoreline Drive on the Shoemaker Bridge. The portion of 9th Street from Fashion Avenue to West Shoreline Drive, including its grade separation structure, would be removed. The connection would not be

replaced. The Project would also evaluate traffic calming and signal improvements on 9th Street between Caspian Avenue and Anaheim Street.

**10th Street**

The existing terminus of 10th Street is uncontrolled and diverges from the right-hand- side of NB West Shoreline Drive on the Shoemaker Bridge. The portion of 10th Street from West Shoreline Drive to Fashion Avenue, including its grade separation structure, would be removed. The connection would not be replaced.

**Anaheim Street**

The Project would evaluate traffic calming and signal improvements on Anaheim Street between West 9th Street and Atlantic Avenue. Traffic calming and traffic signal improvements proposed along Anaheim Street would include, but not be limited to, protected left turns added to signalized intersections, controlled-access medians that would prohibit left-turns and only allow right-in, right-out access to minor streets, and pedestrian/bike refuge medians.

### 1.4.2.2 Ramps/Connectors

The new ramps would be operated and maintained by Caltrans. The area owned and maintained by Caltrans after completion of the proposed Project would include the new Shoemaker Bridge terminus on the east of the LA River, the main span over the LA River to SR-710, the structure spanning the NB lanes of SR-710, and the roadbed connecting to SR-710.

### 1.4.2.3 Structures

**Eastside Intersection**

The new roundabout (Design Option A) or “Y” intersection (Design Option B) connecting the new Shoemaker Bridge to West Shoreline Drive and 7th Street would be constructed on a structure above the surrounding Cesar E. Chavez Park and LB MUST facility. A portion of both West Shoreline Drive and 7th just south and just east of the roundabout or “Y” intersection would also be on a structure. This would also allow pedestrian and bike paths linking Cesar E. Chavez Park with Drake-Chavez Greenbelt and the LA River Bike path, to safely pass underneath vehicle traffic on West Shoreline Drive and 7th Street.

### 1.4.2.4 Bicycle and Pedestrian Linkages

The existing bicycle and pedestrian path linking 7th Street to the LARIO Trail would be removed. The existing path is grade separated, crossing below NB and SB West Shoreline Drive. The path and grade separation would be replaced. The proposed Project would include at-grade Class I bike paths that would extend from the new 6th Street cul-de-sac to the new Drake/Chavez Soccer Fields and Greenbelt and the LARIO Trail, as well as a pedestrian/bikeway on the south side of the new Shoemaker Bridge to provide connectivity between trails on the west and east side of the LA River.

### 1.4.2.5 Design Exceptions

Non Standard Mandatory and Advisory Design Features include the following items:

- Nonstandard interchange spacing on SR-710
- Left-hand ramps exiting and entering from SR-710

Further details regarding these design exceptions are provided in the Draft Project Report (Caltrans 2018b).

#### 1.4.2.6 Retaining Walls

The proposed Shoemaker Bridge would require abutments and retaining walls at each end of the structure. Additional walls would be constructed at the Shoreline Drive and 7th Street approaches to the roundabout or "Y" intersection. Walls would also be required along the east and west side of Golden Shore north of Shoreline Drive where the grade separation structure is being removed and Golden Shore is being lowered to join West Shoreline Drive.

#### 1.4.2.7 Utilities

The proposed Project would require the removal or relocation of overhead power lines that are in conflict with the new ramp structures and local street alignments. All other major utilities would be protected in place as a part of the Project. There would be several smaller-diameter utilities located within the existing street alignments that would require removal or relocation as part of the local street realignments.

#### 1.4.2.8 Stormwater Treatment

The proposed Project would modify the existing storm drain systems to send storm water to the new LB MUST facility currently being developed by the City. Storm water that cannot be routed to LB MUST would be routed through bio-treatment where hydraulically feasible prior to entering into the existing storm drain systems. Treatment options, including bio-swales, bio-strips, and wet basins, and/or an urban runoff and reuse facility, would be incorporated as landscape features that would be integrated with the overall landscaping form of Drake Park and Cesar E. Chavez Park.

#### 1.4.2.9 Signing

Signs would be removed and relocated to accommodate the new bridge. All existing overhead signs would be replaced and relocated to the new edge of shoulders.

#### 1.4.2.10 Right-of-Way Acquisition

A small amount of ROW would be required from LACFCD property and an existing parking lot along West Broadway; however, acquisition would not prevent the operation of the existing land use. An aerial easement over the LA River and ROW on the west side of the LA River, to allow for a bridge footing, would be required from LACFCD. No business or residential displacements would occur.

Additionally, Alternatives 2 and 3 would require use of land from Cesar E. Chavez Park; however, there would be a net gain in park acres because the existing NB West Shoreline Drive pavement would be removed and the underlying land would be restored and added to Cesar E. Chavez Park.

Several TCEs would be required from commercial properties along Golden Shore for the removal of the bridge over Shoreline Drive. Lastly, because most of the parcels impacted during construction are within Cesar E. Chavez Park, which is owned by the City, TCEs within the park would not be required, as these are only obtained from private property owners.

#### 1.4.2.11 Additional Project Features

This Project contains a number of standardized measures as outlined by the Caltrans Construction Contract Standards and Caltrans best management practices (BMP), which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed Project outlines the standardized Project measures and identifies them as Project features. These Project features are also referenced under the Environmental Consequences sections found in Chapter 2.

## Table 1-5. Additional Project Features

| Project Design Feature | |
|---|---|
| ***Utilities and Emergency Services*** | |
| **PF-1** | During construction, the City's Resident Engineer will ensure that all public utility lines, pipes, and cables disturbed or removed to accommodate the Project must be replaced or relocated within the Project limits to continue to meet the needs of residents and businesses in the community. In addition, arrangements must be made to avoid disruption of utility services. If interruption in service is unavoidable, notice must be given, and proper arrangements will be made with residents and businesses. |
| **PF-2** | To ensure that emergency response times are not disrupted during construction, the City's Resident Engineer will ensure that LBFD be informed of the Project construction schedule, lane closures (if any), and detour plans (if any) at least 2 weeks in advance of any detour plan or lane closure being implemented throughout construction. |
| ***Traffic and Transportation*** | |
| **PF-3** | The TMP will include, but is not limited to, the following measures:<br>• A Maintenance of Traffic (MOT) Plan will be established that provides at least one lane of traffic in each direction on roads during construction.<br>• Local access will be maintained to businesses and residential properties at all times.<br>• Pedestrian access points to businesses, parks, and schools within the construction area will be maintained throughout the construction period, where feasible. If usual access points are lost, provisions for alternative access to the affected parcels will be made. Appropriate signage will be placed to inform pedestrians and bicyclists of the alternative access to local businesses. Disabled access will be maintained during construction where feasible.<br>• During construction, appropriate signage and advanced warning will be developed and displayed to direct pedestrian, bicycle, and vehicular traffic alternate routes.<br>• During construction, the City will establish an information field office near the construction site. The field office will serve the following purposes:<br>• Provide information pertaining to construction and lane closures;<br>• Notify property owners, residences, and businesses of major construction activities (e.g., utility relocation/disruption, rerouting of delivery trucks);<br>• Provide information via the City website. |

## Table 1-5. Additional Project Features

| Project Design Feature | |
|---|---|
| ***Cultural Resources*** | |
| **PF-4** | If cultural materials are discovered during construction, all earth moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find. |
| **PF-5** | If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities will stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the NAHC, who, pursuant to PRC Section 5097.98, will then notify the MLD. At this time, the Caltrans District 7 Environmental Branch Chief and Caltrans District 7 Native American Coordinator will be contacted so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable. |
| ***Water Quality*** | |
| **PF-6** | During construction, the City's Resident Engineer or designated contractor will ensure scheduling and move-in/move-out temporary erosion control (SS-1) to designate multiple move-ins to establish temporary erosion control on graded areas that are substantially complete. |
| **PF-7** | During construction, the City's Resident Engineer or designated contractor will ensure that silt fence (SC-1) will be installed to protect the perimeter of the Project work sites. |
| **PF-8** | During construction, the City's Resident Engineer or designated contractor will ensure that street sweeping (SC-7) will be utilized to clean up adjacent City streets. |
| **PF-9** | During construction, the City's Resident Engineer or designated contractor will ensure that storm drain inlet protection (SC-10) will be used to protect the new and existing storm drain inlets |
| **PF-10** | To minimize the volume of decontamination wash water and prevent the transport of contaminates from work site areas during construction, the City's Resident Engineer or designated contractor will ensure the implementation of BMPs, including the following:<br>• Waste management (WM) -6, addressing hazardous waste management<br>• WM-7, addressing contaminated soil management<br>• Tracking control (TC) -3, which pertains to entrance outlet tire |
| **PF-11** | During construction, the City's Resident Engineer or designated contractor will ensure that pile driving operations (NS-11) will involve mitigation measures to control waste from pile driving operations. |

## Table 1-5. Additional Project Features

| Project Design Feature | |
|---|---|
| **PF-12** | During construction, the City's Resident Engineer or designated contractor will ensure compliance with the provisions of the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009-DWQ, NPDES No. CAS000002), and any subsequent amendments (Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ), as they relate to construction activities for the Project. This will include submission of the Permit Registration Documents, including an NOI, risk assessment, site map, SWPPP, annual fee, and signed certification statement to the SWRCB via the SMARTS at least 7 days prior to the start of construction.<br>• Construction activities will not commence until a WDID number is received from the SMARTS. The SWPPP will be prepared by a QSD.<br>• The SWPPP will meet the requirements of the Construction General Permit and identify potential pollutant sources associated with construction activities; identify non-stormwater discharges; develop a water quality monitoring and sampling plan; and identify, implement, and maintain BMPs to reduce or eliminate pollutants associated with the construction site. BMPs will include, but not be limited to, good housekeeping, erosion control, and sediment control BMPs.<br>• The BMPs identified in the SWPPP will be implemented during Project construction. Caltrans and the City will comply with the Risk Level 1 sampling and reporting requirements of the Construction General Permit.<br>• A REAP will be prepared and implemented by a QSD within 48 hours prior to a rain event of 50 percent or greater probability of precipitation according to NOAA. A NOT will be submitted to the SWRCB within 90 days of completion of construction and stabilization of the site. |

## Table 1-5. Additional Project Features

| Project Design Feature | |
|---|---|
| **PF-13** | During construction, the City's Resident Engineer or designated contractor will ensure all construction site BMPs follow the latest edition of the Stormwater Quality Handbooks: Construction Site BMPs Manual (Caltrans 2017a) to control and reduce the impacts of construction related activities, material, and pollutants on the watershed. These include, but are not limited to, temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-stormwater BMPs identified in the following Non-Stormwater (NS) BMPs listed below:<br>• NS-2, related to dewatering operations<br>• NS-3, related to paving and grinding operations<br>• NS-4, related to temporary stream crossing<br>• NS-5, related to clear water diversion<br>• NS-6, related to illicit connection/discharge<br>• NS-7, related to potable water/irrigation<br>• NS-11, related to pile driving operation<br>• NS-12, related to concrete curing<br>• NS-13, related to concrete finishing<br>• NS-16, related to temporary batch plants<br>In addition, during construction, the City's Resident Engineer or designated contractor will ensure compliance with the following Materials Management BMPs:<br>• WM-3, related to stockpile management<br>• WM-5, related to solid waste management<br>• WM-9, related to sanitary septic waste management<br>• WM-10, related to liquid waste management |
| **PF-14** | During the PS&E phase, the City's Resident Engineer will review the results of further geotechnical explorations to determine if dewatering is necessary during construction of deep foundations within the LA River. |
| **PF-15** | During construction, the City's Resident Engineer or designated contractor will ensure that turbidity and pH testing will be conducted at discharge points during qualifying rain events. |

## Table 1-5. Additional Project Features

| Project Design Feature | |
|---|---|
| **PF-16** | During construction, the City's Resident Engineer or designated contractor will ensure that carriers be constructed at entry points to the receiving waters to prevent large debris from entering the receiving water. |
| **PF-17** | During construction, the City's Resident Engineer or designated contractor will ensure that cofferdams be used during bank or sediment disturbing construction activities. |
| **PF-18** | During construction, the City's Resident Engineer or designated contractor will ensure that turbidity curtains be used in lieu of silt curtains, which are less effective at trapping sediment in tidal channels. |
| **PF-19** | During construction, the City's Resident Engineer or designated contractor will ensure that streambank stabilization (SS-12) be required to mitigate work involving the existing LA River banks. |
| **PF-20** | During construction, the City's Resident Engineer or designated contractor will ensure that material and equipment use over water (NS-13) be required for work done over the LA River. |
| **PF-21** | During construction, the City's Resident Engineer or designated contractor will ensure that structure demolition/removal over or adjacent to water (NS-15) be required for removal of the existing bridge over the LA River. |
| **PF-22** | During construction, the City's Resident Engineer or designated contractor will ensure that solid waste management (WM-5) be used to control runoff from waste piles generated from demolishing the existing bridge structures. |
| **PF-23** | During construction, a Temporary Sediment Basin (SC-2) will be utilized on the east side of the bridge to mitigate sediment transport into the existing pump station and LA River. |
| **PF-24** | During construction, the City of Long Beach's Resident Engineer or designated contractor will ensure that proposed locations for servicing, washing, and refueling of equipment are designated in areas that are located away from temporary channels or swales that have the potential to quickly convey runoff to the drainage system and into the LA River. The Resident Engineer or designated contractor will comply with the guidance outlined in BMP NS-8, pertaining to vehicle and equipment cleaning, NS-9, pertaining to vehicle and equipment fueling, and NS-10, pertaining to vehicle and equipment maintenance. |
| **PF-25** | During construction, the City's Resident Engineer or designated contractor will ensure that construction materials be securely locked up to avoid vandalism and accidental spills into the watercourse. The City's Resident Engineer or designated contractor will follow measures outlined in BMPs materials management WM-1, regarding material delivery and storage, and WM-4, regarding spill prevention and control. |

## Table 1-5. Additional Project Features

| Project Design Feature | |
|---|---|
| **PF-26** | During construction, the City's Resident Engineer or designated contractor will ensure that contaminated material (e.g., oil, lubricants) will be kept at a safe distance (a minimum of 100 feet [30.5 meters]) from an entry point into a receiving water body. Temporary barriers and containers will be necessary to confine any contaminated materials. Upon completion of construction, all contaminated material on the construction site must be removed and disposed of in accordance with federal, regional, and local regulations. |
| **PF-27** | During construction, the City's Resident Engineer or designated contractor will ensure that a temporary spill containment system will be installed and maintained on either side of the receiving water crossing. The City's Resident Engineer or designated contractor will be responsible for the containment plan and the execution of spill containment during the course of construction. The containment plan will be reviewed and approved by the City's Resident Engineer. |
| **PF-28** | During construction, the City's Resident Engineer or designated contractor will ensure excess grease will be manually removed from moving parts of bridges and collected for disposal. |
| **PF-29** | During construction, the City's Resident Engineer or designated contractor will ensure that structures will be degreased prior to painting and hydro blasting to remove old paint with additive free water, where possible. |
| **PF-30** | During construction, the City's Resident Engineer or designated contractor will ensure that shrouds be erected around working areas. Nets and tarps will be suspended below bridges to catch debris from abrasive removal of old paint and over spray, where wind conditions permit. |
| **PF-31** | During construction, the City's Resident Engineer or designated contractor will ensure that debris be confined by anchoring tarps to enclose the bridge, where the bridge deck is close to the water level. |
| **PF-32** | During construction, the City's Resident Engineer or designated contractor will ensure that booms be used to capture fugitive floating paint chips. Custom built enclosures will be used to confine and capture abrasives, old paint chips, and paint. |
| **PF-33** | During construction, the City's Resident Engineer or designated contractor will ensure that vacuum or suction shrouds on blast heads will be used to capture grit and old paint. |
| **PF-34** | During construction, the City's Resident Engineer or designated contractor will ensure that storing, mixing, and cleaning operations will be carried out on land. |
| **PF-35** | During construction, the City's Resident Engineer or designated contractor will ensure that concrete curing (NS-12) will be used to control waste related to concrete curing. |

## Table 1-5. Additional Project Features

| Project Design Feature | |
|---|---|
| **PF-36** | During construction, the City's Resident Engineer or designated contractor will ensure that temporary concrete washout and concrete management (WM-8) will be used to control runoff from waste concrete. |
| **PF-37** | During construction, the City's Resident Engineer or designated contractor will ensure that paving and grinding operations (NS-3) will be used to manage waste from paving operations. |
| **PF-38** | During construction, the City's Resident Engineer or designated contractor will ensure that stabilized construction entrance/exits (TC-1) will be situated at locations where construction traffic will enter paved roads. |
| **PF-39** | During construction, the City's Resident Engineer or designated contractor will ensure that hydraulic mulch (SS-3) will be utilized to stabilize the graded slopes prior to plant establishment. |
| **PF-40** | During construction, the City's Resident Engineer or designated contractor will ensure that hydroseeding (SS-4) and soil binders (SS-5) will be used for exposed slopes and stockpiles. |
| **PF-41** | During construction, the City's Resident Engineer or designated contractor will ensure that outlet protection (SS-10) will be used to protect downstream areas from erosion. |
| **PF-42** | During construction, the City's Resident Engineer or designated contractor will ensure that channel bank work include bank protection (riprap, concrete walls, and sheet piling) to eliminate the possibility of enhanced bank erosion. If channel bank work occurs during post construction, Caltrans' Resident Engineer or designated contractor will ensure that the same requirements are adhered to. |
| **PF-43** | To minimize flow rates and volumes of storm water, the City's Resident Engineer or designated contractor will ensure the implementation of BMPs, which may include the following:<br>• Gross solid removal devices<br>• Wet basins<br>• Bioswales and stripes<br>• Media filters may be installed as per SSP 13 6.02C<br>• Catch basin inserts |

## Table 1-5. Additional Project Features

| Project Design Feature | |
|---|---|
| **PF-44** | During construction, the City's Resident Engineer or designated contractor will ensure compliance with the provisions of the General Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4 2013 0095, NPDES Permit No. CAG994004), effective July 6, 2013 (known as the Dewatering permit), as they relate to discharge of non stormwater dewatering wastes for the Project. The two options to discharge would be to the local storm drain system and sanitary sewer system and would require a permit from the RWQCB and the City, respectively. |
| **PF-45** | During construction, the City's Resident Engineer or designated contractor will ensure compliance with the provisions of the General Waste Discharge Requirements for Discharges of Treated Groundwater from Investigation and/or Cleanup of Volatile Organic Compounds Contaminated Sites to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4 2013 0043, NPDES Permit No. CAG914001), effective April 7, 2013 (known as the Dewatering permit for contaminated sites), as they relate to discharge of non stormwater dewatering wastes from contaminated sites for the Project. The two options to discharge would be to the local storm drain system and sanitary sewer system and would require a permit from the RWQCB and the City, respectively. |
| **PF-46** | During construction, the City's Resident Engineer or designated contractor will ensure that an appropriate groundwater treatment method be determined based on a groundwater assessment and recommendations from the Los Angeles RWQCB. These three treatment methods include:<br>• On-site treatment: A temporary water treatment plant would be constructed to treat water generated from dewatering operations to reduce the concentrations of pollutants of concern below NPDES limits.<br>• Treatment and disposal off site: Water would be temporarily stored in the Project area, the waste would be profiled (i.e., categorized as hazardous or non-hazardous), and the water would be transported to a regulated facility for treatment and disposal.<br>• Disposal into the Local sewer system: Groundwater would be disposed into the County of Los Angeles sewage treatment system via a local sewer or truck line, depending on the rate and flow. An Industrial Wastewater Discharge Permit, issued by the County of Los Angeles Sanitation Department, would be required. Treatment of the discharge water may be required to satisfy the permit. |
| **PF-47** | Following construction, Caltrans' Resident Engineer or designated contractor will ensure that the new bridge structures be continuously maintained in accordance with Caltrans' standard maintenance policies and procedures to prevent excessive buildup of debris that could be discharged in a precipitation event. |
| **PF-48** | Prior to construction, the City's Resident Engineer or designated contractor will ensure that the LB MUST Facility will accommodate drainage from the portion of the Project area to the north of Broadway. |
| **PF-49** | Prior to construction, the City's Resident Engineer or designated contractor will ensure that a detention basin will be constructed as part of the Project to accommodate drainage from the portion of the Project area to the south of Broadway. |

## Table 1-5. Additional Project Features

| Project Design Feature | |
|---|---|
| **PF-50** | Prior to construction, the City's Resident Engineer or designated contractor will ensure that preservation of existing vegetation (SS-2) for any ESAs identified in the environmental document and existing park landscaping be protected during construction activities as designated on the construction documents. |
| ***Hazard and Hazardous Waste*** | |
| **PF-51** | During the PS&E phase, the City will ensure unpaved soils adjacent to the existing roadway be tested for ADL according to Caltrans ADL testing guidelines. -Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed in accordance with Caltrans Standard Specifications, Section 14-11.08 Material Containing Hazardous Waste Concentrations of Aerially Deposited Lead (2015) and under the July 1, 2016, ADL Agreement between Caltrans and the California DTSC. This ADL Agreement allows such soils to be safely reused within the project limits, as long as all requirements of the ADL Agreement are met. |
| **PF-52** | During construction, the City Resident Engineer will ensure that the removal of any wooden telephone poles would be conducted in accordance with Appendix XII of the CCR, Title 22, Division 4.5, Chapter 11. |
| **PF-53** | During the PS&E Phase, the City will ensure that an ACM and LBP survey will be conducted for any structure requiring modification or removal. The City will ensure that the survey will be conducted in conformance with the U.S. EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR, SCAQMD Rule 1403, and in accordance with Caltrans SSP 14-11.13, Disturbance of Existing Paint Systems on Bridges, and Caltrans SSP 14-11.16, Asbestos-Containing Construction Materials in Bridges. |
| **PF-54** | During the PS&E Phase, the City will ensure lead and chromium sampling and analysis will be conducted of yellow and white paint striping that would be disturbed or removed by the Project. In addition, during construction, the City Resident Engineer will ensure the removal, handling, and disposal of yellow and white paint striping will be conducted in accordance with Construction Program Procedure Bulletin 99-2, Caltrans SSP 14-11.12, Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue, and Caltrans SSP 36-4, Residual Containing Lead from Paint and Thermoplastic. |
| **PF-55** | During the PS&E Phase, the City will ensure PCB sampling will be conducted for any pole- or pad-mounted transformers and substations, including the SCE Seabright Substation, which would be disturbed or removed as part of the Project. |
| **PF-56** | During construction, the City Resident Engineer will ensure USA will be notified at least 2 days prior to ground-disturbing activities to enable all utility owners within the Project disturbance limits to identify the locations of known underground transmission lines and facilities. |

## Table 1-5. Additional Project Features

| Project Design Feature | |
|---|---|
| **PF-57** | Prior to construction, the City Resident Engineer will ensure the preparation of the following plans to protect worker health and safety and the environment:<br>• Health and Safety Plan: A certified industrial hygienist will prepare a Health and Safety Plan to guide all construction activities. The Health and Safety Plan would identify all potential hazards and contain specific procedures for encountering expected and unexpected contaminants. It would prescribe safe work practices, contaminant monitoring, personal protective equipment, emergency response procedures, and safety training requirements to protect constructions workers and third parties.<br>• Construction Contaminant Management Plan: A soils and groundwater Construction Contaminant Management Plan will be prepared. This plan would include procedures for contaminant monitoring and identification, temporary storage, handling, treatment, and disposal of waste and materials.<br>• Construction Contingency Plan: A Construction Contingency Plan will be prepared with guidance provided in Chapter 7, Environmental Stewardship of the Caltrans Construction Manual (Caltrans 2017a), for the handling and dealing of unknown hazards. This plan would include provisions for responding to events such as the discovery of unidentified USTs, hazardous material, petroleum hydrocarbons, or hazardous or solid wastes during construction. This plan would address UST decommissioning, field screening, and material testing methods, mitigation and contaminant management requirements, and health and safety requirements for construction workers. |
| **PF-58** | During the PS&E phase and prior to start of construction and any parcel dedications, the City will ensure all recommended PSI activities are conducted for the eight properties described in Table 2.12 3 and Table 2.12 4, which are also referenced in Avoidance and Minimization Measures HAZ 1 through HAZ 9 in Section 2.12.4. The results of the PSIs will be used to determine appropriate measures to manage contaminated soil and groundwater and disposal options during construction. The PSI results would also be used to prepare the Health and Safety Plan, Construction Contaminant Management Plan, Construction Contingency Plan, as well as a Lead Compliance Plan if one is needed per the PSI results. |
| **PF-59** | During construction, the Project will avoid building over any plugged and abandoned wells. However, if any wells, including any plugged, abandoned or unrecorded wells, are damaged or uncovered during excavation or grading, remedial plugging operations may be required. If such damage or discovery occurs, the Department of Conservation's Division of Oil, Gas, and Geothermal Resource district office will be contacted to obtain information on the requirements and approval to perform remedial operations. |
| ***Air Quality*** | |
| **PF-60** | During construction, the City's Resident Engineer will ensure that the construction contractor complies with the Caltrans' Standard Specifications in Section 14-9 (2018).<br>• Section 14.9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. |
| **PF-61** | During construction, the City's Resident Engineer or designated contractor will ensure that water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions. |

## Table 1-5. Additional Project Features

| Project Design Feature | |
|---|---|
| **PF-62** | During construction, the City's Resident Engineer or designated contractor will ensure that a soil binder will be spread on any unpaved roads used for construction purposes and on all Project construction parking areas. |
| **PF-63** | During construction, the City's Resident Engineer or designated contractor will ensure that trucks will be washed as they leave the ROW as necessary to control fugitive dust emissions. |
| **PF-64** | During construction, the City's Resident Engineer or designated contractor will ensure that construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by CCR Title 17, Section 93114. |
| **PF-65** | Prior to construction, the City's Resident Engineer or designated contractor will ensure that a dust control plan will be developed, documenting sprinkling, temporary paving, speed limits, and timely revegetation of disturbed slopes, as needed, to minimize construction impacts on existing communities. |
| **PF-66** | During construction, the City's Resident Engineer or designated contractor will ensure that equipment and materials storage sites will be located as far away from residential and park uses as practicable. Construction areas will be kept clean and orderly. |
| **PF-67** | Prior to construction, the City's Resident Engineer or designated contractor will ensure that environmentally sensitive areas will be established near sensitive air receptors. Within these areas, construction activities involving the extended idling of diesel equipment or vehicles will be prohibited, to the extent feasible. |
| **PF-68** | During construction, the City's Resident Engineer or designated contractor will ensure that track out reduction measures, such as gravel pads at Project access points to minimize dust and mud deposits on roads affected by construction traffic, will be used. |
| **PF-69** | During construction, the City's Resident Engineer or designated contractor will ensure that all transported loads of soils and wet materials will be covered before transport or adequate freeboard (space from the top of the material to the top of the truck) will be provided to minimize emission of dust during transportation. |
| **PF-70** | During construction, the City's Resident Engineer or designated contractor will ensure that dust and mud deposited on paved, public roads due to construction activity and traffic will be promptly and regularly removed to reduce particulate matter emissions. |
| **PF-71** | During construction, the City's Resident Engineer or designated contractor will ensure, to the extent feasible, that construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times. |
| **PF-72** | During construction, the City's Resident Engineer or designated contractor will ensure that mulch will be installed or vegetation planted as soon as practical after grading to reduce windblown particulate matter in the area. |

## Table 1-5. Additional Project Features

| Project Design Feature | |
|---|---|
| **PF-73** | During construction, the City's Resident Engineer or designated contractor will ensure that all trucks that are to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads. |
| **PF-74** | During construction, the City's Resident Engineer will ensure that the contractor will adhere to Caltrans' Standard Specifications for Construction (Sections 14.9 02). |
| ***Noise*** | |
| **PF-75** | During construction, the City's Resident Engineer will ensure that the contractor will use an alternative warning method instead of a sound signal unless required by safety laws. |
| **PF-76** | During construction, the City's Resident Engineer will ensure that the contractor will equip all internal combustion engines with the manufacturer recommended muffler and will not operate any internal combustion engine on the job site without the appropriate muffler. |
| **PF-77** | During construction, the City's Resident Engineer or designated contractor will ensure that all construction equipment, fixed or mobile, will be equipped with properly operating and maintained mufflers consistent with manufacturers' standards during all Project site excavation and grading on site. |
| **PF-78** | During construction, the City of Long Beach's Resident Engineer or designated contractor will ensure that all stationary construction equipment will be placed so that emitted noise is directed away from noise sensitive locations nearest the Project site. |
| **PF-79** | During construction, the City of Long Beach's Resident Engineer or designated contractor will ensure that construction vehicle staging areas and equipment maintenance areas will be located as far as possible from sensitive receptor locations. |
| ***Natural Communities*** | |
| **PF-80** | During construction, the City of Long Beach (City) will ensure that a biologist approved by the Carlsbad Fish and Wildlife Office (CFWO) and National Marine Fisheries Service (NMFS) (Project Biologist) will be on site weekly during Project construction within 200 feet of Environmentally Sensitive Areas (ESAs) and habitat for listed species with the potential to occur in the area (i.e. western snowy plover and California least tern) in order to ensure compliance with all conservation measures. The Project Biologist will be familiar with the habitats, plants, and wildlife in the Project area and will maintain communications with the contractor to ensure that issues relating to biological resources are appropriately and lawfully managed. The Project Biologist will review final plans, designate areas that need temporary fencing (e.g. ESA fencing), and monitor construction. The biologist's name and contact information will be submitted to the CFWO prior to initiating project construction. The contract of the biologist will allow direct communication with the CFWO at any time regarding the proposed project. The Project Biologist will meet the qualifications defined under SSP 14 6.03D(1) Contractor Supplied Biologist. |

## Table 1-5. Additional Project Features

| Project Design Feature | |
|---|---|
| **PF-81** | After the completion of construction, the City of Long Beach (City) will ensure that the Project Biologist will submit a final report to the CFWO within 120 days of project completion, including photographs of impact areas and adjacent habitat, documentation that authorized impacts were not exceeded, and documentation that general compliance with all conservation measures was achieved. The report will specify numbers and locations of listed species (if observed); observed listed species behavior (especially in relation to project activities); and remedial measures employed to avoid and minimize impacts to listed species. Raw field notes will be provided upon request by the CFWO. |
| **PF-82** | The City's Resident Engineer will ensure that prior to clearing or construction, highly visible barriers (such as orange construction fencing) will be installed around sensitive habitats adjacent to the Project footprint to designate ESAs to be preserved. No grading or fill activity of any type will be permitted within these ESAs. The requirement to install highly visible barriers to designate ESAs will be done in accordance with SSP 14 6.03D(2) Natural Resource Protection Plan. |
| **PF-83** | The City's Resident Engineer will ensure that heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental damage to nearby preserved areas. All equipment maintenance, staging, and dispensing of fuel, oil, or any other, such activities will occur in developed or designated nonsensitive upland habitat areas. The designated upland areas will be located in such a manner as to prevent the runoff from any spills from entering waters of the U.S. Provisions to protect ESAs from heavy equipment, including motor vehicle access, will be done in accordance with SSP 14 6.03D(2) Natural Resource Protection Plan. |
| **PF-84** | During construction, the City's Resident Engineer or designated contractor will ensure that turbidity curtains be used in lieu of silt curtains, which are less effective at trapping sediment in tidal channels. |
| ***Animal Species*** | |
| **PF-85** | The City's Resident Engineer will ensure that any native or exotic vegetation removal or tree trimming activities will occur outside of the nesting bird season (February 15 through September 1). In the event that vegetation clearing is necessary during the nesting season, a qualified biologist will conduct a preconstruction survey to identify the locations of nests. Should nesting birds be found, an exclusionary buffer will be established by the biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction or clearing will not be conducted within this zone until the biologist determines that the young have fledged or the nest is no longer active. Nesting bird protection measures will be implemented in accordance with Caltrans SSP 14-6.03B Bird Protection. |

## Table 1-5. Additional Project Features

| Project Design Feature | |
|---|---|
| **PF-86** | The City's Resident Engineer will ensure that all work on existing bridges with potential habitat conducted between February 15 and September 1 will include a survey for bird nests. If bird nests are found, all inactive bird nests will be removed prior to February 1 of that year, before commencement of the nesting season, under guidance and observation of a qualified biologist. Removal of nests that are under construction must be repeated as frequently as necessary to prevent nest completion or until a nest exclusion device is installed (such as netting or a similar mechanism that keeps birds from building nests). If a nest has been completed and eggs have been laid, an exclusionary buffer will be established by a qualified biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction or clearing will not be conducted within this zone until the biologist determines that the young have fledged or the nest is no longer active. Nest removal and exclusion device installation will be monitored by a qualified biologist. Such exclusion efforts must be continued to keep the structures free of swallows until September or completion of construction. All nest exclusion techniques will be coordinated among the City, a Caltrans District Biologist, and the resource agencies. Nesting bird protection measures will be implemented in accordance with Caltrans SSP 14-6.03B Bird Protection. |
| ***Threatened and Endangered Species*** | |
| **PF-87** | Caltrans will consult with the NOAA Fisheries for impacts on EFH for northern anchovy. The protection of all life stages of anadromous fish in streams will be done in accordance with Caltrans SSP 14-6.03 Species Protection and SSP 14-6.03C Fish Protection. |
| ***Energy*** | |
| **PF-88** | The Project will incorporate the use of energy-efficient lighting, such as LED traffic signals and street lights, to the extent feasible. LED lights consume 10 percent of the electricity of traditional lights. |

#### 1.4.2.12 Other Design Features

In conjunction with the City's future expansion of Cesar E. Chavez Park, the realignment of West Shoreline Drive, 3rd Street and the removal of connector ramps between West Shoreline Drive and Ocean Boulevard would increase the usable park space. The Shoemaker Bridge Project would include improvements to Cesar E. Chavez Park and would relinquish additional property to the City to facilitate the park's expansion.

### 1.4.3 Unique Design Features of Alternatives 2 and 3

Alternative 3 includes all the features described in Section 1.4.2 for Alternative 2; however, the few unique features of Alternatives 2 and 3 are described below.

#### 1.4.3.1 Alternative 2 – Non-Transportation Reuse

Alternative 2 also proposes to reuse the existing Shoemaker Bridge for non-transportation uses (i.e., park and recreation facility).

Once the new Shoemaker Bridge is open to traffic, the old Shoemaker Bridge would be modified and reused for non-highway purposes. Non-highway uses and features may include:

- A pedestrian and bike crossing over the LA River with access to the LARIO Trail and the western levee maintenance road
- Viewing and seating areas
- Landscape forms
- Security and maintenance vehicle access

Unused areas where the local street roadbeds are removed would be replaced by minimal landscaping to match the surrounding areas and bicycle/pedestrian paths to connect local street paths to the old Shoemaker Bridge. With the removal of local road connections at 9th Street and 10th Street across SR-710, vehicular, bicycle, and pedestrian traffic must use alternate routes to cross the freeway. The Project would include provision for bicycle and pedestrian linkages at alternate freeway crossings. For CEQA purposes, this alternative is considered the Project. Please refer to Chapter 3 for a full discussion of the Project under CEQA.

#### 1.4.3.2 Alternative 3 – Bridge Replacement

As stated above, Alternative 3 includes all the features described above in Section 1.4.2.1 for Alternative 2; however, Alternative 3 includes removal of the existing Shoemaker Bridge.

All staging would remain the same as described above in Section 1.4.2.1 with the exception of the removal of the existing Shoemaker Bridge.

### 1.4.4 Transportation System Management/Transportation Demand Management

Although Transportation System Management (TSM) measures alone could not satisfy the purpose and need of the Project, the following TSM measures have been incorporated into Alternatives 2 and 3 (Design Options A and B) for this Project: ramp metering and traffic signal coordination. Additionally, Alternatives 2 and 3 (Design Options A and B) would consist of Transportation Demand Management (TDM) elements, as it would provide operating cost savings and increased travel reliability. By consolidating NB and SB West Shoreline Drive, Alternatives 2 and 3 (Design Options A and B) would facilitate improvements to the adjacent City parks. The park improvements planned by the City would

enhance access to both Cesar E. Chavez Park and also the LARIO Trail. Also, by consolidating the NB and SB West Shoreline Drive to a single alignment, the accessible area within Cesar E. Chavez Park would increase by at least 1.95 acres. The City also plans to construct a grade separated bike and pedestrian bridge over the realigned West Shoreline Drive to facilitate greater access to and from the LARIO Trail to the existing Class II bike routes located on 3rd Street and West Broadway. During Project construction, no substantial traffic delays are anticipated.

### 1.4.5 Cost for Alternatives 2 and 3

The estimated total cost for Alternative 2 under Design Option A is $391,900,000 and $266,500,000 under Design Option B. The estimated total cost for Alternative 3 under Design Option A is $338,000,000 and $243,000,000 under Design Option B.

### 1.4.6 Alternative 1 – No Build

Under Alternative (No Build), no modifications to the existing Shoemaker Bridge, and no realignment of West Shoreline Drive or other local connector streets would be implemented.

## 1.5 Environmental Decision Process

After the public circulation period, all comments have been considered, and the Project development team (PDT) comprised of the City and Caltrans has selected a preferred alternative and made a final determination of the proposed Project's effect on the environment. The City has certified the Final Environmental Impact Report (EIR) and filed a Notice of Determination with the State Clearinghouse (SCH). Once Caltrans has determined the action does not significantly impact the environment, Caltrans, as assigned by the FHWA, will issue a Finding of No Significant Impact (FONSI) in accordance with NEPA.

The Draft EIR/EA prepared for the Project was circulated for public review between September 27, 2019, and November 12, 2019. Caltrans, in cooperation with the City, held a public hearing on October 17, 2019. All comments received during the public review period have been considered. After the Final EIR/EA is made available, if the City decides to approve the Project as CEQA lead, a Notice of Determination (NOD) will be published in compliance with CEQA. If Caltrans decides to approve the Project under NEPA, a FONSI will be published for compliance with NEPA. A Notice of Availability (NOA) of the FONSI will be sent to the affected units of federal, state, and local government, and to the State Clearinghouse in compliance with Executive Order 12372. The FONSI will be signed once the Project satisfactorily demonstrates requirements under the Transportation Conformity rules and regulations as the scope and concept of the project will be amended in the upcoming RTP. In California, no new regional conformity determinations can be approved by FHWA until emissions inventories are updated with new assumptions reflecting the recently-implemented Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program.

## 1.6 Identification of the Preferred Alternative

The City, as the lead agency under CEQA in cooperation with Caltrans, as lead agency under NEPA, have identified Alternative 3 (Design Option A) as the Preferred Alternative. The Preferred Alternative, Alternative 3 (Design Option A), includes the complete removal of the existing Shoemaker bridge and construction of the new bridge with a roundabout on the eastern end of the proposed bridge. Local road improvements would occur throughout the Project limits including those on W Shoreline Drive, 3rd Street, Ocean Avenue, Golden Shore/Golden Avenue, West Seaside Avenue, West Broadway, 6th

Street, 7th Street, 9th Street, 10th Street, and Anaheim Street. The new Shoemaker bridge would consist of multiple structures, with spans that cross the LA River, the northbound (NB) lanes of SR-710, and the LA River and Rio Hondo (LARIO) Trail. The new ramps would be located approximately 500 feet (measured from centerline) south of the existing Shoemaker Bridge. After the public circulation period, all comments were considered and addressed prior to the PDT selecting the Preferred Alternative, Alternative 3 (Design Option A). The PDT selected Alternative 3 (Design Option A) on December 11, 2019, after careful consideration of all contributing factors. Alternative 3 (Design Option A) has been selected as the Preferred Alternative because it best satisfies the purpose and need of the Project. Additionally, Alternative 3 consists of the removal of the entire existing Shoemaker bridge and minimizes risks associated with additional piers or columns within the LA River due to the potential hydraulics alterations of the LA River. The Preferred Alternative has also been documented within the Project Report. The environmental effects of the build alternatives are substantially the same.

## 1.7 Alternatives Considered but Eliminated from Further Discussion Prior to the Draft Environmental Impact Report/Environmental Assessment (EIR/EA)

A PSR/Project Development Support (PDS) was approved by Caltrans in February 2008. The PSR/PDS included two Project alternatives (Alternatives 1 and 2) to replace the existing Shoemaker Bridge. The original intent for the development of the PSR/PDS alternatives was to "bookend" the possible construction footprint for the proposed Shoemaker Bridge Replacement Project while design continued on the development of the I-710 Corridor Project southern terminus segment. The two alternatives included in the PSR/PDS included a bridge replacement project that eliminated all local street connections at 6th Street, 7th Street, 9th Street, and 10th Street, and a larger, more expensive, replacement project that maintained all local street connections. The PSR/PDS also differentiated the portion of the Project that resides within proposed Caltrans ROW, and that portion of the Project that resides outside of the proposed Caltrans ROW. Since the approval of the PSR/PDS, the two alternatives have been replaced with two hybrid alternatives that allow for compatibility with the proposed I-710 Corridor Project, but at the same time, provide independent utility as a stand-alone project.

## 1.8 Permits and Approvals Needed

Table 1-6 lists the permits, reviews, and approvals that would be required for construction of the proposed Project.

**Table 1-6. Required Permits, Reviews, and Approvals**

| Agency | Permit/Approval | Status |
|---|---|---|
| FHWA | Air Quality Conformity Determination | Prior to approval of the FONSI. . |
| USACE | Section 404 Permit for modification to USACE facility (levees) | Application would be submitted after environmental document approval. |
| | Section 408 Permit for modification to USACE facility (levees) | Application would be submitted after environmental document approval. |

## Table 1-6. Required Permits, Reviews, and Approvals

| Agency | Permit/Approval | Status |
|---|---|---|
| CDFW | 1602 Lake or Streambed Alteration Agreement | Permit would be obtained after certification of environmental document and prior to construction. |
| CCC | CZMA consistency certification | Consistency Certification will be obtained during PS&E. |
| SWRCB | Section 402 NPDES/Caltrans NPDES Permit CAS000003 and CAS000002 (Construction General Permit) | The Construction General Permit has been adopted and was effective as of July 1, 2010. The Caltrans NPDES Permit was effective as of July 1, 2013. |
| Los Angeles RWQCB | NPDES Permit No. CAG994004 (Dewatering Permit) | Permit will be acquired prior to construction. |
| Los Angeles RWQCB | NPDES Permit No. CAG914001<br>(Dewatering Permit for Contaminated Sites) | Permit will be acquired prior to construction. |
| Affected utilities | Approvals to relocate, protect in place, or remove utility facilities | Prior to any construction that would affect utility facilities. |
| Los Angeles County RWQCB | Section 401 Water Quality Certification<br>Section 402 NPDES (Construction Activity) | Section 401 Water Quality Certification would be obtained after certification of environmental document and prior to construction.<br>Section 402 NPDES (Construction Activity) Application would be submitted after environmental document approval. |
| LACFCD | Encroachment Permit | Letter or permit would be obtained prior to construction. |
| City of Long Beach | Approval of encroachment permits and street construction permits, street closures and rerouting, and associated improvements in the public ROW<br>Section 4(f) consultation for Cesar E. Chavez Park<br>Water Quality Management Plan | Actions/permits would be obtained prior to the start of construction.<br>Section 4(f) concurrence was received from the City on December 14, 2019.<br>Prior to start of construction. |
| City of Long Beach LCP/ CCC | CDP application for consistency determination | Application would be submitted after approval of the Final Environmental Document pursuant to CEQA/NEPA. A CDP is required prior to any ground breaking activities. |

## Table 1-6. Required Permits, Reviews, and Approvals

| Agency | Permit/Approval | Status |
|---|---|---|
| POLB | HDP | Application would be submitted after approval of the Final Environmental Document pursuant to CEQA. An HDP is required prior to any ground breaking activities. |
| Sanitation District of Los Angeles | Construction Work Discharge Permit | Required for discharge of construction water into local sewer system. To be applied for prior to construction. |

Notes:

Caltrans=California Department of Transportation; CCC=California Coastal Commission; CDFW=California Department of Fish and Wildlife; CDP=Coastal Development Permit; CEQA=California Environmental Quality Act; CZMA=Coastal Zone Management Act; FHWA=Federal Highway Administration; HDP=Harbor Development Permit; LACFCD=Los Angeles County Flood Control District; LCP=Local Coastal Program; NEPA=National Environmental Policy Act; No.=Number; NPDES=National Pollutant Discharge Elimination System; POLB=Port of Long Beach; ROW=right-of-way; RWQCB=Regional Water Quality Control Board; A Legacy for Users; SWRCB=State Water Resources Control Board; USACE=United States Army Corps of Engineers

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# Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

Chapter 2 describes the existing affected environment for the Shoemaker Bridge Replacement Project. The affected environment is the base condition on which environmental effects of the alternatives are evaluated in this EIR/EA.

The sections in Chapter 2 include the regulatory setting applicable to the environmental topic, the methodology of impact analysis, a description of the affected environment, environmental effects resulting from the Project, and measures to avoid, minimize, or mitigate adverse impacts under Alternatives 2 and 3 (Design Options A and B). Photographs, graphic exhibits, and data matrices are included throughout Chapter 2, where applicable, to support the impact analyses.

NEPA uses the terms "impact," "effect," and "consequences" synonymously. For an action to affect the environment, it must have a causal relationship with the environment. NEPA distinguishes three types of causal impacts: direct, indirect, and cumulative. A "cumulative impact" definition is provided, and the contribution of Alternatives 2 and 3 (Design Options A and B) to cumulative effects is analyzed in Section 2.22 of this document. Direct and indirect effects are defined below and analyzed in Sections 2.1 through 2.22 of this document.

- Direct effects are caused by the action and occur at the same time and place (40 CFR 1508.8).
- Indirect effects are caused by the action and occur later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, as well as related effects on air, water, and other natural systems, including ecosystems (40 CFR 1508.8).

CEQA requires Caltrans to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant impact. Every significant effect on the environment must be disclosed in the EIR and mitigated, if feasible. In addition, the CEQA Guidelines list a number of mandatory findings of significance. Chapter 3 discusses the effects of this Project and CEQA significance.

As part of the scoping environmental analysis conducted for the project, the following environmental issues were considered, but no adverse impacts were identified. Consequently, there is no further discussion regarding the issues identified in this document.

- **Farmlands and Timberlands:** There are no timberlands or prime, unique, or soils of local significance for farmlands within the study area or vicinity.
- **Wild and Scenic Rivers:** There are no rivers listed in the National Inventory of Wild and Scenic Rivers located near the study area.

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# Human Environment

## 2.1 Land Use

### 2.1.1 Existing and Future Land Use

This section is based on information from the *Community Impact Assessment* (CIA) (Caltrans 2018c) and the *Section 4(f) and 6(f) Analysis* (Caltrans 2019b). This section discusses existing and planned land uses that would occur as a result of land use designations and policies from applicable planning documents and planned developments; consistency of the Project with state, regional, and local plans and programs; and the parks and recreational facilities located within and adjacent to the Project.

#### 2.1.1.1 Affected Environment

The Project study area (study area) for land use analysis is the community within and surrounding the Project limits within the direct impacts and the indirect impacts of the Project that may occur.

**Study Area**

The land use study area is a defined 0.5-mile area that encompasses the Project limits. The boundary of the land use study area is shown on Figure 2.1-1. The City is located in the southern portion of the County of Los Angeles and encompasses approximately 50 square miles. Land use within the City is divided into land use districts (LUD), which provide general guidance on the appropriate land uses allowed in the City and a policy base for zoning regulation. The City is in the process of updating the Land Use Element. On March 6, 2018, the City Council adopted the 2040 Land Use Element "PlaceType" and Height Maps for each Council District and will proceed with the update to the PEIR to update both elements (City of Long Beach 2018). According to the General Plan Land Use and Urban Design Elements Project Draft EIR (City of Long Beach 2016a), the updated Land Use Element introduces the concept of PlaceTypes (land uses), which would replace the current approach in the existing Land Use Element of segregating property within the City through traditional land uses designations and zoning classifications.

The updated Land Use Element establishes 14 primary PlaceTypes that would divide the City into distinct neighborhoods, thus allowing for greater flexibility and a mix of compatible land uses within these areas. Each PlaceType is defined by unique land use, form, and character-defining goals; policies; and implementation strategies tailored specifically to the particular application of that PlaceType within the City. The PlaceType and Height Maps adopted show the location of the new PlaceType designations, as well as the height limitations proposed for specific PlaceTypes. The adopted PlaceType and Height Maps reflect the future land use envisioned for the City; therefore, the existing PlaceTypes within the Project limits were verified by available aerial mapping to reflect the current uses of land. The following existing PlaceType categories are located within the land use study area (Figure 2.1-1).

1. **Open Space**. The Open Space PlaceType provides for the preservation of land that supports recreational open space; has distinctive scenic, natural, or cultural features, contributing to community character and form; and provides for utilities and/or infrastructure or that contains environmentally sensitive resources.

2. **Founding and Contemporary Neighborhood**. The Founding and Contemporary Neighborhood PlaceType encourages low-density housing at one or two stories in height, along with appropriately scaled multi-family structures, compatible public facilities, and small-scale neighborhood serving commercial uses; and prohibits incompatible, large-scale multi-family structures; as well as other uses that would detract from the established architectural character of the neighborhood.
3. **Multi-Family – Low**. The Multi-Family – Low PlaceType includes the housing stock in lower density multi-family residential areas, with a maximum density of 29 dwelling units per acre.
4. **Multi-Family – Moderate**. The Multi-Family – Moderate PlaceType includes housing in moderate-density residential areas with maximum densities of 48 to 62 dwelling units per acre, depending on lot width.
5. **Neighborhood-Serving Centers and Corridors – Low**. The Neighborhood-Serving Centers and Corridors – Low PlaceType includes low-rise, low-intensity mixed use (housing and retail) commercial centers and corridors designed to meet consumers' daily needs for goods and services close to residential areas.
6. **Neighborhood-Serving Centers and Corridors – Moderate**. The Neighborhood-Serving Centers and Corridors – Moderate PlaceType includes medium-rise, moderate-intensity mixed-use (housing and retail) commercial centers and corridors that provide goods and services conveniently located relative to housing.
7. **Transit-Oriented Development – Low**. The Transit-Oriented Development – Low PlaceType includes multi-family housing at densities that provide a transition from lower-density single-family neighborhoods to the higher-density housing planned for the Metro Blue Line station, as well as existing and future bus, shuttle and other mass transit routes and stations.
8. **Transit-Oriented Development – Moderate**. The Transit-Oriented Development – Moderate PlaceType includes multi-family housing at densities that support mass transit's function and public investment.
9. **Community Commercial Centers**. The Community Commercial Centers PlaceType includes local and community-serving commercial uses in buildings no higher than five stories or 60 feet, including auto sales and repair, appliance sales and repair, furniture stores, hardware stores, clothing stores, restaurants, grocery stores, fast-food outlets, and similar uses.
10. **Industrial**. The Industrial PlaceType includes all industrial activities, including light industrial research parks, warehousing or storage activities, industrial manufacturing, and machining operations.
11. **Neo-Industrial**. The Neo-Industrial PlaceType encourages the location, evolution, and retention of restricted light industrial activities associated with innovative start-up businesses and creative design offices in the arts, engineering, sciences, technology, media, education, and information industries, among others.
12. **Regional-Serving Facility**. The Regional-Serving Facility PlaceType include uses that serve a regional need for medical and social services, education, goods movement, people movement, energy production and distribution, public utilities, and uses of a similar nature.
13. **Downtown**. The Downtown PlaceType includes active ground-floor shops, restaurants, and cafes.

14. **Waterfront**. The Waterfront PlaceType applies to three major waterfront activity areas: the Downtown Shoreline, Belmont Pier and Pool Complex, and the Alamitos Bay Marina. Each of these Waterfront PlaceTypes is also included in the General Plan Local Coastal Program (LCP). Each waterfront area should include a unique mix of uses depending on its specific purpose and location.

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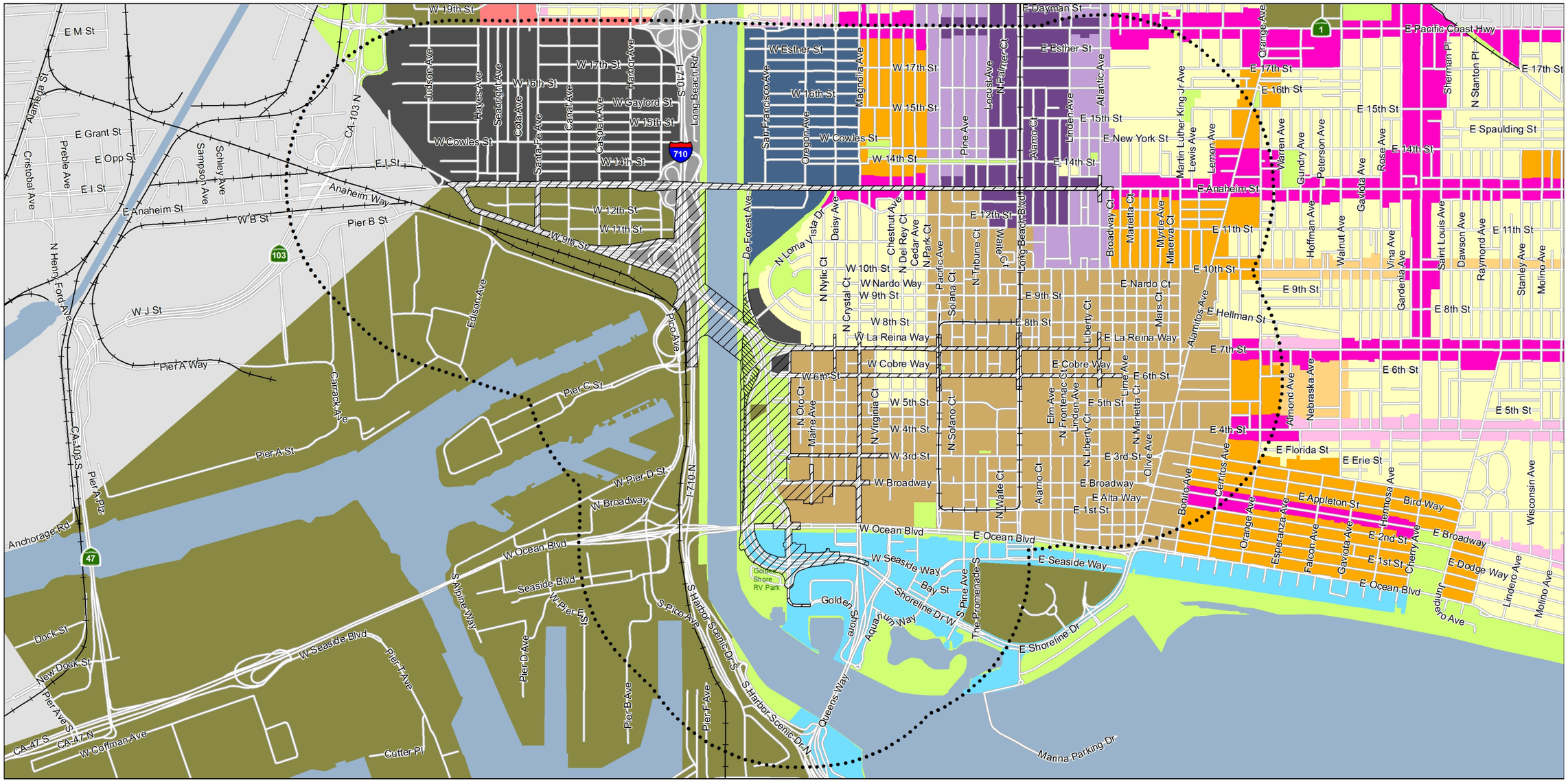


**LEGEND**

- Project Limits
- Land Use Study Area (Project Limit 0.5 Mile Buffer)
- Long Beach MUST Project

0 Feet 1,500

Land Use

- CC - Community Commercial
- DT - Downtown
- N - Founding and Contemporary Neighborhood (Single-family and low-density)
- MFR-L - Multiple Family Residential Low Density
- MFR-M - Multiple Family Residential Moderate Density
- NSC-L - Neighborhood Serving Center or Corridor Low Density
- NSC-M - Neighborhood Serving Center or Corridor Moderate Density
- TOD-L - Transit-Oriented Development Low Density
- TOD-M - Transit-Oriented Development Moderate Density
- OS - Open Space
- WF - Waterfront
- I - Industrial
- NI - Neo Industrial
- RSF - Regional Serving Facility
- FWY - Freeway

07-LA-710: PM 6.0/6.4
EA No. 27300
*Shoemaker Bridge Replacement Project*

**Figure 2.1-1. Existing Land Use**

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### 2.1.1.2 Development Trends

A majority of the Project's proposed improvements are located within the Downtown Plan Planned Development District (Planned Development [PD] -30). The purpose of the Downtown Plan is to provide additional housing, employment, shopping, and entertainment opportunities, while preserving intact residential neighborhoods that provide a wide mix of historic and more recent housing types (Long Beach Development Services 2015). PDs are applied to select geographic areas within the City and are more comprehensive than zoning. PD-30 was adopted in January 2012 and has since been updated, as of 2015. A PEIR was prepared with PD-30 to streamline the entitlement process for new development projects (Long Beach Development Services 2015).

The northern and southern portions of the Project also extend into the Wilmore City Planned Development District (PD-10), the Downtown Shoreline Planned Development District (PD-6), and the Queensbay Planned Development District (PD-21) (Figure 2.1-2)

Based on the existing land use, the draft Downtown Plan, and planned projects, it is expected that the land use study area will continue to undergo redevelopment. The City intends to improve the downtown area with a focus on providing alternative modes of transportation, connections between the downtown area and the surrounding community to existing and proposed recreational features, new high-rise residential developments, and new civic center to create a mixed used area that is livable, walkable, accessible, and a destination for visitors and employment. The POLB also has several capital improvement projects to modernize the goods movement. These project include redevelopment of existing terminals, dredging to deepen shipping channels, building of new wharfs, and improvements to bridges and railroads to allow for more efficient transport of goods. These development trends are observed to be reflected in the new PlaceTypes designations and consistent with the City's vision of future land use.

#### Future Land Uses

As discussed in Section 2.1.1.1, the City is in the process of updating the City's General Plan Land Use Element. On March 6, 2018, the City Council adopted the Land Use Element "PlaceType" and Height Maps for each Council District and will proceed with the update to the PEIR to update both elements. These new PlaceTypes (land uses) divides the City into distinct neighborhoods, thus allowing for greater flexibility and a mix of compatible land uses within these areas. As shown on Figure 2.1-3, the future land uses are depicted using data from the newly adopted PlaceTypes.

#### Planned Developments

Within the area of the land use study area and community at large, there are multiple projects at various stages of development (newly constructed, under construction, proposed). Table 2.1-1 and Figure 2.1-4 discuss and locate the various development trends.

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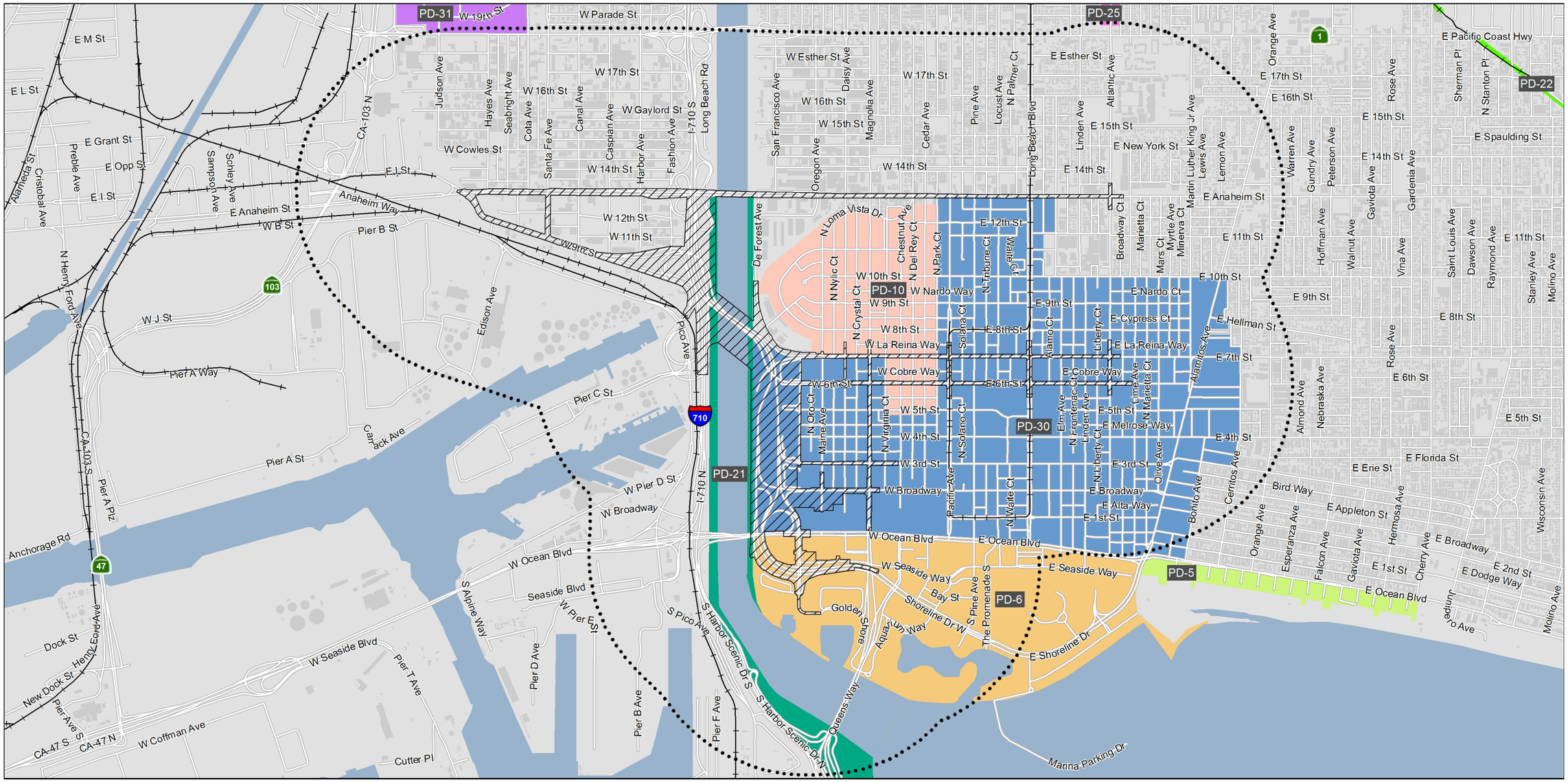


**LEGEND**

- Project Limits
- Land Use Study Area (Project Limit 0.5 Mile Buffer)

0 Feet 1,500

Planned Development Districts

- PD-5 - Ocean Blvd Planned Development District
- PD-6 - Downtown Shoreline Planned Development District
- PD-10 - Willmore City Planned Development Plan
- PD-21 - Queensway Bay Planned Development Plan
- PD-22 - Pacific Railway
- PD-25 - Atlantic Ave Planned Development District
- PD-30 - Downtown Planned Development District
- PD-31 - Technology Center/Villages at Cabrillo

07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.1-2. Planned Development Districts**

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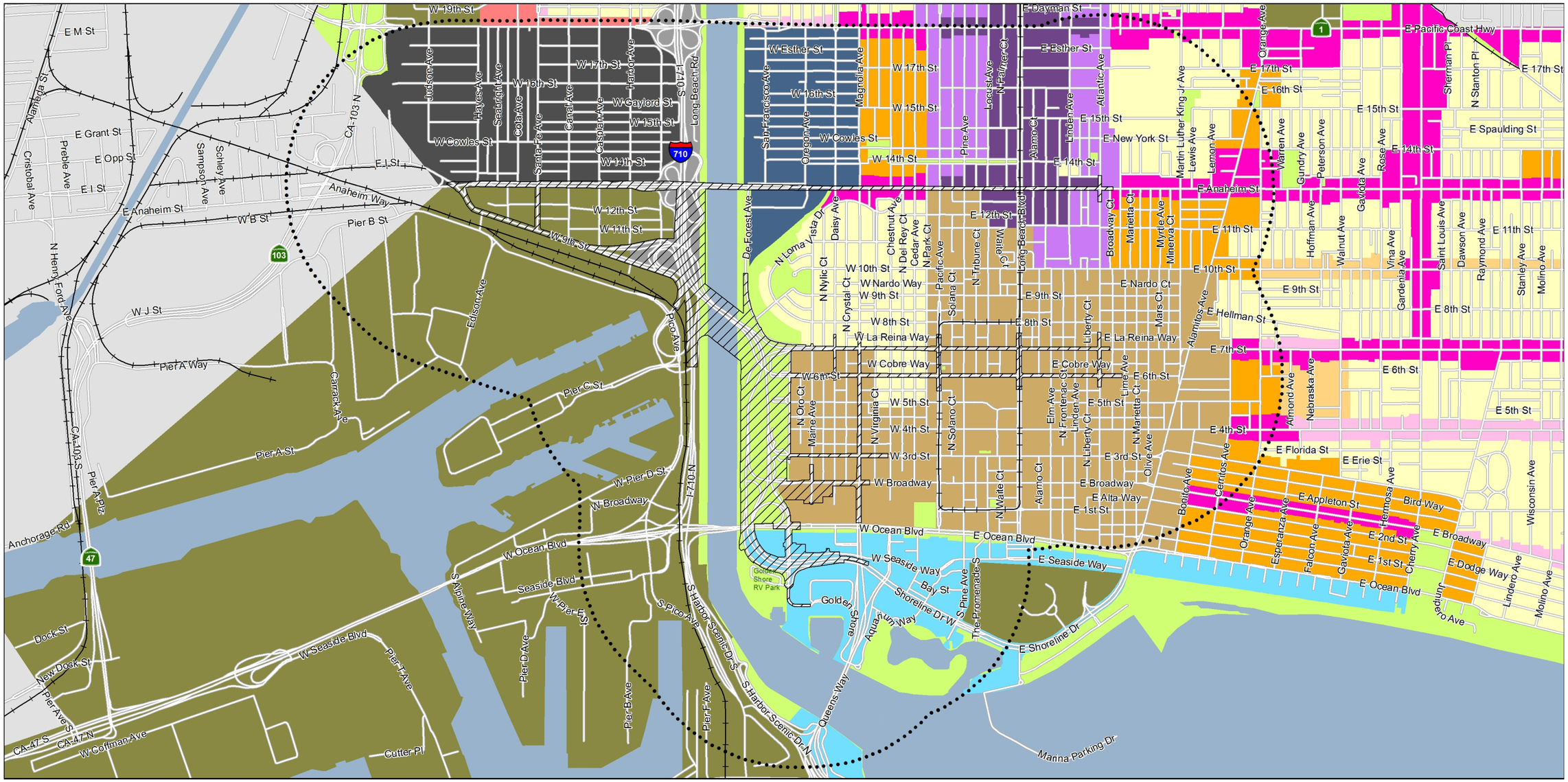


**LEGEND**

- Project Limits
- Land Use Study Area (Project Limit 0.5 Mile Buffer)

2040 Land Use

- CC - Community Commercial
- DT - Downtown
- N - Founding and Contemporary Neighborhood (Single-family and low-density)
- MFR-L - Multiple Family Residential Low Density
- MFR-M - Multiple Family Residential Moderate Density
- NSC-L - Neighborhood Serving Center or Corridor Low Density
- NSC-M - Neighborhood Serving Center or Corridor Moderate Density
- TOD-L - Transit-Oriented Development Low Density
- TOD-M - Transit-Oriented Development Moderate Density
- OS - Open Space
- WF - Waterfront
- I - Industrial
- NI - Neo Industrial
- RSF - Regional Serving Facility
- FWY - Freeway

0 Feet 1,500

07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.1-3. Future Land Use**

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## Table 2.1-1. Development Trends and Planned Projects

| Figure 2.1-4 Project No. | Name | Jurisdiction | Proposed Uses | Status |
|---|---|---|---|---|
| 1 | I-710 Corridor Project | Multiple | The I-710 Corridor Improvement Project proposes improvements to I-710 in City of Long Beach between Ocean Boulevard and SR-60. The project would include widening the freeway by adding up to two lanes in each direction, improving interchange connections, and upgrading nonstandard features (lane widths, merging distance, etc.) to current Highway Capacity Manual standards. The project also includes alternatives to add a four-lane separated freight movement corridor. | **Proposed.** A RDEIR/SDEIS was circulated for public review in July 2017. The focused RDEIR/SDEIS evaluates impacts under the no build alternative and two build alternatives: Alternative 5C (Modernization of I-710) and Alternative 7 (Modernization and Addition of a Clean-Emission Freight Corridor). The public comment period for the RDEIR/SDEIS ended October 23, 2017.<br>The Final I-710 Corridor Project Environmental Document is scheduled to be approved in early 2020 (Metro n.d.). |
| 2 | SR-47 Expressway Project (Schuyler Heim Bridge Replacement and construct Expressway and Flyover) | Caltrans and ACTA | This project proposes to replace the Schuyler Heim Bridge over Cerritos Channel with a fixed-span bridge connecting to a new limited-access four-lane elevated highway that parallels Henry Ford Avenue and that merges with Alameda Street. The project also proposes to construct new two-lane flyover to divert eastbound Ocean Boulevard traffic directly to northbound SR-47 and across the new bridge. | **Under Construction.** An FEIS/FEIR was prepared for this project, dated May 2009.The project is divided into two segments. Segment 1 is the replacement of the seismically deficient Schuyler Heim bridge with a new safer fixed bridge. Segment 1 is being administered by Caltrans and began construction in October 2011 and is anticipated to be completed in the next few years. Segment 2 provides an expressway connection between the north side of the bridge and Alameda Street at Pacific Coast Highway. The project is anticipated to be completed in 2030 (SCAG 2016). |
| 3 | Gerald Desmond Bridge Replacement Project | POLB, Caltrans, FHWA | This project proposes to replace the existing four-lane Gerald Desmond Bridge with a new six-lane bridge (three lanes in each direction) and construct the Terminal Island East Interchange and I-710 connector ramps. | **Under Construction.** A revised FEIR/ EA was prepared for this project in July 2010. The project is being constructed in a design-build process. The design-build contract was awarded in July 2012 and construction started in July 2013. The bridge is expected to be completed by the end of 2019 (POLB 2018a). |

## Table 2.1-1. Development Trends and Planned Projects

| Figure 2.1-4 Project No. | Name | Jurisdiction | Proposed Uses | Status |
|---|---|---|---|---|
| 4 | Pier B On-Dock Rail Support Facility Project | POLB | The Pier B On-Dock Rail Support Facility Project (Pier B Project) proposes to reconfigure, expand, and enhance the Pier B Rail Yard located along Anaheim Street and SR-710. The project would support more efficient use of “on-dock” rail at the POLB’s shipping terminals. The project would also ease roadway traffic congestion and improve air quality. | **Proposed.** The DEIR for the proposed project was released on December 16, 2016, for a 90-day public review period, which ended March 13, 2017. The Final EIR was released January 12, 2018. The Board of Harbor Commissioners approved the project January 22, 2018 (POLB 2008, n.d.). |
| 5 | Middle Harbor Redevelopment Project | POLB | This project proposes to redevelop, expand, and modernize the existing waterfront property that is part of the Middle Harbor area of the POLB and Port lands to accommodate a portion of the forecasted increases in containerized cargo throughput volumes. | **Under Construction.** After extensive environmental review and public participation, the Board of Harbor Commissioners approved the project's FEIR/FEIS in April 2009. The Long Beach City Council upheld the Board's decision in May 2009. Project construction began in 2011. Phase 1 opened in 2016, and Phase 2 opened in 2017. Phase 3 is currently underway, and the project construction is scheduled to be completed in December 2020, with the last phase commissioned in March 2021 (POLB 2018b). |
| 6 | Piers G and J Terminal Redevelopment Project | POLB | This project proposes to redevelop two existing marine container terminals into one terminal and develop a marine terminal up to 315 acres by consolidating two existing terminals on Piers G and J and several surrounding parcels. Construction would occur in four phases; it would include approximately 53 acres of landfills, dredging, concrete wharves, rock dikes, and road and railway improvements. | **Under Construction.** An EIR was prepared for the project, and the project has been approved. Pier G redevelopment would include up to 16 separate construction phases and is expected to be completed over the next 10 years. Most of the project elements under this program were completed by 2015. Some of the program elements are on hold (e.g., South Rail yard, South Slip fill, and Berth G236 extension) (Parsons 2016). |

## Table 2.1-1. Development Trends and Planned Projects

| Figure 2.1-4 Project No. | Name | Jurisdiction | Proposed Uses | Status |
|---|---|---|---|---|
| 7 | Oceanaire Apartments | City of Long Beach | The project is located at 150 West Ocean Boulevard. It is a high-rise residential development that would provide 216-unit apartments on a 1.76-acre site. Units would range from studios to one to three bedrooms. The project would also include a two-level parking structure with ingress/egress along West Seaside Way. | **Under Construction.** Project construction commenced in 2015 and is slated to be completed in 2020 (Sharp 2018). |
| 8 | 442 West Ocean Boulevard Apartments Project | City of Long Beach | The proposed project would consist of a 95-unit multi-family apartment complex on the approximately 24,000 square-foot site. The project would include a single structure that would consist of nine levels (one subterranean level and eight aboveground levels). The bottom three levels would consist of parking and provide 153 on-site parking spaces. | **Under Construction.** An Initial Study/Mitigated Negative Declaration was approved in May 2015. The project began construction in 2017 (Sharp 2017). |
| 9 | Drake/ Chavez Greenbelt Master Plan | City of Long Beach | This project proposes to construct a new 57-acre public park along the lower LA River that will link Cesar E. Chavez Park to Drake Park, as well as Loma Vista Park. The project will include developments such as the Cesar Chavez/ Greenbelt link, LA River Trail system access, wetlands, a community and urban nature center, community gardens, and various new sports and recreation facilities, among other substantial improvements. | **Proposed.** This project has secured funding to begin the EIR process. The DEIR has been prepared. |

## Table 2.1-1. Development Trends and Planned Projects

| Figure 2.1-4 Project No. | Name | Jurisdiction | Proposed Uses | Status |
|---|---|---|---|---|
| 10 | Drake/Chavez Soccer Fields | City of Long Beach | This project proposes to develop 8.75 acres of new park facility on existing vacant parcels and would consist of one striped soccer field; large, landscaped open space/passive park areas; a pedestrian walking trail; restroom facilities; and parking. The proposed park would incorporate the existing Loma Vista Park into the new park layout by removing the existing chain-link fencing along the northeastern portions of Loma Vista Park. In addition, the proposed project would use a portion of a City-owned parking lot located near the northwest area of the project site to accommodate the proposed passive park space.<br><br>The proposed Drake Park Soccer Field Project would be linear in form and characterized by an 8-foot-wide pedestrian trail traversing the park from the northeast to southwest. The northeast entrance at Anaheim Street and N. Daisy Avenue is envisioned to be a gateway entrance to the proposed park. | **Built.** The Drake Park Soccer Field Project was approved by City Council in April 2016 and is considered a key component of the Drake/Chavez Master Plan. The grand opening of the Drake/Chavez Soccer Fields occurred January 20, 2018 (City of Long Beach Department of Public Works 2016; City of Long Beach Public Information Office 2018). |

## Table 2.1-1. Development Trends and Planned Projects

| Figure 2.1-4 Project No. | Name | Jurisdiction | Proposed Uses | Status |
|---|---|---|---|---|
| 11 | RiverLink Plan | City of Long Beach | This project proposes to connect the neighborhoods of the west side of Long Beach to the LA River. The plan is a conceptual plan and discusses four main components or ideas. These components include destinations, gateways, pathways, and connections.<br><br>This project was created to outline the City's efforts to restore and enhance the LA River in Long Beach, as well as plans to revitalize the entire length of the River in a collaborative effort with the LA River Revitalization Corporation. | **Proposed.** The *Long Beach RiverLink* report was prepared in February 2007. Mayor Robert Garcia asked the City Council to direct the City Manager to formally update the Long Beach "River Link" plan. Since the 2007 plan, more recent developments have been developed, specifically, the efforts by the LA River Revitalization Corporation, which partnered with Frank Gehry and his associates to evaluate an integrated vision for the entire 51 miles of the LA River (City of Long Beach 2007).<br><br>The City Council unanimously approved an update of the City's RiverLink Plan August 18, 2015. Future funding of the project will require City Council approval at a later time. |

## Table 2.1-1. Development Trends and Planned Projects

| Figure 2.1-4 Project No. | Name | Jurisdiction | Proposed Uses | Status |
|---|---|---|---|---|
| 12 | Golden Shore Master Plan | City of Long Beach | This project proposes to develop new residential, office, retail, and potential hotel uses, along with associated parking and open space. Three options are being considered: a residential option and two hotel options. The project is located on Golden Shore Drive, bounded by Ocean Boulevard, Shoreline Drive, and the Arco Center parking lots. | **Proposed.** The FEIR was approved by the Planning Commission in March 2010. Modifications to the project were made and reapproved by the City and CCC in June 2011 and granted full Master Plan entitlements. In July 2015, the project received approval for a development agreement that will protect the entitlements for a 20-year period. Phase One, construction of the office tower, west of Golden Shore at Ocean Boulevard, began in mid-2011. Phase Two will complete the balance of the site east of Golden Shore, and Phase Three will develop the balance of the site east of Golden Shore. It was expected that construction will not be completed prior to 2018; however implementation of following phases is pending agreements on proposals and partnering agencies (PCR 2009; Addison 2018a). |

## Table 2.1-1. Development Trends and Planned Projects

| Figure 2.1-4 Project No. | Name | Jurisdiction | Proposed Uses | Status |
|---|---|---|---|---|
| 13 | 1235 Long Beach Boulevard Mixed-Use Project | City of Long Beach | Because of changing market conditions, the TOD project has since been modified from the original approval. Two of the three proposed buildings were constructed: the 39-unit Annex and the 161-unit Long Beach Senior Arts Colony. The site of the third building has since been modified to include two additional buildings: Beacon Pointe, a seven-story building with 121 one- and two-bedroom units for low income seniors and 6,184 square feet of commercial leasing area and Beacon Place, a five-story building with 39 one- and two-bedroom units for veterans and special needs. Both newly proposed buildings will be constructed above a shared two-level parking garage with 200 vehicle parking stalls and 72 bicycle parking stalls. The buildings will also share a 23, 735-square-foot communal courtyard complete with a community room and associated residential amenities. | **Under Construction.** An EIR Addendum was prepared for the project in January 2008, as an EIR was prepared for the project in 2000. Originally, the project will construct the senior rental housing component in Phase 1 and condominium and commercial area components in Phase 2. However, changes in market conditions required the project to be modified. On April 4, 2017, the final subdivision map (Tract 73900) was approved. Ground breaking for the two Beacon apartments was slated for late 2017. Phase 1 is expected to be completed in Spring 2019, and Phase 2 is not yet under construction (City of Long Beach Public Information Office 2016a; Edwards 2017). |

## Table 2.1-1. Development Trends and Planned Projects

| Figure 2.1-4 Project No. | Name | Jurisdiction | Proposed Uses | Status |
|---|---|---|---|---|
| 14 | LB MUST | City of Long Beach | The project is a planned capital improvement project located on east and west banks of the LA River and SR-710/I-710. LB MUST includes facilities intended to improve water quality associated with urban runoff in the project area, which ultimately flows into the LA River. The two primary project components of the LB MUST Project are the MUST facility and the conveyance facilities to carry urban runoff to the MUST facility for treatment. The MUST facility will be located along the east bank of the LA River, immediately north of the existing Shoemaker Bridge. The project will be integrated with the Drake/Chavez Park Master Plan improvements and by providing pedestrian and bicyclist access to the LA River and coastal post detention basins. These detention basins will be located just south of the existing bridge and surround the eastern terminus support structure of the proposed Shoemaker Bridge. | **Proposed.** The project is in process of developing its Master Plan and preliminary design. Construction is tentatively scheduled completion date of May 2021 (City of Long Beach 2016c).<br><br>(Source: http://www.longbeach.gov/common/templates/city-news.aspx?id=67872) |

## Table 2.1-1. Development Trends and Planned Projects

| Figure 2.1-4 Project No. | Name | Jurisdiction | Proposed Uses | Status |
|---|---|---|---|---|
| 15 | Civic Center Project | City of Long Beach | Currently, the Civic Center, which includes City Hall and Main Library, has significant seismic deficiencies. The project components consist of the following:<br><br>**Construction of the Civic Block.** This will include a new 11-story Port Building, a new City Hall, and an underground parking structure with 509 spaces.<br><br>**Lincoln Park and New Library Block.** This will include a new two-story Main Library and redevelopment of the old Main Library into the new Lincoln Park.<br><br>**Third and Pacific Block.** This will include the construction of a seven-story multi-family residential complex, with up to 200 residential units and associated parking facility.<br><br>**Center Block.** Once the new City Hall is in operation, the existing facility will be demolished and redeveloped with a mixed use project. This will include residential, retail, restaurant, and hotel uses, as well as an underground parking garage with up to 725 spaces. | **Under Construction.** The Civic Center Project will transform downtown Long Beach to better serve local businesses and residents. The project began construction June 8, 2016, and will continue into 2020 (City of Long Beach n.d.). |
| 16 | Shoreline Gateway East Tower Project | City of Long Beach | The project is located at 777 East Ocean Boulevard and proposes the construction of a 35-story mixed-use building (East Tower) with 315 residential units and 6,711 square feet of retail/restaurant space. The East Tower was previously approved with 221 residential units and 6,367 square feet of retail/restaurant space as part of the approved Shoreline Gateway Master Plan. The building is to be constructed on a vacant parcel in PD-30. | **Under Construction.** The addendum to the 2006 FEIR was approved in October 2016. Phase 1 of the project finished construction and opened in June 2016, and Phase 2 broke ground in 2018. Completion of the project is anticipated for 2021 (Curbed Los Angeles 2016; Addison 2018b). |

## Table 2.1-1. Development Trends and Planned Projects

| Figure 2.1-4 Project No. | Name | Jurisdiction | Proposed Uses | Status |
|---|---|---|---|---|
| 17 | Ocean Boulevard Connection | POLB | The POLB is exploring options to connect the eastern terminus of the Mark Bixby Bicycle and Pedestrian Path with Ocean Boulevard across the LA River, and as well as the LA River Bike Path with the City's bicycle network. | **Proposed.** The POLB is currently working to produce preliminary design plans for the connector to explore the three alignments, design options, and cost estimates. It is anticipated that with the completion of the design, the connector may be completed in time to achieve a coordinated opening date with the Gerald Desmond Bridge. The $3.1 million funding for the design and construction of the Ocean Boulevard Connector was obtained from the $23 million grant Metro provided to the City of Long Beach, POLB, and LBT for funding transportation and infrastructure improvement projects (Port of Long Beach 2014). |
| 18 | North Harbor/Coastal Trail Connection | POLB | This project will close a gap in the California Coastal Trail by providing a bicycle/pedestrian connection through the North Harbor Planning District of the Port Master Plan from Anaheim Street at the border of the cities of Los Angeles and Long Beach, to 6th and/or 7th Street in the City. | **Proposed.** The final design of the project will accommodate the Shoemaker Bridge, the final alternative for the Pier B rail support facility, and the I-710 Corridor Project. Since all three of these projects are currently under analyses, near-term solutions for closing the gap in the California Coastal Trail Connection may include interim treatments to 9th Street and Shoemaker Bridge (Port of Long Beach 2014). |
| 19 | Inner Harbor Turning Basin | POLB | This project proposes the dredging of approximately 50,000 cubic yards of material to widen the turning basin to 1,190 feet and deepen it to -52 feet MLLW. | **Under Construction**. The project was approved and is currently underway (Parsons 2016). |

## Table 2.1-1. Development Trends and Planned Projects

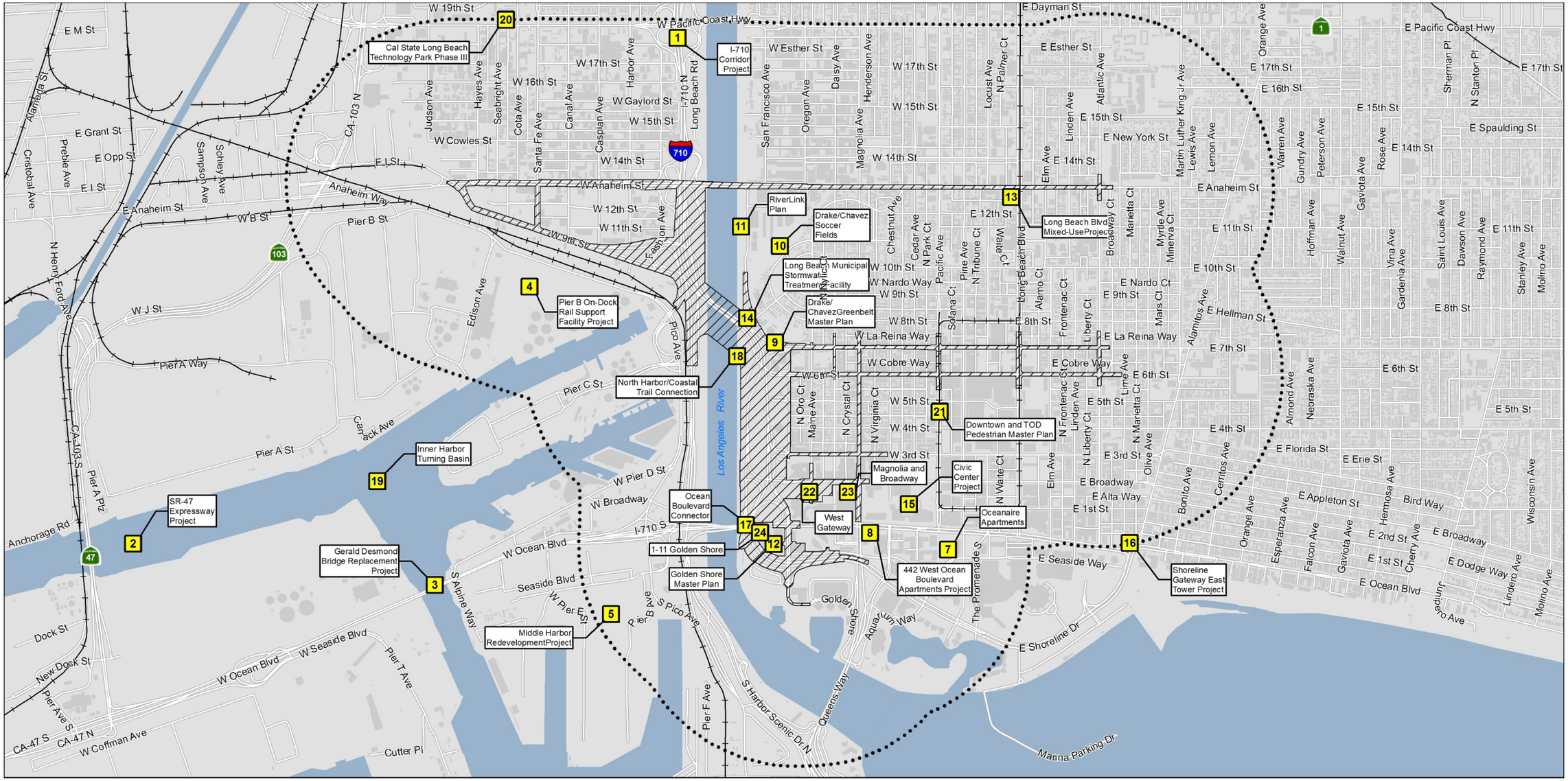
| Figure 2.1-4 Project No. | Name | Jurisdiction | Proposed Uses | Status |
|---|---|---|---|---|
| 20 | CSULB Technology Park Phase III | City of Long Beach | The proposed project is an approximately 10-acre site on the north side of Pacific Coast Highway, also known as SR-1, between Cota Avenue and Hayes Avenue. The proposed project will include approximately 205,060 square feet of warehousing land use, including approximately 20,000 square feet of office space. The proposed project is intended to meet growing demand for warehouse space in West Long Beach. | **Proposed.** The project Initial Study/Mitigated Negative Declaration was approved in September 2017 (City of Long Beach 2017). |
| 21 | Downtown and TOD Pedestrian Master Plan | City of Long Beach | The study area is divided into three major districts, roughly along the Blue Line light rail between I-405 and the harbor. The proposed project includes a list of 14 high-priority pedestrian improvement projects and represents $71 million in investment to be implemented over the next 15 years. These priority projects strike a balance between the Wardlow, Midtown, and Downtown Districts. | **Proposed.** The project is an amendment to the adopted Mobility Element of the City's General Plan. The project is intended to provide policies, guidelines, and standards to ensure that all capital projects incorporate best practices for pedestrian design. The Port Master Plan identifies high priority catalytic infrastructure investments that the City of Long Beach can implement over the next 15 years. The project Negative Declaration was approved May 2016 (City of Long Beach Public Information Office 2016). |
| 22 | West Gateway | City of Long Beach | The project proposes a 40 story mixed use project consisting of 694 dwelling units, approximately 3,200 square feet of retail, and a commercial, residential and retail parking structure. | **Proposed.** The project is currently under review. An addendum to the Downtown Plan EIR was prepared for this project in June 2019 (Long Beach Development Services n.d.). |
| 23 | Magnolia and Broadway | City of Long Beach | The project proposes a seven story, 142-unit residential development that will feature a mix of studio, one-, two, and three-bedroom units. Amenities consist of a roof deck with a pool, spa, fitness center, and community room for residents. | **Proposed.** The project entitlements have been approved. Construction of the project has yet to be determined (Long Beach Development Services n.d.) |

## Table 2.1-1. Development Trends and Planned Projects

| Figure 2.1-4 Project No. | Name | Jurisdiction | Proposed Uses | Status |
|---|---|---|---|---|
| 24 | 1-11 Golden Shore | City of Long Beach | The project proposes an eight story development with 11,000 square feet of commercial space, 750 dwelling units, an entertainment terrace, fireside terrace, garden room, game lawn, and resort pool and spa | **Proposed.** The project is currently under review (Long Beach Development Services n.d.). |

Notes:

ACTA=Alameda Corridor Transportation Authority; Caltrans=California Department of Transportation; CSULB-California State University, Long Beach; EA=environmental assessment; EIR=environmental impact report; EIS=environmental impact statement; FEIR=final environmental impact report; FEIS=final environmental impact statement; FHWA=Federal Highway Administration; I-405=Interstate 405; I-710=Interstate 710; LA River=Los Angeles River; LB MUST=Long Beach Municipal Urban Stormwater Treatment; LBT=Long Beach Transit; Metro=Los Angeles County Metropolitan Transportation Authority; No.=Number; PD=planned development; PDT=Project Development Team; POLB=Port of Long Beach; RDEIR=Recirculated Draft Environmental Impact Report; SDEIS=Supplemental Draft Environmental Impact Statement; SR-1=State Route 1; SR-47=State Route 47; SR-60=State Route 60; TOD=transit-oriented development


Cal State Long Beach Technology Park Phase III
I-710 Corridor Project
RiverLink Plan
Drake/Chavez Soccer Fields
Long Beach Municipal Stormwater Treatment Facility
Drake/ ChavezGreenbelt Master Plan
Pier B On-Dock Rail Support Facility Project
North Harbor/Coastal Trail Connection
Long Beach Blvd Mixed-UseProject
Downtown and TOD Pedestrian Master Plan
Inner Harbor Turning Basin
Magnolia and Broadway
Civic Center Project
Oceanaire Apartments
SR-47 Expressway Project
Ocean Boulevard Connector
West Gateway
1-11 Golden Shore
Golden Shore Master Plan
442 West Ocean Boulevard Apartments Project
Gerald Desmond Bridge Replacement Project
Middle Harbor RedevelopmentProject
Shoreline Gateway East Tower Project
W 19th St
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E Shoreline Dr
E Spaulding St
E Pacific Coast Hwy
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E 11th St
E 8th St
E 5th St
E 2nd St
E Appleton St
E Ocean Blvd
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Bird Way
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W Broadway
W Ocean Blvd
Seaside Blvd
W Pier E St
W Seaside Blvd
W Coffman Ave
I-710 S
I-710 N
Long Beach Rd
Alameda St
Preble Ave
Cristobal Ave
Sampson Ave
Schley Ave
Anaheim Way
Pier B St
W J St
Pier A Way
Pier C St
Pier A St
Pier A Plz
Anchorage Rd
Dock St
New Dock St
Pier Ave S
Pier T Ave
Pier F Ave
Pier B Ave
Cutter Pl
Edison Ave
Pico Ave
S Alpine Way
S Pico Ave
S Harbor Scenic Dr N
Queens Way
Aquarium Way
Golden Shore
The Promenade S
Los Angeles River
CA-103 N
CA-103 S
CA-47 S
CA-47 N
Carrack Ave
Judson Ave
Hayes Ave
Seabright Ave
Cota Ave
Santa Fe Ave
Canal Ave
Caspian Ave
Harbor Ave
San Francisco Ave
Oregon Ave
Daisy Ave
Henderson Ave
Magnolia Ave
Locust Ave
N Palmer Ct
Chestnut Ave
Cedar Ave
N Park Ct
Pacific Ave
Pine Ave
N Tribune Ct
Walnut Ct
Long Beach Blvd
Alamo Ct
Frontenac Ct
Liberty Ct
Solana Ct
Mars Ct
Marietta Ct
Broadway Ct
Myrtle Ave
Minerva Ct
Martin Luther King Jr Ave
Lewis Ave
Lemon Ave
Elm Ave
Linden Ave
Atlantic Ave
Orange Ave
Warren Ave
Gundry Ave
Peterson Ave
Hoffman Ave
Walnut Ave
Gaviota Ave
Rose Ave
Vina Ave
Gardenia Ave
Saint Louis Ave
Dawson Ave
Raymond Ave
Stanley Ave
Molino Ave
Sherman Pl
N Stanton Pl
Almond Ave
Nebraska Ave
Lime Ave
Olive Ave
Bonito Ave
Cerritos Ave
Esperanza Ave
Falcon Ave
Hermosa Ave
Cherry Ave
Wisconsin Ave
Lindero Ave
Manna Parking Dr
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N Crystal Ct
N Virginia Ct
N Waite Ct
Olive Ave
Amalfi Dr
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Gundry Ave
Almond Ave
Nebraska Ave
Lime Ave
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Appleton St
Florida St
Erie St
Ocean Blvd
Shoreline Dr
Seaside Way
Aquarium Way
Golden Shore
The Promenade S
Queens Way
S Harbor Scenic Dr N
Pier F Ave
Pier B Ave
S Pico Ave
Pier T Ave
Edison Ave
Pico Ave
Cutter Pl
W Coffman Ave
W Ocean Blvd
W Seaside Blvd
Dock St
New Dock St
Pier Ave S
CA-47 S
CA-47 N
Anchorage Rd
Pier A Plz
Pier A St
Pier C St
Carrack Ave
W Pier D St
W Broadway
W Ocean Blvd
Seaside Blvd
W Pier E St
S Alpine Way
I-710 S
I-710 N
Long Beach Rd
Alameda St
Preble Ave
Cristobal Ave
Sampson Ave
Schley Ave
Anaheim Way
Pier B St
W J St
Pier A Way
Edison Ave
Pico Ave
Los Angeles River
CA-103 N
CA-103 S
Carrack Ave
Judson Ave
Hayes Ave
Seabright Ave
Cota Ave
Santa Fe Ave
Canal Ave
Caspian Ave
Harbor Ave
San Francisco Ave
Oregon Ave
Daisy Ave
Henderson Ave
Magnolia Ave
Locust Ave
N Palmer Ct
Chestnut Ave
Cedar Ave
N Park Ct
Pacific Ave
Pine Ave
N Tribune Ct
Walnut Ct
Long Beach Blvd
Alamo Ct
Frontenac Ct
Liberty Ct
Solana Ct
Mars Ct
Marietta Ct
Broadway Ct
Myrtle Ave
Minerva Ct
Martin Luther King Jr Ave
Lewis Ave
Lemon Ave
Elm Ave
Linden Ave
Atlantic Ave
Orange Ave
Warren Ave
Gundry Ave
Peterson Ave
Hoffman Ave
Walnut Ave
Gaviota Ave
Rose Ave
Vina Ave
Gardenia Ave
Saint Louis Ave
Dawson Ave
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### 2.1.1.3 Consistency with State, Regional, and Local Plans and Programs

Table 2.1-2 provides a summary of the applicable state, regional, and local plans, programs, and regulations.

**Table 2.1-2. Applicable Federal, State, Regional, and Local Plans and Programs**

| Plan/Program | Applicability to Project |
|---|---|
| FTIP | The FTIP is a federally mandated 4-year program of all surface transportation projects that are planned to receive federal funding or are subject to a federally required action. The FTIP is a comprehensive listing of transportation projects proposed over a 6-year period. Projects in the FTIP include highway improvements, transit, rail and bus facilities, HOV lanes, high-occupancy toll lanes, signal synchronization, intersection improvements, freeway ramps, non-motorized projects, bicycle, and pedestrian.<br><br>The Project is listed in the SCAG 2019 FTIP as Project ID #LA0G830 and is referred to as the I-710 Improvements/ Shoemaker Bridge Replacement Project, as follows:<br><br>I-710 Improvements/Shoemaker Bridge Replacement - Existing Shoemaker bridge consists of two mixed flow lanes and one auxiliary lane in the NB and three mixed flow lane and one auxiliary lane in the southbound. The new bridge will be reduced to two lanes in both directions to tie the flow into I-710 (SCAG 2019). |
| Caltrans RAP | The Caltrans RAP is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 CFR Part 24. The purpose of RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole.<br><br>All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 USC 2000d, et seq.). |
| SCAG | SCAG is the largest regional planning agency in the United States, functioning as the MPO for 6 counties and 187 cities. SCAG develops long-term solutions for regional challenges, such as transportation, air quality, housing, growth, hazardous waste, and water quality. Since these issues cross city and county boundaries, SCAG works with cities, counties, and public agencies in the six-county region to develop plans and strategies. SCAG has developed strategies that specifically address the growth and transportation issues facing Southern California. These plans include the RCP (SCAG 2008) and the RTP (SCAG 2016). |
| SCAG 2008 RCP | The SCAG 2008 RCP is an advisory document to local agencies for their voluntary use in preparing local plans and handling issues of regional significance (SCAG 2008). The RCP addresses important regional issues, such as housing, traffic/transportation, water, and air quality, and presents a vision of how the region can balance resource conservation, economic vitality, and quality of life. |
| SCAG 2016-2040 RTP/SCS | The SCAG 2016-2040 RTP/SCS identifies and analyzes transportation needs for the region and creates a framework for project priorities (SCAG 2016). The Shoemaker Bridge Replacement is listed in the SCAG 2016-2040 RTP/SCS as FTIP # LA0G830. |
| LARMP | The LARMP recognizes the LA River as a body of resources of regional importance and recognizes that those resources must be protected and enhanced. The implementation of the LARMP will maintain the river as a resource that provides flood protection and opportunities for recreational and environmental enhancement, improves the aesthetics of the region, enriches the quality of life for residents, and helps sustain the economy of the region. |

## Table 2.1-2. Applicable Federal, State, Regional, and Local Plans and Programs

| Plan/Program | Applicability to Project |
|---|---|
| CZMA | The CZMA is the primary federal law enacted to preserve and protect coastal resources. The CZMA sets up a program under which coastal states are encouraged to develop coastal management programs. States with an approved coastal management plan are able to review federal permits and activities to determine if they are consistent with the state's management plan. California has developed a coastal zone management plan and has enacted its own law, the CCA, to protect the coastline. The CCC is responsible for implementation and oversight under the CCA. Just as the federal CZMA delegates power to coastal states to develop their own coastal management plans, the CCA delegates power to local governments (15 coastal counties and 58 cities) to enact their own LCPs. LCPs determine the short- and long-term use of coastal resources in their jurisdiction consistent with the CCA goals. A federal consistency certification will be completed during final design. |
| City of Long Beach Local Coastal Program (adopted 1980) | The City of Long Beach LCP (City of Long Beach 1980) was certified in 1980 by the CCC and amended in 1994. This designates the City as the primary authority to regulate development and to issue CDPs for projects requiring discretionary approval within its jurisdiction that are consistent with the LCP. |
| POLB Master Plan | The POLB Port Master Plan (POLB 1990) was first certified in 1980 by the CCC. The document was updated and certified in 1983 and then again in 1990. Since 1990, the POLB Port Master Plan has been amended and certified an additional 19 times. The POLB Port Master Plan serves as the LCP for the port. Portions of the land use study area located within the coastal zone are located south of Anaheim Street and west of the LA River.<br><br>The purpose of the POLB Port Master Plan is to provide a planning tool to guide future port development and to ensure that projects and developments in the Harbor District are consistent with the requirements of the CCA (POLB 1990). The POLB Port Master Plan is divided into 11 planning districts, which are geographical areas established to serve functional purposes by consolidating similar land and water uses, maximizing efficient use of facilities, and separating hazardous cargo from other areas of POLB. The proposed Project is located in District 1, the North Harbor Planning District. The North Harbor Planning District consists of numerous small, independently owned land parcels that are presently devoted to Port-related and non-Port-related uses. Anaheim Street is the north boundary of the district and functions as a major route for vehicular traffic entering or leaving the Port (POLB 1990). Existing uses on private land within District 1 remain throughout the northern portion of the district but do not need to meet the requirements of the POLB Port Master Plan; therefore, as these private properties become available, POLB intends to obtain and redevelop them in accordance with the POLB Port Master Plan. |
| Long Beach Bicycle Master Plan 2040 | The Long Beach Bicycle Master Plan (adopted 2001) serves as the planning document that is used to guide future improvements to the bicycle network of the City of Long Beach. The Draft Bicycle Master Plan 2040 was adopted by the Long beach City Council February 7, 2017.The Master Plan expands upon the Mobility Element of the City's General Plan by providing additional detail on bicycle planning and design (City of Long Beach 2016b). |
| California Government Code (Sections 65000 et seq.) | State law requires that each city and each county adopt a general plan containing the following seven components, or elements: land use, circulation, housing, conservation, open space, noise, and safety (Government Code Sections 65300 et seq.). At the same time, each jurisdiction is free to adopt a wide variety of additional elements covering subjects of particular interest to that jurisdiction, such as recreation, urban design, or public facilities.<br><br>The local general plan can be described as the city's or county's "blueprint" for future development. It represents the community's view of its future and is a constitution made up of the goals and policies upon which the city council, board of supervisors, and planning commission will base their land use decisions. |

## Table 2.1-2. Applicable Federal, State, Regional, and Local Plans and Programs

| Plan/Program | Applicability to Project |
|---|---|
| City of Long Beach Land Use Element | The Land Use element integrates the other six elements by providing the driving force that prescribes the proper long-range use and development of land in the City. The Land Use element was developed to rein in the potential for disruptive and uncontrolled growth. It is comprised of several major components which include forecasts, urban design, neighborhood, activity center, and traffic corridors. |
| City of Long Beach Mobility Element | The Mobility Element establishes the visions, goals, policies, and implementation measure to improve the City's local and regional transportation network. The Mobility Element is the City's future plan for improving the mobility of people, goods, and resources; and also improving the quality of life and the natural environment of the City's natural environment, neighborhoods, and districts. The purpose of the element is to transform Long Beach into a community that offers transportation that is flexible, convenient, affordable and energy efficient; enhances safety; creates and strengthens sense of place; embraces innovative transportation technology; maintains profession standards integrates land use with a multi-modal network; and plans, maintains, and operates a mobility system that is consistent with the principles of complete streets, active living and sustainable community design. |
| City of Long Beach Public Safety Element | The Public Safety Element is an exercise in preventative planning and focuses on what planned improvements can be implemented so as to provide a safe environment for the public. |
| City of Long Beach Open Space and Recreation Element | The 2002 Open Space and Recreation Element revision represents a new modernized, streamlined approach to the 1973 Open Space Element. The 2002 Open Space and Recreation Element emphasizes the policy plan and implementation measures, which are directed to addressing the community's primary open space and recreation issues. The current element addresses the requirements of open space planning with a special emphasis on planning for public creations. Four topical areas are covered by the element: preservation of natural resources, managed production of resources, public health and safety, and outdoor recreation. |
| City of Long Beach PD Districts | PD Districts establish flexible development plans for areas of the City that may benefit from the formal recognition of unique or special land uses and the establishment of design policies and standards that are otherwise not possible under conventional zoning district regulations. PDs include permitting a compatible mix of land uses, allowing for planner commercial areas and business parks, and encouraging a variety of housing styles and densities. |
| Downtown Shoreline Planned Development (PD-6) | This PD Is located between Ocean Boulevard and Queensway Bay and extends from the LA River to east Shoreline Drive. The intent of this PD is to provide a framework to guide and control development within the Downtown Shoreline. The area contains both public and private property, and also significant undeveloped and underdeveloped properties. The PD is an area of high public interest due to its historic role as the focus of the city and the existence of public trust lands; therefore, the purpose of the plan is to coordinate future public and private improvements in a mixed land-use concept. |
| Willmore City Planned Development Plan (PD-10) | This PD is just south of Anaheim Street and is bounded to the east by Park Court, to the west by De Forest Avenue, and to south by 7th Street and 5th Street. The intent of this PD is to provide special zoning regulations for an area of unique historical and cultural interest to the City. This area was the site of the original Willmore City, which grew into the City of Long beach. Over the years, the area within this PD declined, as did many historic buildings. Therefore, the PD focuses on the preservation and rehabilitation of historic structures while controlling the mixture of housing and commercial density to ensure compatibility with the residential neighborhood. |

## Table 2.1-2. Applicable Federal, State, Regional, and Local Plans and Programs

| Plan/Program | Applicability to Project |
|---|---|
| Queensway Bay Development Plan (PD-21) | This PD is located on both sides of the LA River and extends from Anaheim Street to Queensway Bay. The western portion of the PD is between the I-710 and the LA River, while the eastern portion is between the LA River and SB West Shoreline Drive. The intent of the PD is to guide and control development in Queensway Bay area of the Long Beach Harbor Department and create a destination for recreational and commercial users; and enhance the downtown area as a major international business, convention and tourist center and the port as a major international harbor. |
| Downtown Plan (PD-30) | This PD is the largest in the southeast portion of the City. It encompasses a majority of the city between the LA River and Alamitos Avenue, as well as Anaheim Street and Ocean Boulevard. The PD intends to guide how new private and public development can build on existing strengths and enhance the area as a whole. The downtown area specifically has seen fast pace development and construction over the last decade; therefore, the PD encourages a proactive planning by implementing a process known as form-based code which focuses less on traditional use regulation and more on what residents and stakeholders want. |

Notes:

Caltrans=California Department of Transportation; CCA= California Coastal Act; CCC= California Coastal Commission; CDP=Coastal Development Permit; CFR=Code of Federal Regulations; CZMA=Coastal Zone Management Act ; FTIP=Federal Transportation Improvement Program; HOV=high-occupancy vehicle; I-710=Interstate 710; LA River=Los Angeles River; LARMP=LA River Master Plan; LCP=local coastal program; MPO=Metropolitan Planning Organization; NB=northbound; PD=planned development; POLB=Port of Long Beach; SCAG=Southern California Association of Governments; RAP=Relocation Assistance Program; RCP=Regional Comprehensive Plan; RTP=Regional Transportation Plan; SB=southbound; SCAG=Southern California Association of Governments; SCS=sustainable communities strategy; USC=United States Code

### 2.1.1.4 Environmental Consequences

Table 2.1-3 provides a summary of the Project's consistency with applicable plans and programs.

**Table 2.1-3. Consistency with State, Regional, and Local Plans and Programs**

| Policy/Goal | Alternatives 2 and 3 (Design Options A and B) | Alternative 1 |
|---|---|---|
| ***FTIP*** | | |
| **Policy Guideline:** Each project in the County TIP submitted to SCAG must be consistent with and reflect investment priorities established in the most recently adopted metropolitan transportation plan, in accordance with MAP-21. Each FTIP project must show consistency with the project's design concept, and timely implementation as reflected in the adopted RTP/SCS. | **Consistent.** The Project is identified in the 2019 FTIP as Project LA0830 and is referred to as the Shoemaker Bridge Replacement Project. The Project is consistent with the design concept and timely implementation as reflected in the adopted RTP/SCS. Therefore, Alternatives 2 and 3 (Design Options A and B) would be consistent with this policy guideline. | **Inconsistent.** Alternative 1 would not result in any changes to existing conditions and would not implement the Project as reflected in the adopted RTP/SCS. |
| ***SCAG 2008 RCP*** | | |
| **Transportation Goal:** A more efficient transportation system that reduces and better manages vehicle activity. | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would result in a more efficient and safe transportation system by replacing the structurally deficient bridge, providing roadway improvements, and implementing new bikeway connections. The roadway improvements would consist of realignment, striping, and signaling. Therefore, the Project under Alternatives 2 and 3 (Design Options A and B) would be consistent with this goal. | **Consistent.** Alternative 1 would not result in any changes to existing conditions and would, therefore, not conflict with this goal. However, this alternative would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B). |
| **Security and Emergency Preparedness Goal:** Ensure transportation safety, security, and reliability for all people and goods in the region. | **Consistent.** Implementation of Alternatives 2 and 3 (Design Options A and B) would build a new bridge consistent with Caltrans standards, thereby improving transportation safety and efficiency. Alternatives 2 and 3 (Design Options A and B) would be consistent with this goal. | **Inconsistent.** Alternative 1 would not result in any changes to existing conditions. However, because of the structural deficiency of the existing bridge, Alternative 1 would conflict with this goal. This alternative would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B). |

## Table 2.1-3. Consistency with State, Regional, and Local Plans and Programs

| Policy/Goal | Alternatives 2 and 3 (Design Options A and B) | Alternative 1 |
|---|---|---|
| ***SCAG 2016-2040 RTP/SCS*** | | |
| **Goal 2:** Maximize mobility and accessibility for all people and goods in the region. | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would maximize mobility and accessibility in the region by improving operational safety and efficiency through the implementation of the new Shoemaker Bridge. Additionally, the Project under Alternatives 2 and 3 (Design Options A and B) would be consistent with the proposed EAP I-710 Corridor Project improvements. Therefore, Alternatives 2 and 3 (Design Options A and B) would be consistent with this goal. | **Inconsistent.** Alternative 1 would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B) and would be inconsistent with the RTP/SCS. Additionally, the Project would remain inconsistent with the EAP of the I-710 Corridor Project. |
| **Goal 3:** Ensure travel safety and reliability for all people and goods in the region. | **Consistent.** Implementation of Alternative 2 or 3 (Design Options A and B) would build a new bridge that is consistent with Caltrans standards; thereby improving transportation safety and efficiency. Alternatives 2 and 3 (Design Options A and B) would be consistent with this goal. | **Inconsistent.** Alternative 1 would not result in any changes to existing conditions. However, because of the structural deficiency of the existing bridge, Alternative 1 would conflict with this goal. This alternative would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B). |
| **Goal 6:** Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking). | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would include implementation of new bicycle pathways along the south side of the new bridge, as well as additional connections to the LA River and nearby parks. Alternatives 2 and 3 (Design Options A and B) would also incorporate the existing NB West Shoreline Drive into Cesar E. Chavez Park. These improvements are consistent with the City's future plans to expand open space in this area of the City. Additionally, an increase in open space may occur with the implementation of Alternative 2, which proposes to repurpose the existing bridge. | **Inconsistent.** Alternative 1 would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B) or the projected air quality benefits. |

## Table 2.1-3. Consistency with State, Regional, and Local Plans and Programs

| Policy/Goal | Alternatives 2 and 3 (Design Options A and B) | Alternative 1 |
|---|---|---|
| ***SCAG 2004 Growth Vision Report*** | | |
| **Principle #1:** Improve mobility for all residents.<br>Encourage transportation investments and land use decisions that are mutually supportive. | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would replace the structural deficient bridge and include roadway improvements to ensure the safe efficient flow of roadways within the Project limits. Additionally, the Project under Alternatives 2 and 3 (Design Options A and B) would implement expansions in open space, new bikeway connections from the west bank of the LA River, LARIO Trail, and parks. Alternatives 2 and 3 (Design Options A and B) would also be consistent and coordinate with the proposed EAP I-710 Corridor Project improvements, the City's planned expansion of nearby recreational resources, and the new LB MUST facility, which will provide new coastal post detention basins. Therefore, Alternatives 2 and 3 (Design Options A and B) would be consistent with this goal. | **Consistent.** Alternative 1 would not result in any changes to existing conditions and would, therefore, not conflict with this principle. However, this alternative would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B). |
| ***LARMP*** | | |
| **Goal 1:** Ensure flood control and public safety needs are met. | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would replace the structural deficient bridge and include roadway improvements to ensure the safe efficient flow of roadways within the Project limits. Additionally, the Project under Alternatives 2 and 3 (Design Options A and B) would implement expansions in open space, new bikeway connections from the west bank of the LA River, LARIO Trail, and parks. Modifications to existing storm drains are also proposed and would treat surface runoff. Water treatment will also be coordinated with the new LB MUST facility being developed by the City. | **Consistent.** Alternative 1 would not result in any changes to existing conditions and would, therefore, not conflict with these objectives and strategies. However, this alternative would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B). |
| **Goal 4:** Preserve, enhance, and restore environmental resources in and along the river. | | |
| **Goal 5:** Consider stormwater management alternatives. | | |
| **Goal 6:** Ensure public involvement and coordinate Master Plan development and implementation among jurisdictions. | | |
| **Goal 8:** Ensure safe access to and compatibility between the river and other activity centers. | | |

## Table 2.1-3. Consistency with State, Regional, and Local Plans and Programs

| Policy/Goal | Alternatives 2 and 3 (Design Options A and B) | Alternative 1 |
|---|---|---|
| ***CZMA, CCA, and LCP*** | | |
| Protection and expansion of public access and recreation. | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would increase open space, as well as expand public access to recreational uses through new bikeways. Therefore, Alternatives 2 and 3 (Design Options A and B) would be consistent with these programs. | **Inconsistent.** Alternative 1 would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B). |
| Protection, enhancement, and restoration of environmentally sensitive areas. | | |
| ***Long Beach Bicycle Master Plan 2040*** | | |
| **Goal 1:** Design bicycle facilities that are accessible and comfortable for people of all ages and abilities. | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would include new Class 1 bikeways that would connect Drake Park and Cesar E. Chavez Park to the LARIO Trail. The on-ramps to 6th and 7th street are being removed and would allow for these new bikeways. The new bridge would also include a bikeway along the south side of the bridge. Therefore, Alternatives 2 and 3 (Design Options A and B) would be compatible with these goals and policies. | **Consistent.** Alternative 1 would not result in any changes to existing conditions and would, therefore, not conflict with these goals and policies. However, this alternative would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B). |
| **Policy 1.1:** Expand, improve, and connect the bikeway system to provide a viable transportation option for all levels of bicycling abilities. | | |
| **Policy 1.4:** Upgrade the bridges, intersections, freeway ramps, tunnels, and any other obstacles that impede safe and convenient bicycle passage. | | |
| **Goal 3:** Identify, develop, and maintain a complete and convenient bicycle network. | | |
| **Policy 8.5:** Identify opportunities to remove travel lanes from roads where there is excess capacity in order to provide new or improved bicycle facilities. | | |
| ***City of Long Beach Land Use Element*** | | |
| **Functional Transportation:** Long Beach will maintain or improve the current ability to move people and goods to and from development centers while preserving and protecting residential neighborhoods. | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would result in improvements to efficiency and safety and would be consistent with the proposed EAP I-710 Corridor Project improvements. Therefore, Alternatives 2 and 3 (Design Options A and B) would be consistent with this goal. | **Consistent.** Alternative 1 would not result in any changes to existing conditions and would, therefore, not conflict with these goals. However, this alternative would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B). |

## Table 2.1-3. Consistency with State, Regional, and Local Plans and Programs

| Policy/Goal | Alternatives 2 and 3 (Design Options A and B) | Alternative 1 |
|---|---|---|
| ***City of Long Beach Mobility Element*** | | |
| **Goal No. 1:** Create an Efficient, Balanced Multi-modal Mobility Network. | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would improve the safety and efficiency of the transit network and are consistent with the EAP I-710 Corridor Project. Alternatives 2 and 3 (Design Options A and B) propose roadway closures, roadway realignments, roadway improvements (i.e., signal), and new bikeway connections consistent with City-planned expansions to recreational space. Additionally, with the incorporation of NB West Shoreline Drive into the Cesar E. Chavez Park, and pedestrian safety would improve, especially for the nearby students and residents. Therefore, Alternatives 2 and 3 (Design Options A and B) would be consistent with these goals, strategies, and policies. | **Inconsistent.** Alternative 1 would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B) and would be inconsistent with the RTP/SCS. Additionally, the Project would remain inconsistent with the EAP of the I-710 Corridor Project. |
| **Strategy No. 1:** Establish a network of complete streets that complements the related street type. | | |
| **MOP Policy 1-1:** To improve the performance and visual appearance of Long Beach's streets, design streets holistically using the "complete streets approach" which considers walking, those with mobility constraints, bicyclists, public transit users, and various other modes of mobility in parallel. | | |
| **MOP Policy 1-3:** Improve auto-oriented streets (such as Pacific Coast Highway and Lakewood Boulevard) so pedestrians using the stores or services can walk comfortably and feel safer navigating the busy thoroughfare, regardless of their point of origin – from the surrounding neighborhoods or via transit. | | |
| **MOP Policy 1-4:** Allow for flexible use of public rights-of-way to accommodate all users of the street system, while maintaining safety standards. | | |
| **MOP Policy 1-9:** Increase mode shift of transit, pedestrians, and bicycles. | | |
| **MOP Policy 1-14:** Use universal design techniques to accommodate pedestrians of all ages and abilities and ensure compliance with the Americans with Disabilities Act. | | |
| **Strategy No. 2:** Reconfigure streets to emphasize their modal priorities. | | |

## Table 2.1-3. Consistency with State, Regional, and Local Plans and Programs

| Policy/Goal | Alternatives 2 and 3 (Design Options A and B) | Alternative 1 |
|---|---|---|
| **MOP Policy 2-11:** Consider every street in Long Beach as a street that bicyclists and pedestrians will use. | | |
| **MOP Policy 2-16:** Close gaps in the existing bikeway system. | | |
| **Strategy No. 3:** Strategically improve congested intersections and corridors. | | |
| **MOP Policy 3-1:** Make strategic improvements to intersections and corridors to improve the flow of vehicle traffic. | | |
| ***City of Long Public Safety Element*** | | |
| **Goal 5:** Use physical planning as a means of achieving greater degrees of protection from safety hazards. | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would replace the structural deficient bridge, include roadway improvements to ensure the safe efficient flow of roadways within the Project limits, and add new bikeways connecting the LARIO Trail to nearby parks. NB West Shoreline Drive would also be incorporated into the Cesar E. Chavez Park, and pedestrian safety would improve, especially for students and residents in the area. Therefore, Alternatives 2 and 3 (Design Options A and B) would be consistent with these goals, strategies, and policies. | **Consistent.** Alternative 1 would not result in any changes to existing conditions and would, therefore, not conflict with these goals, policies, and objective. However, this alternative would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B). |
| **Goal 6:** Encourage transportation systems, utilities, industries, and similar uses to locate and operate in a manner consistent with public safety goals. | | |
| ***City of Long Open Space and Recreation Element*** | | |
| **Goals 1.3**: Improve appropriate access to natural environments | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would improve the safety and efficiency of the transit network and are consistent with the EAP I-710 Corridor Project. Alternatives 2 and 3 (Design Options A and B) propose roadway closures, | **Consistent.** Alternative 1 would not result in any changes to existing conditions and would, therefore, not conflict with these goals, policies, and objective. However, this alternative would not achieve the open space enhancements and transportation improvements |
| **Policy 1.2:** Protect and improve the community's natural resources, amenities, and scenic values including nature centers, beaches, bluffs, wetlands, and water bodies. | | |

## Table 2.1-3. Consistency with State, Regional, and Local Plans and Programs

| Policy/Goal | Alternatives 2 and 3 (Design Options A and B) | Alternative 1 |
|---|---|---|
| **Goals 2.1:** Maintain a sufficient quantity and quality of open space in Long Beach to produce and mange natural resources. | roadway realignments, roadway improvements (i.e., signal), and new bikeway connections consistent with City- planned expansions to recreational space. Additionally, with the incorporation of NB West Shoreline Drive into the Cesar E. Chavez Park, pedestrian safety would improve especially for the nearby students and residents. Therefore, Alternatives 2 and 3 (Design Options A and B) would be consistent with these goals, strategies, and policies. | projected to result under Alternatives 2 and 3 (Design Options A and B). |
| **Goal 3.1:** Prove for and maintain sufficient open space for adequate protection of lives and property against natural and man-made safety hazards. | | |
| **Policy 3.1:** Maintain open space buffers adequate to keep property and lives safe from natural and man-made disasters within the City including: unstable soil areas, known active fault zones, low-lying flood prone lands, airport flight paths, and areas of physical and noise contamination. | | |
| **Goals 4.4:** Provide the recreational resources the public wants. | | |
| **Goals 4.6:** Increase recreation resources and supplement publicly owned recreation resources with privately owned recreation resources. | | |
| **Policy 4.1:** Create additional recreation open space and pursue all appropriate available funding to enhance recreation opportunities. | | |
| **Goals 4.9:** Connect recreation open spaces with greenway linkages. | | |
| ***Downtown Shoreline Planned Development (PD-6)*** | | |
| **Objective 2:** Significant public access through and around uses, whether public or private, and to coastal resources. | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would improve the safety and efficiency of the transit network and are consistent with the EAP I-710 Corridor Project. Alternatives 2 and 3 (Design Options A and B) propose roadway closures, | **Consistent.** Alternative 1 would not result in any changes to existing conditions and would, therefore, not conflict with these objectives. However, this alternative would not achieve the transportation improvements projected to result |
| **Objective 4:** Strong land use interactions and access connections with the downtown. | | |

## Table 2.1-3. Consistency with State, Regional, and Local Plans and Programs

| Policy/Goal | Alternatives 2 and 3 (Design Options A and B) | Alternative 1 |
|---|---|---|
| **Objective 5:** An urban park-like setting with a variety of strolling, bicycling, and active and passive recreational areas, interesting water features and abundant landscaping. | roadway realignments, roadway improvements (i.e., signal), and new bikeway connections consistent with City-planned expansions to recreational space. Additionally, with the incorporation of NB West Shoreline Drive into the Cesar E. Chavez Park, pedestrian safety would improve especially for the nearby students and residents. Therefore, Alternatives 2 and 3 (Design Options A and B) would be consistent with these objectives. | under Alternatives 2 and 3 (Design Options A and B). |
| ***Willmore City Planned Development Plan (PD-10)*** | | |
| **Objective 3:** To ensure architectural and landscape architectural compatibility between new construction and existing development. | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would replace the existing Shoemaker Bridge and provide landscape improvements through expansion of recreational space and inclusion of new bikeways that would connect residents and users within the Project limits to Drake Park, Cesar E. Chavez Park, and the LARIO Trail. Furthermore, Alternatives 2 and 3 (Design Options A and B) would be consistent with the City's future planned expansions of recreational resources within the Project limits and the new LB MUST facility, which will provide new coastal post detention basins. Therefore, Alternatives 2 and 3 (Design Options A and B) would be consistent with this objective. | **Consistent.** Alternative 1 would not result in any changes to existing conditions and would, therefore, not conflict with this objective. However, this alternative would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B). |
| ***Queensway Bay Development Plan (PD-21)*** | | |
| An attractively integrated waterfront development. | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would replace the existing shoemaker bridge and provide landscape improvements through expansion of recreational space and inclusion of new bikeways that would connect residents and users within the Project limits to Drake Park, Cesar E. Chavez Park, and the LARIO Trail. Alternatives 2 and 3 (Design Options A and B) also propose roadway closures, roadway | **Consistent.** Alternative 1 would not result in any changes to existing conditions and would, therefore, not conflict with these characteristics. However, this alternative would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B). |
| Improved access to the shoreline. | | |
| A harmonious association of entertainment, hotel, display, maritime business, commercial and recreational facilities. | | |
| Coordinated and phased provision of public and private improvements. | | |

## Table 2.1-3. Consistency with State, Regional, and Local Plans and Programs

| Policy/Goal | Alternatives 2 and 3 (Design Options A and B) | Alternative 1 |
|---|---|---|
| A transition in uses between downtown Long Beach and the Port. | realignments, and roadway improvements (i.e., signal). These improvements would be consistent with the City's future planned expansions of recreational resources within the Project limits and the new LB MUST facility, which will provide new coastal post detention basins. Therefore, Alternatives 2 and 3 (Design Options A and B) would be consistent with these characteristics. | |
| ***Downtown Plan (PD-30)*** | | |
| **Enhanced Mobility:** Reinforce downtown as a destination within the city through the implementation of a citywide multi-modal transportation network. In order to create a fully balanced multi-modal system, improvements integrated into the street systems, including upgraded transit and Blue Line facilities; an increase in the number of interlinked bicycle pathways and related accommodations, such as the existing bike station; and pedestrian-oriented amenities is necessary. | **Consistent.** Alternatives 2 and 3 (Design Options A and B) would improve the safety and efficiency of the transit network and are consistent with the EAP I-710 Corridor Project. Alternatives 2 and 3 (Design Options A and B) propose roadway closures, roadway realignments, roadway improvements (i.e., signal), and new bikeway connections consistent with City- planned expansions to recreational space. Additionally, with the incorporation of NB West Shoreline Drive into the Cesar E. Chavez Park, pedestrian safety would improve, especially for the nearby students and residents. Therefore, Alternatives 2 and 3 (Design Options A and B) would be consistent with these goals. | **Consistent.** Alternative 1 would not result in any changes to existing conditions and would, therefore, not conflict with these goals. However, this alternative would not achieve the transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B). |
| **Interconnected Pedestrian Space:** A walkable Downtown is the corner stone of a successful urban environment, a proven generator of economic growth, a healthier living, and overall sustainability. Therefore, the creation of fully accessible and inviting opens spaces that are interconnected, allowing pedestrians direct contact and efficient travel are important aspects of making a walkable downtown. | | |

## Table 2.1-3. Consistency with State, Regional, and Local Plans and Programs

| Policy/Goal | Alternatives 2 and 3 (Design Options A and B) | Alternative 1 |
|---|---|---|
| **Sustainability:** Creation of a more livable downtown for future generation by committing to sustainable practices in both public and private spaces. Current infrastructure caters primarily to automobile access into and around downtown, therefore downtown will require augmentation through upgraded system of bicycle and pedestrian amenities. This includes public ROW enhancements and continued promotion of alternative transportation. | | |
| Supporting Infrastructure: Improve existing infrastructure in order to increase the efficient movement of goods and people, and support future development. As one of the oldest neighborhoods, downtown will require ongoing maintenance and repair of streets, sidewalks, utilities, and communication systems remain a top priority. Downtown's future will consist of street improvements to make the area more readily accessible to both pedestrians and bicyclists. | | |

**Table 2.1-3. Consistency with State, Regional, and Local Plans and Programs**

| Policy/Goal | Alternatives 2 and 3 (Design Options A and B) | Alternative 1 |
|---|---|---|
| ***Drake/Chavez Greenbelt Master Plan*** | | |
| An approximately 57-acre proposed park that will connect Cesar E. Chavez Park, Drake Park, Loma Vista Park, and the LARIO Trail. The implementation of the Master Plan will also include approximately 16 acres of former industrial and abandoned railroad property that will be developed into wetlands, habitat, and active and passive recreation areas. (Note: The Master Plan is being developed in phases as funding is identified.) | **Consistent.** Currently, the Greenbelt Project is being constructed as a component of the master plan. The Drake Chavez Soccer Field construction has been completed, and the soccer field opened in January 2018. Alternatives 2 and 3 (Design Options A and B) would be consistent, as the master plan is undergoing updates. Alternatives 2 and 3 (Design Options A and B) propose bike paths within areas identified in the master plan and would enhance connection between the various parks by closing multiple roadways and converting them into additional parkland for Cesar E. Chavez Park. | **Consistent.** Alternative 1 would not result in any changes to existing conditions and would, therefore, not conflict with the master plan. However, this alternative would not achieve the open space enhancements and transportation improvements projected to result under Alternatives 2 and 3 (Design Options A and B). |

Source: Caltrans 2018c

Notes:
CCA=California Coastal Act; CZMA=Coastal Zone Management Act; EAP=Early Action Project; FTIP=Federal Transportation Improvement Program; LA River=Los Angeles River; LARIO=Los Angeles River and Rio Hondo; LARMP=LA River Master Plan; LB MUST=Long Beach Municipal Urban Stormwater Treatment; LCP=local coastal program; NB=northbound; RCP=Regional Comprehensive Plan; RTP=Regional Transportation Plan; SCAG=Southern California Association of Governments; SCS=Sustainable Communities Strategy; TIP=Transportation Improvement Program

## Temporary Impacts

### *Alternative 1*

Alternative 1 (No Build) would not involve construction activities associated with Alternatives 2 and 3 (Design Options A and B); therefore, no temporary impacts on existing and future land use would occur. No temporary inconsistencies with state, regional, and/or local plans and policies would occur.

### *Alternatives 2 and 3 (Design Options A and B)*

As shown in Table 2.1-4, Alternatives 2 and 3 (Design Options A and B) would result in temporary impacts on existing land uses as result of construction activities. The majority of temporary impacts would occur to open space, downtown, and waterfront PlaceTypes. Most modifications and construction would occur within the existing Caltrans or City ROW and City-owned property. However, an aerial easement and TCE from the LACFCD would be required as part of the proposed Project. These temporary impacts are as a result of roadway improvements (i.e., signaling and striping), TCEs, and staging areas, which would be returned to their original condition or improved. Design Option A exhibits slightly higher permanent impacts than Design Option B, and Design Option B has slightly higher temporary impacts; however, these minimal variations are attributed to the design of the

structures and how they are integrated into the local roadways. Temporary indirect impacts related to Project construction and implementation would be minimized or mitigated through Minimization Measure LU-1. No adverse temporary impacts would occur with inconsistencies with existing plans and policies as a result of Alternatives 2 and 3 (Design Options A and B).

**Table 2.1-4. Alternatives 2 and 3 (Design Options A and B) Existing Land Use Impacts**

| PlaceTypes (Land Use) | Impact (acres) | | | |
|---|---|---|---|---|
| | Permanent | | Temporary | |
| | Option A (Roundabout)[a] | Option B (Y Intersection) | Option A (Roundabout)[a] | Option B (Y Intersection) |
| Downtown | 0.41/0.41 | 0.41 | 4.34/4.34 | 4.34 |
| Founding and Contemporary Neighborhood (Single-Family and Low-Density) | 0.03/0.03 | 0.03 | 0.61/0.61 | 0.61 |
| Industrial | 0.01/0.01 | 0 | 0/0 | 0 |
| Open Space | 8.18/8.47 | 8.32 | 15.62/15.46 | 15.40 |
| Regional Serving Facility | 0.17/0.17 | 0.17 | 0.47/0.47 | 0.47 |
| Waterfront | 1.18/1.18 | 1.13 | 1.86/1.86 | 1.91 |
| Total | 9.98/10.27 | 10.06 | 22.90/22.74 | 22.73 |

Source: Caltrans 2018c

[a] Impacts have been calculated for both the segmented and single pylon bridge design. The single pylon bridge design option is applicable only to Design Option A.

## Permanent Impacts

### *Alternative 1*

Alternative 1 would not involve replacement of the Shoemaker Bridge, its associated connectors, or realign local streets in this area or require any acquisition of property or the need for permanent easements. Therefore, no permanent impacts on existing and future land use would occur. However, Alternative 1 would not be consistent with current development plans.

### *Alternatives 2 and 3 (Design Options A and B)*

As shown in Table 2.1-4 when considering the extent of the proposed Project limits for Alternative 2 (Design Options A and B), a majority of permanent impacts would occur to open space, downtown, and waterfront PlaceTypes. Permanent impacts on open space are related to reconfiguration of SB West Shoreline Drive to accommodate for two-way traffic and construction of the replacement bridge, which would impact the proposed publicly owned properties associated with LB MUST, Cesar E. Chavez Park, LA River, LARIO Trail, and the Golden Shore Recreation Vehicle (RV) Park. The LB MUST facility is anticipated to be completed prior to the proposed Project.

The proposed Project would not require any full property acquisitions. Only minor partial acquisitions would occur at four privately owned non-residential parcels. TCEs and permanent easements are also required at non-residential parcels, consisting of 13 parcels affected by permanent easements and 19 parcels affected by only TCEs. Neither Alternative 2 nor 3 (Design Options A and B) would result in the displacement of any residents or businesses.

The existing bridge is a total of 2.44 acres. Alternative 3 (Design Options A and B) differs from Alternative 2 (Design Options A and B) in that it proposes to remove the existing bridge rather than repurpose it for open space. Alternatives 2 and 3 (Design Options A and B) would result in a conversion of 5.57 acres of existing roadways into open space due to the closure of the existing NB West Shoreline Drive and incorporation into the Cesar E. Chavez Park. Alternative 2 (Design Options A and B) would amount to an addition of approximately 0.49 acre of open space with the repurposing of a portion of the existing bridge.

Alternatives 2 and 3 (Design Options A and B) would also result in a change to existing PlaceTypes due to the closure of the existing NB West Shoreline Drive and incorporation into the Cesar E. Chavez Park, reconfiguration of SB West Shoreline Drive to accommodate for two-way traffic, repurposing or removal of the existing bridge, and construction of the replacement bridge. However, the changes to existing PlaceTypes are consistent with City's General Plan 2040 Land Use Element. No changes to the City's General Plan 2040 Land Use Element would be required, and no substantial adverse temporary impacts would occur with inconsistencies with existing plans and policies as a result of Alternatives 2 and 3 (Design Options A and B). Therefore, no minimization measures are proposed.

#### 2.1.1.5 Avoidance, Minimization, and/or Mitigation Measures

A minimization measure is provided below to reduce construction-related temporary impacts on access. Minimization Measure LU-1 would minimize impacts on land uses and the businesses adjacent to the Project.

**LU-1** During construction, the City of Long Beach's (City) Resident Engineer will require the construction contractor to maintain vehicular and pedestrian access to businesses within the construction area throughout the construction period. If existing access points are disrupted, alternative access will be provided. Appropriate signage and temporary sidewalks will be provided, as needed, throughout construction, and the construction contractor will provide and maintain appropriate signage to direct both pedestrian and vehicular traffic to businesses via alternate routes. Disabled access will also be maintained during construction.

### 2.1.2 Coastal Zone

#### 2.1.2.1 Regulatory Setting

This Project has the potential to affect resources protected by the Coastal Zone Management Act (CZMA) of 1972. The CZMA is the primary federal law enacted to preserve and protect coastal resources. The CZMA sets up a program under which coastal states are encouraged to develop coastal management programs. States with an approved coastal management plan are able to review federal permits and activities to determine if they are consistent with the state's management plan.

California has developed a coastal zone management plan and has enacted its own law, the California Coastal Act of 1976, to protect the coastline. The policies established by the California Coastal Act are similar to those for the CZMA: They include the protection and expansion of public access and

recreation; the protection, enhancement, and restoration of environmentally sensitive areas; the protection of agricultural lands; the protection of scenic beauty; and the protection of property and life from coastal hazards. The California Coastal Commission is responsible for implementation and oversight under the California Coastal Act.

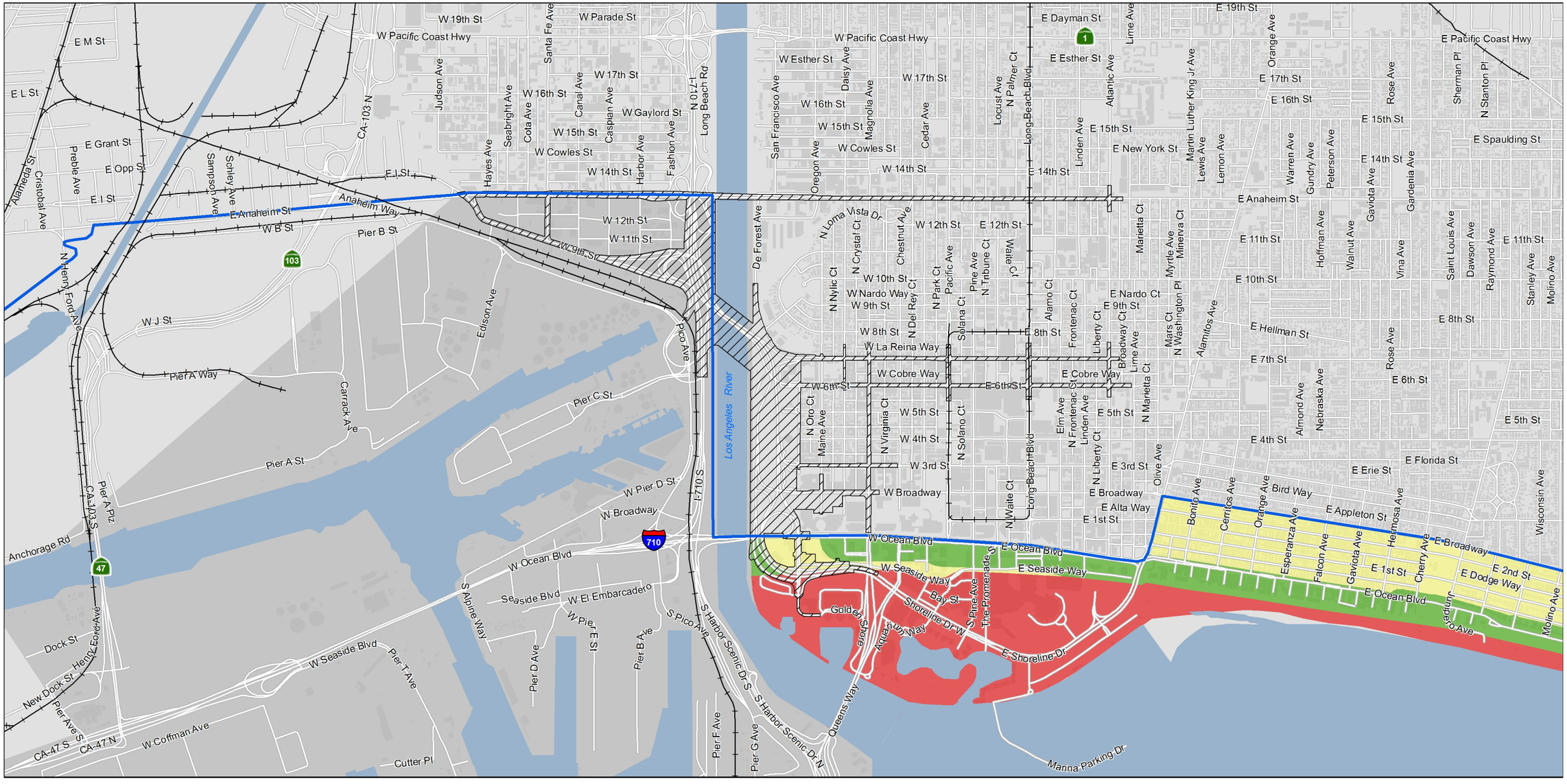
Just as the federal CZMA delegates power to coastal states to develop their own coastal management plans, the California Coastal Act delegates power to local governments to enact their own local coastal programs (LCPs). This Project is subject to the City's local coastal program. LCPs contain the ground rules for development and protection of coastal resources in their jurisdiction consistent with the California Coastal Act goals. A Federal Consistency Certification will be needed. The Federal Consistency Certification process will be completed during final design.

### 2.1.2.2 Affected Environment

The portion of the Project within the coastal zone is south of Anaheim Street and west of the LA River, and south of Ocean Boulevard and east of the LA River. The coastal zone environment in the Project vicinity is built out. Currently, estuarine habitat within the Project limits occurs in earthen-bottom tidal portions of the LA River between Anaheim Street on the north and POLB on the south. These habitats are considered high-quality wildlife habitats because they provide protective cover, reproduction and nesting resources, water, and food for a variety of species. In addition, estuaries, such as the lower LA River, serve as nurseries for marine fish and provide sediment traps, erosion control, and natural flood control. The only portion of the Project that is within the coastal zone is the most northwestern portion of the Project along Anaheim and 9$^{th}$ Street, and the most southern portion of the Project south of Ocean Boulevard. No coastal habitat that has been designated as an environmentally sensitive habitat area by the CCC are known to occur or have been detected as being present within the Project limits. Sections 2.16, Natural Communities, and 2.17, Wetlands, include additional information on native and nonnative biological resources that occur in the coastal zone and land use study area.

Access to the coastal zone is facilitated by SR-710 and Ocean Boulevard. Public access is relatively limited because the area is fully developed. Public access to the coast is available via public parks and marinas/boat launches located in downtown Long Beach and south of Ocean Boulevard by foot, vehicle, or bicycle using a network of roads and pathways.

The portion south of Anaheim Street and west of the LA River are subject to the POLB Port Master Plan, and the portion of the Project south of Ocean Boulevard and east of the LA River is also within the LCP. Figure 2.1-5 shows the applicable LCPs within the Project limits included in the POLB Port Master Plan and City of Long Beach LCP. These LCPs are identified below.




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.1-5. Coastal Commission and Coastal Zone**

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### City of Long Beach Local Coastal Plan

The City of Long Beach LCP (City of Long Beach 1980) was certified in 1980 by the CCC and amended in 1994. This designates the City as the primary authority to regulate development and issue Coastal Development Permits (CDP) for projects requiring discretionary approval within its jurisdiction that are consistent with the LCP. The Project is located in the Downtown Shoreline sub-area of the LCP, which is characterized as mid- to high-rise office and residential buildings and large-scale public recreation and entertainment facilities. The development within this sub-area is focused on revitalization and redevelopment of the commercial shopping district north of Ocean Boulevard.

### Port of Long Beach Port Master Plan

The POLB Port Master Plan (POLB 1990) was first certified in 1980 by the CCC. The document was updated and certified in 1983 and then again in 1990. Since 1990, the POLB Port Master Plan has been amended and certified an additional 19 times. The POLB Port Master Plan serves as the LCP for the port. Portions of the Project limits located within the coastal zone are located south of Anaheim Street and west of the LA River.

The purpose of the POLB Port Master Plan is to provide a planning tool to guide future port development and to ensure that projects and developments in the Harbor District are consistent with the requirements of the CCA (POLB 1990). The POLB Port Master Plan is divided into 11 planning districts, which are geographical areas established to serve functional purposes by consolidating similar land and water uses, maximizing efficient use of facilities, and separating hazardous cargo from other areas of POLB. The proposed Project is located in District 1, the North Harbor Planning District, and District 7 Queensway Bay. The North Harbor Planning District consists of numerous small, independently owned land parcels that are presently devoted to Port-related and non-Port-related uses. Anaheim Street is the north boundary of the district and functions as a major route for vehicular traffic entering or leaving the Port (POLB 1990). Existing uses on private land within District 1 remain throughout the northern portion of the district but do not need to meet the requirements of the POLB Port Master Plan; therefore, as these private properties become available, POLB intends to obtain and redevelop them in accordance with the POLB Port Master Plan. The majority of public and commercial recreational opportunities are located by design within the Queensway Bay District (POLB 1990). The district acts as a buffer between the higher-industrialized inner port complex and the waterfront recreation activities of the Port and City of Long Beach.

## 2.1.2.3 Environmental Consequences

### Temporary Impacts

*Alternative 1*

Alternative 1 (No Build) would not result in changes to existing conditions within the land use study area. No adverse temporary impacts associated with coastal zone resources would occur under Alternative 1.

*Alternatives 2 and 3 (Design Option A and B)*

The portion of the Project within the coastal zone is developed with high-rise office buildings, residential, commercial, and public facilities. Table 2.1-5 provides a consistency analysis of Alternatives 2 and 3 (Design Option A and B) relative to the CCA Chapter 3 Policy Consistency Summary Table and applicable LCPs to provide an overview of anticipated impacts on coastal resources. According to the CCA Chapter 3 Policy Consistency Summary Table guidance,

Table 2.1-5 identifies the policies that are and are not applicable, as well as summarizes the impacts that are further discussed in detail in the following sections of Chapter 2.

As discussed in Table 2.1-5, the Project under Alternatives 2 and 3 (Design Options A and B) would result in temporary impacts on resources within the CCC jurisdiction. However, with the inclusion of various Project Features from Table 1-5, Chapter 1, and the implementation avoidance, minimization and/or mitigation measures referenced in Table 2.1-5, no adverse temporary impacts on coastal zone resources are anticipated.

### Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| ***Wetlands*** | |
| ***CCA Chapter 3*** | |
| **CCA Section 30230**. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreation, scientific, and educational purposes. | According to Section 2.17, Wetlands, areas within the coastal zone satisfying USACE jurisdictional criteria for waters and wetlands of the U.S. or exhibiting wetland hydrology, a predominance of hydrophytic vegetation or hydric soils would also be subject to CCC jurisdiction as wetlands pursuant to the CCA.<br><br>The portion of the BSA south of Anaheim Street and west of the LA River is located within the coastal zone. However, it is not part of an LCP and does not contain CCC jurisdictional waters or wetlands. The portion of the BSA south of Ocean Boulevard and east of the LA River is also within the coastal zone and is within the City LCP; however, this portion of the BSA does not contain CCC jurisdictional wetlands. On the south side of the Anaheim Street Bridge, outside of the coastal zone, the BSA includes less than 0.01 acre of wetland waters associated with Freshwater Emergent Marsh habitat.<br><br>As shown on Figure 2.1-5, Section 2.16, Natural Communities, and Section 2.17, Wetlands, the portion of the BSA that overlaps with the LA River where impacts (i.e., filling and dredging for existing and proposed piers) as a result of construction of the new |
| **CCA Section 30231**.The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams. | |

## Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| **CCA Section 30233** (in relevant part).<br>(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:<br>(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.<br>(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.<br>(3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.<br>(4) Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.<br>(5) Mineral extraction, including sand for beaches, except in environmentally sensitive areas.<br>(6) Restoration purposes.<br>(7) Nature study, aquaculture, or similar resource dependent activities. | Shoemaker Bridge and full/partial removal of the existing bridge would occur are outside of the coastal zone (upstream). The area where bridge impacts would occur are considered intertidal waters within Section 10 and Section 404/401 and CDFW jurisdiction.<br><br>According to Section 2.16, Natural Communities, Alternatives 2 and 3 (Design Options A and B) would result in direct temporary and permanent impacts on natural communities as a result of the construction of the new Shoemaker Bridge and full/partial removal of the existing bridge. This includes impacts on estuarine habitats; however, impacts on plant communities that are also within the coastal zone are identified as park and developed/ disturbed/ ornamental communities.<br><br>Indirect impacts could occur that would result in temporary reduction in benthic invertebrate fauna (i.e., food sources), an increased level of suspended solids from disruption of the soft-bottom, debris, potential fuel spills from construction equipment; or indirect permanent impacts on deepwater aquatic habitat through enhancing the germination and proliferation of nonnative invasive plant species. Therefore, with the implementation of Minimization Measures NC-1 through NC-5, identified in Section 2.16, Natural Communities; and IS-2, identified in Section 2.21, Invasive Species; and the inclusion of Project Features PF-43 through PF-45 and PF-80 through PF-84 identified in Section 2.16, Natural Communities, impacts related to resuspension of contaminated sediment in the LA River, sensitive natural communities, and temporary and permanent impacts on estuarine habitat would be minimized. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |

## Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| ***Agricultural Resources*** | |
| ***CCA Chapter 3*** | |
| **CCA Section 30241** The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas' agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:<br>a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.<br>b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.<br>c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.<br>d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.<br>e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.<br>f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands. | **Not Applicable.** There are no prime agricultural land to be maintained, no land suitable for agricultural use, and no timberland to be protected within the Project limits. |
| **CCA Section 30242 :** All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless:<br>(1) continued or renewed agricultural use is not feasible; or<br>(2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands. | |

## Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| **CCA Section 30113 :** "Prime agricultural land" means those lands defined in paragraph (1), (2), (3), or (4) of subdivision (c) of Section 51201 of the Government Code. Section 51201(c) of the California Government Code includes:<br>(1) a rating as class I or class II in the Natural Resource Conservation Service Land use capability classifications;<br>(2) a rating 80 through 100 in the Storie Index Rating; or<br>(3) the ability to support livestock used for the production of food and fiber with an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture; or<br>(4) (4) the ability to normally yield in a commercial bearing period on an annual basis not less than two hundred dollars ($200) per acre of unprocessed agricultural plant production of fruit- or nut-bearing trees, vines, bushes or crops which have a nonbearing period of less than five years. | |
| **CCA Section 30243:** The long-term productivity of soils and timberlands shall be protected, and conversions of coastal commercial timberlands in units of commercial size to other uses or their division into units of noncommercial size shall be limited to providing for necessary timber processing and related facilities. | |
| ***Public Access and Recreation*** | |
| ***CCA Chapter 3*** | |
| **CCA Section 30210**. In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse. | **Consistent.** The proposed Project under Alternatives 2 and 3 (Design Options A and B) would improve coastal access by increasing reliability, efficiency, and safety. Additionally, the Project would provide improvements to existing roadways and additional public access points from Cesar E. Chavez Park to the LARIO Trail, which traverses south into CCC jurisdiction, as shown on Figure 2.1-5.<br>Alternatives 2 and 3 (Design Options A and B) would not interfere with the public right to access, result in higher costs for the use of recreational facilities, nor |
| **CCA Section 30211**. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation. | |

## Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| **CCA Section 30212**.<br>a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:<br>(1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,<br>(2) adequate access exists nearby; or,<br>(3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway. | interfere with the public recreational use of facilities within the Project Limits and CCC jurisdiction.<br><br>The Project under Alternatives 2 and 3 (Design Options A and B) would have temporary impacts on public access to recreational properties during the realignment of local roadways and construction of the Shoemaker Bridge replacement. The inclusion of Project Feature PF-3, as identified in Section 2.5, Traffic and Transportation/Pedestrian and Bicycle Facilities, and implementation of Minimization Measure LU-1 would reduce impacts on access and circulation during construction. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |
| **CCA Section 30213**. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. | |
| **CCA Section 30214**.<br>a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:<br>(1) Topographic and geologic site characteristics.<br>(2) The capacity of the site to sustain use and at what level of intensity.<br>(3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.<br>(4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.<br>b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. | |
| **CCA Section 30220**. Protection of certain water-oriented activities: Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses. | **Not Applicable.** The proposed Project under Alternatives 2 and 3 (Design Option A and B) would not impact water-oriented activities or land suitable for these uses in the future. The proposed Project under Alternatives 2 and 3 (Design Options A and B) also |

## Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| **CCA Section 30221**. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area. | does not propose the construction of a development (i.e., office building, commercial plaza, or residential) that would require additional facilities to accommodate for visitors or new residents. The proposed Project under Alternatives 2 and 3 (Design Options A and B) is a transportation project providing safety and operational improvements the existing infrastructure. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |
| **CCA Section 30223**. Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible. | |
| **CCA Section 30224**. Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land. | |
| **CCA Section 30252.** The location and amount of new development should maintain and enhance public access to the coast by:<br>(1) Facilitating the provision or extension of transit service,<br>(2) Providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads,<br>(3) Providing nonautomobile circulation within the development,<br>(4) Providing adequate parking facilities or providing substitute means of serving the development with public transportation,<br>(5) Assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by<br>(6) Assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development. | |

## Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| ***City of Long Beach Local Coastal Program – Transportation Policy*** | |
| (1) Increase reliance on public transit | **Not Applicable.** The Project under Alternatives 2 and 3 (Design Options A and B) proposes to replace an existing bridge, provide improvements to existing roadways, improve the overall connectivity from the downtown area to surrounding communities and adjacent recreational uses, and improve the overall safety for all modes of transportation. Therefore, the purpose of the proposed Project under Alternatives 2 and 3 (Design Options A and B) is not a modal shift to reduce or increase reliance of other modes of transportation. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |
| (2) Decrease reliance on automobiles | |
| (3) Provide slightly more parking | |
| (4) Increase pedestrian and bicycle access opportunities | **Consistent.** The Project under Alternatives 2 and 3 (Design Options A and B) proposes to provide additional access points to the LARIO Trail from Cesar E. Chavez Park. The new bridge would also include pedestrian and bicycle access, and additional bicycle, pedestrian, and street enhancements would be provided on adjacent thoroughfares. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |

## Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| ***City of Long Beach Local Coastal Program – Park Dedication Policy*** | |
| Permit development as depicted on the CHNMB plan (water feature, parkland, two motels – see Downtown Shoreline Policy Plan) south of the Chapter 138 line providing that all parks and beaches within the coastal zone (as defined by the CCA) designated by the LCP and now in public ownership be immediately dedicated in perpetuity as public park land. Properties in the coastal zone not now developed as parks but which may at some future time become public park lands shall also be dedicated in perpetuity at the time they become public parks. Public beaches and parks subject to this immediate dedication policy are illustrated on the accompanying map. It has been indicated by the State Lands Commission that dedication of public trust lands may not be possible. Therefore, the areas which are subject to the public trust and which are noted in this LCP to be dedicated as public parks in perpetuity shall instead be designated by the City as permanent public parks or beaches. Any change in such designation by the City shall not be effective unless approved by the CCC. Those parks not within the Tidelands Trust shall be dedicated in perpetuity.<br><br>No parkland which has been dedicated or designated within the coastal zone shall be committed to another use unless the City replaces such parkland on an acre-for-acre basis within or adjacent to the coastal zone with the approval of the CCC. Such replacement parkland must provide similar recreational opportunities and be accessible to the same population through private or affordable public transportation. Replacement park land shall be developed prior to or concurrent with the commencement of the development which displaces it, and shall also be dedicated or designated in perpetuity. | **Not Applicable.** The Project does not propose to change parkland that has been dedicated or designated within the CCC jurisdiction, as shown on Figure 2.1-5, to another use. Therefore, no replacement parkland is necessary. |
| **Dedications:** The following have been dedicated or designated in perpetuity by City ordinance as public parks: Victory Park and Santa Cruz Strip Park, Shoreline Park, Rainbow Lagoon and Park, Marina Green Park<br><br>No parkland which has been dedicated or designated within the coastal zone shall be committed to another use unless the City replaces such parkland on an acre-for-acre basis within or adjacent to the coastal zone with the approval of the CCC. Such replacement parkland must provide similar recreational opportunities and be accessible to the same population through private or affordable public transportation. Replacement parkland shall be developed prior to or concurrent with the commencement of the development which displaces it, and shall also be dedicated or designated in perpetuity. | |

## Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| ***POLB Port Master Plan – Public Access, Visual Quality, and Recreational/Tourist Element*** | |
| Goal 2: Promote quality recreational and tourist activities in the Queensway Bay District. | **Consistent.** The Project under Alternatives 2 and 3 (Design Options A and B) proposes to build a replacement bridge within the Queensway Bay District. Under Alternatives 2 and 3 (Design Options A and B), the replacement bridge would also include pedestrian and bicycle access. Additional bicycle, pedestrian, and street enhancements outside of the POLB Port Master Plan boundary would provide additional public access points to the LARIO Trail, which is within the Queensway Bay District. Additionally, under Alternatives 2 and 3 (Design Options A and B), a portion of the existing bridge would be converted into a recreational use; thereby enhancing and promoting recreational activity and access within the Queensway Bay District. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |
| Goal 8: Enhance Public Access in the Queensway Bay Planning District. | |
| Goal 1: Revitalize the Queensway Bay area. | **Not Applicable.** The purpose of the Project under Alternatives 2 and 3 (Design Options A and B) is to provide roadway and highway improvements related safety and efficiency. The Project under Alternatives 2 and 3 (Design Options A and B) does not propose to develop any structures related to residential or non-residential uses; additionally, the purpose of the proposed Project under Alternatives 2 and 3 (Design Options A and B) is not a modal shift to reduce or increase reliance of other modes of transportation. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |
| Goal 3: Consolidate harbor recreational activities into the Queensway Bay District. | |
| Goal 4: Enhance and Augment recreational and tourist activities to complement recreational developments proposed by the City of Long Beach. | |
| Goal 5: Meet the demand for additional hotel facilities. | |
| Goal 6: Encourage increased use of the Los Angeles County Flood Control Channel. | |
| Goal 7: Develop a cruise ship passenger terminal. | |
| Goal 12: Encourage the development of a shuttle system between City of Long Beach and the Port's recreational corridor in Queensway Bay. | |
| Goal 4: Minimize vessel congestion possibilities by properly coordinating and arranging ancillary port uses (i.e., sportfishing; marine contracting, etc.) to complement primary port activities. | |

## Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| ***CCA Chapter 3 – Visual Resources and Community Character*** | |
| **CCA Section 30251.** The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting. | The proposed Project under Alternatives 2 and 3 (Design Options A and B) proposes to construct a replacement bridge and conduct a full removal/partial removal of the existing Shoemaker Bridge. The proposed bridge work occur outside of the CCC jurisdiction, as shown on Figure 2.1-5, and would not impact the visual quality of the coastal area. The replacement bridge would not change the view to and along the ocean and scenic coastal areas.<br><br>Additionally, as stated in Section 2.6, Visual Aesthetics, there is no major land form feature within the viewshed of the Project limits because of the low elevation at the mouth of the LA River to the Pacific Ocean. There are no outstanding scenic vistas and/or visual features that would potentially be impacted by the proposed Project under Alternatives 2 and 3 (Design Options A and B).<br><br>However, the portions of Alternatives 2 and 3 (Design Options A and B) south of Ocean Boulevard and east of the LA River are located within CCC jurisdiction. Construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would require removal of trees and other vegetation in the ROW. CDPs would be required during final design and prior to construction to implement the improvements under Alternatives 2 and 3 (Design Options A and B), as identified in Minimization Measure LU-2. Additionally, tree and vegetation removal on public lands would comply with City and Caltrans landscaping policies, as detailed in Minimization Measures VIS-1 and VIS-2 (Section 2.6, Visual Aesthetics). Therefore, with the implementation of Minimization Measure LU-2, identified below, and Minimization Measures VIS-1 and VIS-2, impacts would be minimized within the coastal zone, and no permanent adverse impacts are anticipated. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |
| ***POLB Port Master Plan – Public Access, Visual Quality, and Recreational/Tourist Element*** | |
| Goal 9: Provide landscaping between recreational facilities and port industries. | **Not Applicable.** Under Alternatives 2 and 3 (Design Options A and B), Project improvements that occur within Harbor lands are within the North Harbor District |
| Goal 10: Minimize disruptive views. | |

## Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| Goal 11: Improve appearance of Harbor lands at and along major vehicular approaches. | along Anaheim Street. However, these components are specific to traffic calming and signal improvements.<br><br>Additionally, there are no recreational facilities on uses within the North Harbor of Queensway Bay Districts that would need landscape buffering from port industries. The newly constructed bridge would be a replacement bridge of the existing and structurally deficient Shoemaker Bridge. Views to the bay and shoreline would not be disrupted under Alternatives 2 and 3 (Design Options A and B). Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |
| ***ESHA*** | |
| ***CCA Chapter 3*** | |
| **CCA Section 30240.**<br><br>(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.<br><br>(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas. | During construction of Alternatives 2 and 3 (Design Options A and B), temporary supports would be required in the LA River channel to erect the new bridge and excavation of the channel bottom for foundation columns and the positioning of outriggers. In addition, Alternative 3 (Design Options A and B) would require anchoring barges under the existing structure to facilitate demolition and receive debris. These construction activities have the potential to temporarily degrade aquatic habitat by reducing food sources and increasing suspended solids, noise, vibration, runoff, and litter. |
| **CCA Section 30107.5.** "Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. | The LA River contains deepwater aquatic habitat that is designated as EFH for coastal pelagic species and pacific coast groundfish species. Therefore, there is potential for fish passage in the LA River channel. During construction, the Project would require work over and within the LA River Channel, which could restrict fish passage. However, the area with the Project limits is only expected to support northern anchovy and Pacific sardine, and the majority of these populations are located south of the Project area in Queensway and San Pedro Bays.<br><br>Aquatic wildlife, habitat, and other aquatic organisms within the Project limits may be impacted during construction. Project features, in addition to Minimization Measures NC-3 through NC-5, as identified in Section 2.16, Natural Communities, would be implemented to minimize these impacts. No adverse impacts on aquatic wildlife, habitat, and other aquatic organisms are anticipated. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |
| ***POLB Port Master Plan – Environmental Element*** | |
| Goal 2: Minimize habitat loss within Port boundaries. | Please refer to discussion above. |

## Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| Goal 5: Develop additional Mitigation Banks. | **Not Applicable.** The Project impacts would not trigger the need to develop additional mitigation banks. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |
| ***Water Quality*** | |
| ***CCA Chapter 3*** | |
| **CCA Section 30230**. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreation, scientific, and educational purposes. | Improvements under Alternatives 2 and 3 (Design Options A and B) extending into the City's CCC jurisdiction may include minor street improvements, such as additional street lighting, restriping, turn lanes, bicycle, pedestrian, and streetscape improvements. CDPs would be required during final design and prior to construction to implement the improvements under Alternatives 2 and 3 (Design Options A and B), as identified in Minimization Measure LU-3. |
| **CCA Section 30231**.The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams. | Pollutants of concern typically generated during the operation of a transportation facility include sediment/turbidity, nutrients, organic compounds, trash and debris, oxygen-demanding substances, bacteria and viruses, oil and grease, pesticides, and metals. Alternatives 2 and 3 (Design Options A and B) would require the construction activities of new Shoemaker Bridge in the LA River. Alternative 2 (Design Options A and B) would require partial demolition and removal of the existing Shoemaker Bridge, while Alternative 3 (Design Options A and B) would require the demolition of the entire existing Shoemaker Bridge. Impacts on biological productivity and water quality during construction would with the inclusion of Project |

## Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| **CCA Section 30232.** Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur. | Features PF-10, PF-12 PF-13, PF-24, PF-25, and PF-43, which are composed of standard measures and BMPs.<br><br>The proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in a permanent decrease in impervious surfaces and a permanent increase in pervious surfaces. Alternatives 2 and 3 (Design Options A and B) would result in a decrease of approximately 10 acres of impervious area. The more impervious surfaces on a site, the more runoff from the site. The consequences of runoff are an increased speed of water flow, which cannot be absorbed into the ground as readily; increased erosion; and collection of pollutants over a larger area. Because Alternatives 2 and 3 (Design Options A and B) would reduce the impervious area by approximately 10 acres, it would have an overall net positive effect for runoff.<br><br>Through compliance with the Caltrans Statewide NPDES Permit, grading and construction permits from the City, Section 404 of the CWA (issued by USACE), and a dewatering permit as identified in Project Features PF–47 through PF-49 in Section 2.9, Water Quality and Storm Water Runoff, the design and operation of the proposed Project would not result in direct or indirect adverse impacts on water quality. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |
| ***POLB Port Master Plan – Environmental Element*** | |
| Goal 1: Minimize pollutant levels from existing and future sources. | Please refer to discussion under the water quality applicable goals and policies in Chapter 3 of the CCA. The proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |
| Goal 3: Identify and remediate soil and groundwater contamination within the Harbor District. | |
| Goal 4: “Streamline” HDP processing procedures. | **Consistent.** The Project under Alternatives 2 and 3 (Design Options A and B) would require an HDP as stated in Minimization Measure LU-2, as the Project is considered a “ground-breaking activity” that includes construction, alteration, improvement, erection, remodeling, or repair within the POLB Harbor District. Therefore, the proposed Project under Harbor Development Permit is considered consistent. |

## Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| ***Coastal Hazards/Shoreline Development*** | |
| ***CCA Chapter 3*** | |
| **CCA Section 30253** (in part) New development shall:<br>a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. | **Consistent.** The proposed Project under Harbor Development Permit would replace the existing Shoemaker Bridge, which has structural deficiencies and a high accident rate because of nonstandard geometric features that cannot be upgraded to current state highway standards. The replacement Shoemaker Bridge would provide a new structure and highway facility that meets current structural and geometric design standards, and additional Project components under Alternatives 2 and 3 (Design Options A and B) would improve safety and operations for all modes of transportation. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |
| **CCA Section 30235.** Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible**.** | The proposed Project under Alternatives 2 and 3 (Design Options A and B) would not result in alterations to the natural shore line. However as discussed in Section 2.9, Water Quality and Storm Water Runoff, the Project under Alternatives 2 and 3 (Design Options A and B) would impact the riprap along the LA River Banks with the construction of the replacement bridge. Therefore, during construction, there could be soil erosion of the channels and banks; however, Project Features PF-47 through PF-49 as identified in Section 2.9, Water Quality and Storm Water Runoff, temporary Project impacts would be reduced. These Project features include construction site BMPs to protect the banks and control erosion (e.g., riprap, concrete walls, and sheet piling). Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |
| **CCA Section 30236.** Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to:<br>(1) necessary water supply projects,<br>(2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or<br>(3) developments where the primary function is the improvement of fish and wildlife habitat. | |

## Table 2.1-5. California Coastal Act Consistency

| Goals/Policy | Consistency Analysis |
|---|---|
| ***Archaeological and Paleontological Resources*** | |
| ***CCA Chapter 3*** | |
| **CCA Section 30244.** Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required. | **Consistent.** The proposed Project under Alternatives 2 and 3 (Design Options A and B) would require ground-disturbing construction work to replace the existing Shoemaker Bridge over the LA River with a new bridge located just south of the existing bridge and the realignment of existing local streets. No archaeological resources were identified within the APE, and much of the APE is located on artificial fill. Given the disturbed condition of the APE, the potential for intact archaeological resources to be present is low; therefore, no mitigation measures are proposed.<br><br>As discussed in Section 2.11, Paleontology, the records search produced two fossil localities directly within the Project boundaries, LACM 6896, in the southeastern-most portion of the Project limits near the intersection of Magnolia Avenue and Ocean Boulevard. Within the coastal zone subareas, as shown on Figure 2.1-5, there does not appear to be sensitivity in these areas. However, Minimization Measures PAL-1 to PAL-6 are proposed in Section 2.11, Paleontology, to address potential permanent impacts on paleontological resources. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered consistent. |

Source: City of Long Beach 1980

Notes:
APE=area of potential effect; BSA=biological study area; BMP=best management practice; Caltrans=California Department of Transportation; CCA=California Coastal Act; CCC=California Coastal Commission; CDFW=California Department of Fish and Wildlife; CDP=Coastal Development Permit; CWA=Clean Water Act; CHNMB= Carter, Hull, Nishita, McCulley, and Baxter; EFH=essential fish habitat; ESHA=Environmentally Sensitive Habitat Area; HDP=Harbor Development Permit; LA River=Los Angeles River; LACM=Natural History Museum of Los Angeles County; LARIO=Los Angeles River and Rio Hondo; LCP=local coastal program; NPDES=National Pollutant Discharge Elimination System; POLB=Port of Long Beach; ROW=right-of-way; USACE=United States Army Corps of Engineers

## Permanent Impacts

### *Alternative 1*

Alternative 1 would not result in changes to existing conditions within the land use study area. No adverse permanent impacts associated with coastal zone resources would occur under Alternative 1.

### *Alternatives 2 and 3 (Design Option A and B)*

As discussed in Table 2.1-5, the Project under Alternatives 2 and 3 (Design Options A and B) would result in permanent impacts on resources within the CCC jurisdiction. However, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would be consistent with coastal zone goals and policies with the inclusion of Project Features and the implementation of Minimization Measures as listed in Table 2.1-5.

As previously stated, the only portion of the Project that is within the coastal zone is the most northwestern portion of the Project along Anaheim and 9th Street, and the most southern portion of the Project south of Ocean Boulevard. The area where construction related to the existing and new bridge would occur within the LA River Channel, which is not within a coastal zone boundary. No coastal habitat that has been designated as an environmentally sensitive habitat area by the CCC are known to occur or have been detected as being present within the Project limits.

Although no environmentally sensitive habitat was identified within the Project limits, the CCC considers eelgrass as an environmentally sensitive habitat. Based on the NES (Caltrans 2019c), biological resource surveys conducted in 2017 did not detect eelgrass in the LA River at the Shoemaker Bridge. In addition, eelgrass is not known to occur in the LA River. Therefore, no substantial adverse permanent impacts on coastal zone resources as a result of planned Project activities are anticipated.

#### 2.1.2.4 Avoidance, Minimization, and/or Mitigation Measures

The following minimization measures are proposed to reduce permanent and temporary impacts associated with impacts on coastal zone resources as a result of Alternatives 2 and 3 (Design Options A and B):

**LU-2** During the Plans, Specification, and Estimates (PS&E) phase and prior to construction, the City of Long Beach (City) will obtain a Coastal Development Permit (CDP) through the local coastal program (LCP) under the purview by the City and the Port of Long Beach (POLB). The City will also obtain a Harbor Development Permit (HDP) through the POLB.

**LU-3** Prior to and during construction, the City of Long Beach (City) will obtain a permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters to Coastal Watershed of Los Angeles and Ventura Counties (Order Number [No.] R4-2013-0095 National Pollutant Discharge Elimination System [NPDES] No. CAG994004) and any subsequent updates to the permit at the time of construction.

### 2.1.3 Parks and Recreational Facilities

#### 2.1.3.1 Regulatory Setting

This Project would affect facilities that are protected by the Park Preservation Act (California Public Resources Code [PRC] Sections 5400-5409). The Park Preservation Act prohibits local and state agencies from acquiring any property which is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land.

#### 2.1.3.2 Affected Environment

This section is based on information from the CIA (Caltrans 2018c) and the *Section 4(f) and 6(f) Analysis* (Caltrans 2019b).

**Study Area**

The CIA (Caltrans 2018c) identifies the community facilities study area, which is defined as the area within 0.5 mile of the Project limits. The community facilities identified within the community facilities study area may be impacted either directly or indirectly during the construction of the proposed Project.

The City has over 100 existing parks and recreation facilities, as well as several planned parks. As summarized in Table 2.1-6, four existing and one planned parks and recreational facilities are located within the Project limits. Figure 2.1-6 illustrates the various parks and recreational resources located within the community facilities study area.

### Table 2.1-6. Parks and Recreational Facilities within the Project Limits

| Facility Name | Facility Description |
|---|---|
| ***Existing Parks and Recreational Facilities*** | |
| Cesar E. Chavez Park (401 Golden Avenue) | Cesar E. Chavez Park is considered a regional park by the City's Open Space Element. The park is approximately 25.6 acres in size and features basketball courts, community center, playground, weight room, restrooms, and picnic areas. The park also includes a teen and senior center. |
| LARIO Trail (east bank of LA River) | The LARIO Trail is a Class 1 bike way that extends north-south for 29.1 miles along the east bank of the LA River and through the downtown marina. The path connects to the shoreline pedestrian/bicycle path. |
| Golden Shore RV Park | Golden Shore RV Park is considered a special use park by the City's Open Space Element. The park is approximately 5.16 acres in size. It features 77 spaces with full hook-ups, 30/50 amplifier services, large picnic areas with tables, a pool and spa, a recreation/club room with a small kitchen facility, video games, a sand volleyball court, horseshoes, shuffleboard, a children's playground, hot showers, a laundry room, a convenience store, barbecue pits, a phone hook-up, and restrooms. |
| Santa Cruz Park | Santa Cruz Park is approximately 1.9 acre in size. It is a narrow strip along east bound Ocean Boulevard from Golden Shore Avenue to Cedar Avenue. It features passive open space, large shaded trees, and sitting areas. |

## Table 2.1-6. Parks and Recreational Facilities within the Project Limits

| ***Planned Parks and Recreational Facilities*** | |
|---|---|
| LB MUST | The Project under Alternatives 2 and 3 (Design Options A and B), as shown on Figure 2.1-7, is a planned capital improvement project located on east bank of the LA River and SR-710/I-710, extending from downtown Long Beach and approximately 8 miles from SR-91 to the north. LB MUST includes facilities intended to improve water quality associated with urban runoff in the Project vicinity, which ultimately flows into the LA River. The two primary components of the LB MUST Project are the municipal urban stormwater treatment facility and the conveyance facilities to carry urban runoff to the municipal urban stormwater treatment facility for treatment. The municipal urban stormwater treatment facility will be located along the east bank of the LA River, immediately north of the existing Shoemaker Bridge. The Project will be integrated with the Drake/Chavez Park Master Plan improvements and by providing pedestrian and bicyclist access to the LA River, and post treatment detention ponds. These detention ponds will be located just south of the existing bridge and will surround the eastern terminus support structure of the proposed Shoemaker Bridge. The LB MUST Project is slated to be completed prior to the Shoemaker Bridge Replacement Project. Construction is tentatively scheduled for 2018 with a completion year 2021. |

Source: Caltrans 2018c

Notes:
LA River=Los Angeles River; I-710=Interstate 710; LARIO=Los Angeles River and Rio Hondo; LB MUST=Long Beach Municipal Urban Stormwater Treatment; RV=recreational vehicle;SR-91=State Route 91; SR-710=State Route 710

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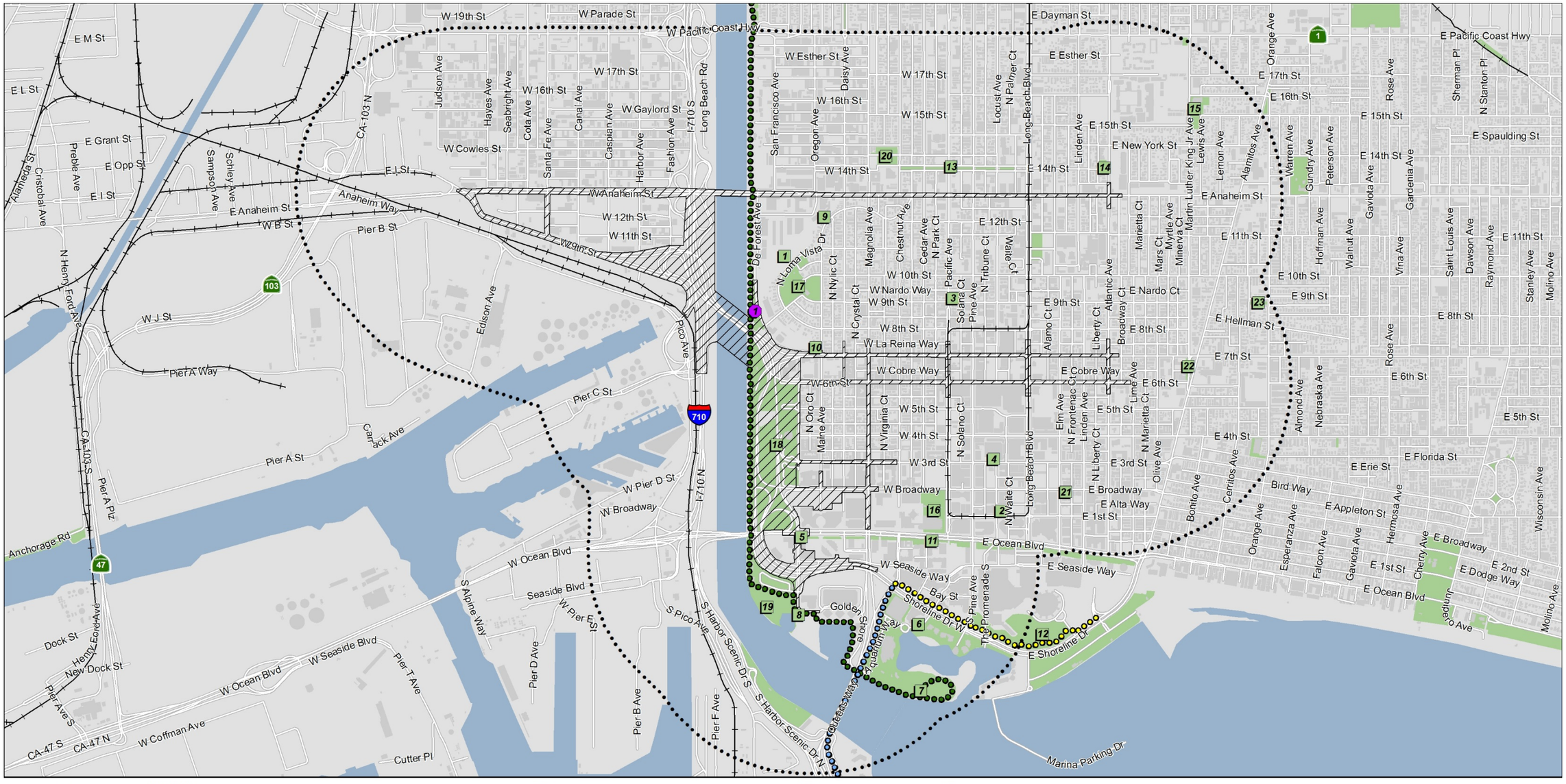


0 Feet 1,500

**LEGEND**

- Project Limits
- Land Use Study Area (Project Limit 0.5 Mile Buffer)

Planned Facilities and Parks

- 1-LB MUST

Community Park

- 1-Drake/Chavez Soccer Field
- 2-Promenade Square Park
- 3-K-9 Corner Dog Park
- 4-Harvey Milk Promenade
- 5-Santa Cruz Park
- 6-Rainbow Harbor Esplanade
- 7-Shoreline Aquatic Park
- 8-Golden Shore Marine Biological Reserve Park
- 9-Loma Vista Park
- 10-Willmore Heritage Garden
- 11-Victory Park
- 12-Rainbow Lagoon
- 13-14th Street Park
- 14-Peace Park
- 15-Ernest McBride Park
- 16-Lincoln Park
- 17-Drake Park
- 18-Cesar E Chavez Park
- 19-Golden Shore RV Park
- 20-Seaside Park
- 21-East Village Arts Park
- 22-Dr. Gumbiner Park
- 23-Craftsman Village Park

- Los Angeles River and Rio Hondo Trail (LARIO Trail)
- Shoreline Pedestrian Bike Path
- Queensway Bridge Bike Path

07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.1-6. Parks and Recreational Facilities**

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07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.1-7. Long Beach Municipal Urban Stormwater Treatment Project**

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### 2.1.3.3 Environmental Consequences

#### Temporary Impacts

*Alternative 1*

Alternative 1 (No Build) would not result in construction activities associated with Alternatives 2 and 3 (Design Options A and B). No temporary impacts on existing parks or recreational facilities would occur.

*Alternatives 2 and 3 (Design Option A and B)*

*Santa Cruz Park*

As shown on Figure 2.1-6, a portion of Santa Cruz Park at the southeastern corner of the Ocean Boulevard and Golden Shore intersection, is located just within the Project limits. Although a portion of Santa Cruz Park is located within the Project limits, construction activities (e.g. grading or location of staging areas) associated with Alternatives 2 and 3 (Design Options A and B), would avoid this resource. Therefore, no substantial temporary adverse effects on Santa Cruz Park would occur with construction activities associated with Alternatives 2 and 3 (Design Options A and B).

*Cesar E. Chavez Park*

Construction of Alternatives 2 and 3 (Design Options A and B) would temporarily impact Cesar E. Chavez Park. Construction activities associated with grading, temporary access roads, and staging area south of Broadway would result in temporary impacts of 6.30 acres of parkland under Alternatives 2 and 3 (Design Option A) and 6.29 acres of parkland under Alternatives 2 and 3 (Design Option B). However, once construction activities cease, these areas temporarily impacted would be revegetated and improved as usable park space.

The eastern portion of Cesar E. Chavez Park containing the parking lot, amphitheater, and community center would still be accessible during construction of the Project. Minor improvements that would be made to this portion of Cesar E. Chavez Park would be for the paved pathway behind the community center. The improvements would provide a new connection between the eastern and western portion of Cesar E. Chavez Park. The Long Beach Unified School District (LBUSD) has a joint-use agreement with the City for the use of the two, half-court basketball courts adjacent to the school; however no temporary impacts to these basketball courts would occur. With the incorporation of Minimization Measures PR-1, and PR-3 through PR-10, the proposed Project would not result in substantial temporary adverse effects on Cesar E. Chavez Park.

*Los Angeles River and Rio Hondo Trail*

Construction of Alternatives 2 and 3 (Design Options A and B) would temporarily impact the LARIO Trail. For Alternatives 2 and 3 (Design Option A and B), a 0.11 acre temporary closure of the LARIO Trail that currently undercrosss the existing Shoemaker bridge would be required.

Under both Alternatives 2 and 3 (Design Option A and B), the portion of the LARIO Trail below the existing Shoemaker Bridge would be temporarily closed for 2 out of the 3-year construction period. During the temporary closures, trail detours would be provided to ensure uninterrupted access for bicyclists and other LARIO Trail users during construction. With the incorporation of Minimization Measures PR-11 through PR-19, the Project would not result in substantial temporary adverse effects to the LARIO Trail.

*Long Beach Municipal Urban Stormwater Treatment*

As described in Table 2.1-6, the LB MUST facility is a planned capital improvement project that is scheduled to be constructed prior to the proposed Project. The LB MUST facility recreational trails that would provide pedestrian and bicycle access to the LA River, would be impacted by Project construction, and may be temporarily closed for up to 2 out of the 3-year construction period. Trail detours during construction, as coordinated with the agency that has jurisdiction over these trail connections, may be provided as part of the TMP, which is included as PF-3.

Alternatives 2 and 3 (Design Option A) would temporarily impact 3.83 acres of land within LB MUST. Alternatives 2 and 3 (Design Option B) would temporarily impact 4.14 acres of land within LB MUST. The area impacted would be temporarily used for construction of the new bridge and bridge terminus, grading, and staging of construction equipment, vehicles, and supplies. Following construction, the temporary use area would be revegetated and improved as recreational space as envisioned as part of the LB MUST. The Project would not impact the portion of LB MUST north of the existing Shoemaker Bridge where the treatment plant and parking lot are located. During the temporary closures, trail detours would be provided to ensure uninterrupted access for bicyclists and other trail users during construction. With the incorporation of Minimization Measures PR-20 through PR-28, the Project would not result in substantial temporary adverse effects on LB MUST.

### Permanent Impacts

*Alternative 1*

Alternative 1 (No Build) would not involve construction activities associated with Alternatives 2 and 3 (Design Options A and B). Therefore, no permanent adverse impacts on parks or recreational resources would occur under Alternative 1 (No Build). However, Alternative 1 would not accommodate the Drake-Chavez Greenbelt Project, which would enhance Drake Park and provide a connection to Cesar E. Chavez Park.

*Alternatives 2 and 3 (Design Option A and B)*

*Golden Shore RV Park*

The Golden Shore RV Park is designated as a special use park, and the parcel of land on which the park is located on is owned by the City, but a private organization leases the property and owns the RV facility. The direct impacts on Golden Shore RV Park are permanent impacts that may occur to the outer northern and eastern landscaped boundaries of the Golden Shore RV Park. Impacts on these landscaped boundaries are a result of the closure of the SB West Shoreline Drive connector to Golden Shore and roadway modifications to Golden Shore as result of the removal of the grade separation at Golden Shore and West Shoreline Drive. However, no impacts to recreational uses are anticipated to the Golden Shore RV Park resource or to the overall use of the resource. Therefore, Alternatives 2 and 3 (Design Options A and B) would not result in permanent adverse effects on Golden Shore RV Park.

*Cesar E. Chavez Park*

Alternatives 2 and 3 (Design Options A and B) would result in permanent impacts to a recreational resource as a result of the partial acquisition of parkland to accommodate roadway improvements associated with a proposed transportation facility. This permanent impact to Cesar E. Chavez Park includes the extension of an existing permanent utility easement by 0.21 acre for the SCE Seabright Substation access road and a permanent slope easement to protect the roadway from slope failures or landslides. Under Alternatives 2 and 3 (Design Option A), the acreage permanently required in

Cesar E. Chavez Park for transportation improvements would be 1.62 acre. Under Alternatives 2 and 3 (Design Option B), the acreage required in Cesar E. Chavez Park for transportation improvements would be 1.60 acre. However, Alternatives 2 and 3 (Design Option A and B) would convert approximately 5.57 acres of existing roadways into parkland as a result of the proposed roadway closures that currently divide Cesar E. Chavez Park. No permanent impacts on the two, half-court basketball courts that are under a joint-use agreement between the City and LBUSD would occur. Therefore, under Alternatives 2 and 3 (Design Options A and B), a net gain in acreage of 3.95 acres of parkland under Design Option A and 3.97 acres under Design Option B would occur. The net gain in parkland acreage is the result of subtracting out parkland areas that would be permanently impacted as a result of partial acquisitions and permanent easements from the roadway closures that would be converted to parkland.

Because the existing roadways that transect Cesar E. Chavez Park would be removed, the Project would result in a larger, more functional park with 28.55 acres of parkland under Design Option A and 28.57 acres of parkland under Design Option B. Since the proposed Project would result in a net increase of parkland within Cesar E. Chavez Park, no further compensation is needed under the Park Preservation Act. With the incorporation of Minimization Measures PR-2, the Project would not result in substantial permanent adverse effects on Cesar E. Chavez Park.

*Los Angeles River and Rio Hondo Trail*

Under Alternative 2 and 3 (Design Option A and B), the new bridge construction would require a 0.24 acre permanent closure of an existing portion of the LARIO Trail. The permanent closure of this portion of the LARIO Trail is needed due to issues maintaining the height clearance at this location. This portion of the LARIO Trail would be realigned and shifted east of its existing location in order to maintain north and south connections along the LARIO Trail and standard height clearances from the new bridge. Because this segment of the LARIO Trail would be shifted east, portions of the realignment would traverse onto LB MUST property. As a result, a new easement between the City of Long Beach and the Los Angeles County of Public Works would be required for the portion of the LARIO Trail that would now traverse through property owned by the City of Long Beach. With the incorporation of Minimization Measures PR-11 through PR-19, the Project would not result in substantial permanent adverse effects to the LARIO Trail.

*Long Beach Municipal Urban Stormwater Treatment*

As discussed in Section 2.1.1.4, the proposed Project activities at the LB MUST Facility include the construction of a roundabout under Design Option A or a “Y” intersection under Design Option B, which would be aerial structures above the facility that require the placement of columns, retaining walls, and abutments, as well as use the area of the pump station as a staging area as the eastern terminus is constructed.

Under Alternatives 2 and 3, 1.11 acre of permanent impacts under Design Option A and 0.73 acre of permanent impacts under Design Option B would occur to LB MUST property in order to construct the columns, footings, and retaining walls associated with the roadway improvements. An access agreement would be required to allow maintenance activities beneath the roundabout or “Y” intersection. With the incorporation of minimization measures PR-20 through PR-28, the Project would not result in permanent adverse effects on LB MUST.

### 2.1.3.4 Avoidance, Minimization and/or Mitigation Measures

The following minimization measures from the *Section 4(f) and 6(f) Analysis* (Caltrans 2019b) are proposed to address direct, indirect, temporary, and permanent impacts associated with impacts on recreational resources as a result of Alternatives 2 and 3 (Design Options A and B):

The following minimization measures would be implemented for Cesar E. Chavez Park:

**PR-1** If Alternatives 2 or 3 (Design Options A and B) are selected, the City of Long Beach (City) will continue to identify and incorporate design refinements to avoid or minimize the permanent incorporation of land from Cesar E. Chavez Park in the final design.

**PR-2** During final design, the City of Long Beach (City) will define the final boundaries of Cesar E. Chavez Park as the basis for the transfer of land from the public street right-of-way (ROW) for Shoreline Drive through Cesar E. Chavez Park (currently owned by the City) to within the boundary of the park. This will be an internal transfer within the City, as the City currently owns the land for both Shoreline Drive and Cesar E. Chavez Park.

After the City has identified the new boundaries of Cesar E. Chavez Park, including the consolidation of the six discontinuous parcels into three larger parcels, California Department of Transportation (Caltrans) will coordinate with the City to:

- Identify park improvements for the new areas added to the park, including removal of pavement and other materials from Shoreline Drive, the landscaping of those areas, and the provision of sidewalks and bicycle paths, as appropriate, connecting the consolidated parcels.
- Develop a plan for public access to the northwest portion of the park for passive activities, such as wildlife viewing and walking.

**PR-3** During construction, the City of Long Beach (City) will require the construction contractor to maintain vehicular and pedestrian access to recreational areas within the construction area throughout the construction period. If existing access points are disrupted, alternative access will be provided. Appropriate signage and temporary sidewalks will be provided, as needed, throughout construction, and the construction contractor will provide and maintain appropriate signage to direct both pedestrian and vehicular traffic to recreational areas via alternate routes. Disabled access will also be maintained during construction.

**PR-4** The City of Long Beach (City) will require the construction contractor to identify all proposed closures of areas within Cesar E. Chavez Park, including streets, no less than 90 days prior to when each closure would begin.

**PR-5** No less than 90 days prior to when a closure would begin, the City of Long Beach (City) will require the construction contractor to provide the following to the City Parks, Recreation and Marine Department and the Long Beach Unified School District (LBUSD):

- A map of each proposed closure, clearly showing each park area proposed to be closed temporarily, including identification of any street closures
- A plan for providing signing and notifications through other public information outlets to inform the public and recreational visitors of upcoming closures of areas within the park

- Estimation of the duration of each closure
- Identification of alternative vehicle and trail routes to/through and/or around the park, as appropriate
- Identification of park features that would be unavailable to the public during the closure

**PR-6** The City of Long Beach (City) will provide written approval of each proposed closure to the construction contractor no less than 45 days prior to when the closure would begin.

**PR-7** The City of Long Beach (City) will require the construction contractor to provide an information telephone number that park visitors can use to contact the contractor for more information regarding individual closures. The contractor may also provide an information website. The contact number and website information are to be provided at the construction site, at/around each closed area, and on information signs discussing the individual closures. The construction contractor will also be required to provide this information to the City Parks, Recreation and Marine Department and the Long Beach Unified School District (LBUSD).

**PR-8** The City of Long Beach (City) will require the construction contractor to return areas of the park closed temporarily during construction to their original, or better, conditions after completion of construction, and those temporarily closed areas will be respectively returned to the City Parks, Recreation and Marine Department and the Long Beach Unified School District (LBUSD).

**PR-9** At the completion of construction in the temporary occupancy areas at Cesar E. Chavez Park, the City of Long Beach (City) will require the construction contractor to return the areas to a condition as good as, or better than, prior to its use for the temporary occupancy. The required improvements for the rehabilitation of those areas will be determined in consultation among the City Parks, Recreation and Marine Department, the Long Beach Unified School District (LBUSD), and the construction contractor.

**PR-10** For temporary construction easements (TCE) currently vegetated in native and mixed native/nonnative plant materials, those land areas will be revegetated at the completion of construction and returned to the original property owners. The City of Long Beach (City) will develop the vegetation plans in consultation with the property owners to ensure the compatibility of the new vegetation with the existing vegetation in the vicinity of those for the affected properties.

The following minimization measures would be implemented for LARIO Trail:

**PR-11** If Alternative 2 or 3 (Design Options A and B) is selected, the City of Long Beach (City) will continue to identify and incorporate design refinements to avoid or minimize the temporary occupancy of land from the Los Angeles and Rio Hondo (LARIO) Trail in the final design.

**PR-12** During construction, the City of Long Beach (City) will require the construction contractor to maintain vehicular and pedestrian access to recreational areas within the construction area throughout the construction period. If existing access points are disrupted, alternative access will be provided. Appropriate signage and temporary sidewalks will be provided, as needed, throughout construction, and the construction contractor will provide and

maintain appropriate signage to direct both pedestrian and vehicular traffic to recreational areas via alternate routes. Disabled access will also be maintained during construction.

**PR-13** The City of Long Beach (City) will require the construction contractor to identify all proposed closures of areas within the Los Angeles and Rio Hondo (LARIO) Trail, including streets, no less than 90 days prior to when each closure would begin.

**PR-14** No less than 90 days prior to when a closure would begin, the City of Long Beach (City) will require the construction contractor to provide the following to the Los Angeles County Public Works Department and the Los Angeles County Parks and Recreation Department:

- A map of each proposed closure, clearly showing each recreational area proposed to be closed temporarily, including identification of any street closures
- A plan for providing signing and notifications through other public information outlets to inform the public and recreational visitors of upcoming closures of areas within the recreational area
- Estimation of the duration of each closure
- Identification of alternative vehicle and trail routes to/through and/or around the recreational area, as appropriate
- Identification of recreational features that would be unavailable to the public during the closure

**PR-15** The County of Los Angeles (County) will provide written approval of each proposed closure to the construction contractor no less than 45 days prior to when the closure would begin.

**PR-16** The City of Long Beach (City) will require the construction contractor to provide an information telephone number that recreational visitors can use to contact the contractor for more information regarding individual closures. The contractor may also provide an information website. The contact number and website information are to be provided at the construction site, at/around each closed area, and on information signs discussing the individual closures. The construction contractor will also be required to provide this information to the Los Angeles County Public Works Department and the Los Angeles County Parks and Recreation Department.

**PR-17** The City of Long Beach (City) will require the construction contractor to return areas of the recreational area closed temporarily during construction to their original, or better, conditions after completion of construction, and those temporarily closed areas will be respectively returned to the Los Angeles County Public Works Department and the Los Angeles County Parks and Recreation Department.

**PR-18** At the completion of construction in the temporary occupancy areas at the Los Angeles and Rio Hondo (LARIO) Trail, the City of Long Beach (City) will require the construction contractor to return the areas to a condition as good as, or better than, prior to its use for the temporary occupancy. The required improvements for the rehabilitation of those areas will be determined in consultation among the Los Angeles County Public Works Department, the Los Angeles County Parks and Recreation Department, and the construction contractor.

**PR-19** For temporary construction easements (TCE) currently vegetated in native and mixed native/nonnative plant materials, those land areas will be revegetated at the completion of construction and returned to the original property owners. The City of Long Beach (City) will develop the vegetation plans in consultation with the property owners to ensure the compatibility of the new vegetation with the existing vegetation in the vicinity of those for the affected properties.

The following minimization measures would be implemented for LB MUST:

**PR-20** If Alternative 2 or 3 (Design Options A and B) is selected, the City of Long Beach (City) will continue to identify and incorporate design refinements to avoid or minimize the temporary occupancy of land from the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility in the final design.

**PR-21** During construction, the City of Long Beach (City) will require the construction contractor to maintain vehicular and pedestrian access to recreational areas within the construction area throughout the construction period. If existing access points are disrupted, alternative access will be provided. Appropriate signage and temporary sidewalks will be provided, as needed, throughout construction, and the construction contractor will provide and maintain appropriate signage to direct both pedestrian and vehicular traffic to recreational areas via alternate routes. Disabled access will also be maintained during construction.

**PR-22** The City of Long Beach (City) will require the construction contractor to identify all proposed closures of areas within the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility, including streets, no less than 90 days prior to when each closure would begin.

**PR-23** No less than 90 days prior to when a closure would begin, the City of Long Beach (City) will require the construction contractor to provide the following to the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility:

- A map of each proposed closure, clearly showing each recreational area proposed to be closed temporarily, including identification of any street closures
- A plan for providing signing and notifications through other public information outlets to inform the public and recreational visitors of upcoming closures of areas within the recreational area
- Estimation of the duration of each closure
- Identification of alternative vehicle and trail routes to/through and/or around the recreational area, as appropriate
- Identification of recreational features that would be unavailable to the public during the closure

**PR-24** The Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility will provide written approval of each proposed closure to the construction contractor no less than 45 days prior to when the closure would begin.

**PR-25** The City of Long Beach (City) will require the construction contractor to provide an information telephone number that recreational visitors can use to contact the contractor

for more information regarding individual closures. The contractor may also provide an information website. The contact number and website information are to be provided at the construction site, at/around each closed area, and on information signs discussing the individual closures. The construction contractor will also be required to provide this information to the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility.

**PR-26** The City of Long Beach (City) will require the construction contractor to return areas of the recreational area closed temporarily during construction to their original, or better, conditions after completion of construction, and those temporarily closed areas will be respectively returned to the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility.

**PR-27** At the completion of construction in the temporary occupancy areas at the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility, the City of Long Beach (City) will require the construction contractor to return the areas to a condition as good as, or better than, prior to its use for the temporary occupancy. The required improvements for the rehabilitation of those areas will be determined in consultation among the City, the LB MUST facility, and the construction contractor.

**PR-28** For temporary construction easements (TCE) currently vegetated in native and mixed native/nonnative plant materials, those land areas will be revegetated at the completion of construction and returned to the original property owners. The City of Long Beach (City) will develop the vegetation plans in consultation with the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility to ensure the compatibility of the new vegetation with the existing vegetation in the vicinity of those for the affected properties.

# 2.2 Growth

## 2.2.1 Regulatory Setting

The Council on Environmental Quality (CEQ) regulations, which established the steps necessary to comply with the National Environmental Policy Act (NEPA) of 1969, require evaluation of the potential environmental effects of all proposed federal activities and programs. This provision includes a requirement to examine indirect effects, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations (40 Code of Federal Regulations [CFR] 1508.8) refer to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (CEQA) also requires the analysis of a project's potential to induce growth. The CEQA Guidelines (Section 15126.2[d]) require that environmental documents "…discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment…"

## 2.2.2 Affected Environment

This section is based on the CIA (Caltrans 2018c) report prepared for the Project.

Many factors influence land use and development in an area, including planning and zoning, economic conditions, population and economic growth, infrastructure, availability of developed land, physical and regulatory constraints, and transportation.

The community impacts study area, as determined in the CIA (Caltrans 2018c) and as shown on Figure 2.2-1, was used for the growth analysis. The community impacts study area includes 14 census tracts affected by the Project within the City and Port of Long Beach (POLB). These census tracts are identified as Census Tract 5753, 5754.01, 5754.02, 5755, 5758.01, 5758.02, 5758.03, 5759.01, 5759.02, 5760.01, 5762, 5763.01, 5763.02, and 9800.33. Data for the County and the Gateway Cities Subregion is provided for comparison. The Gateway Cities Subregion consists of the POLB and 27 cities, including the City.

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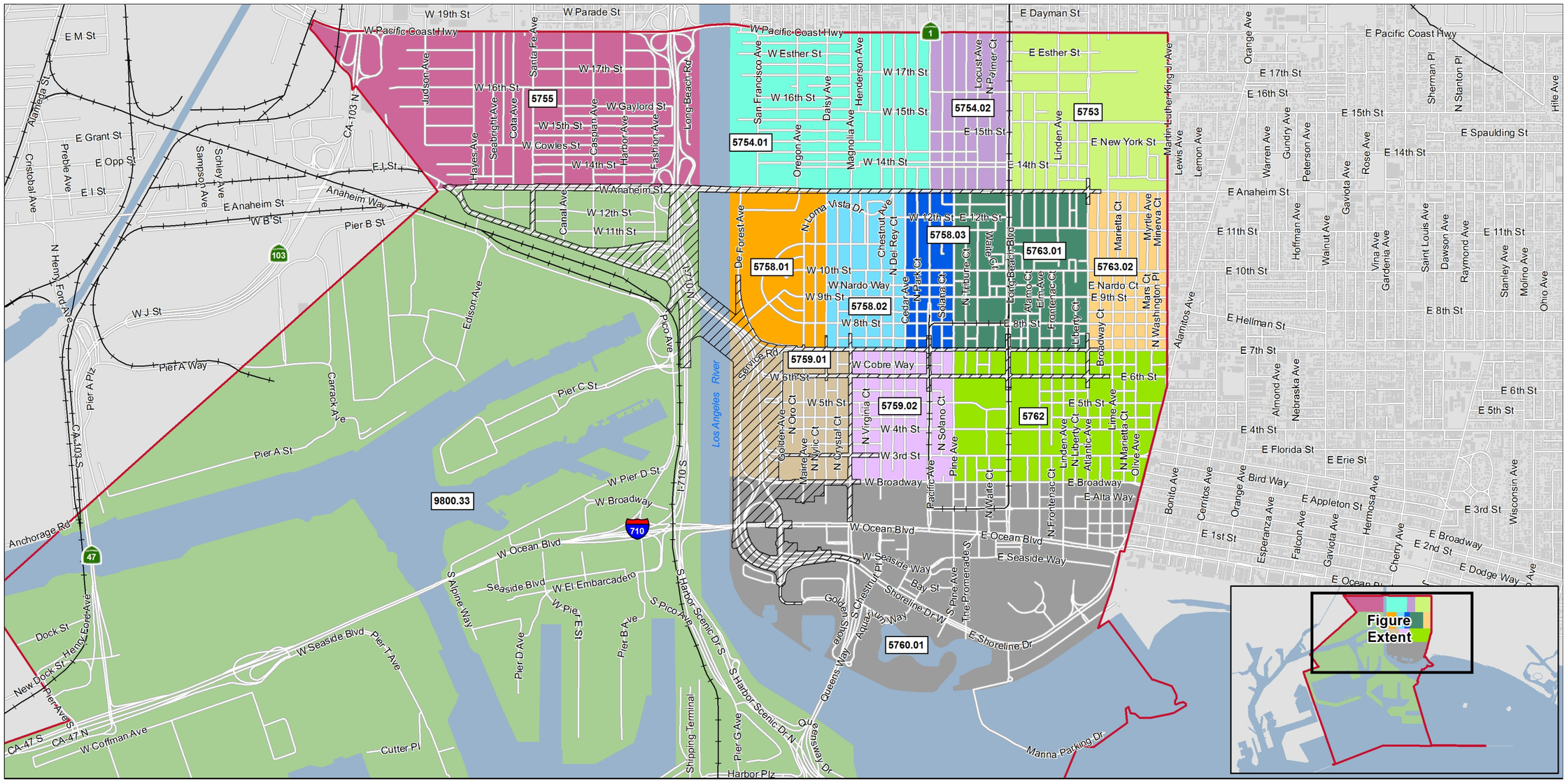


**LEGEND**

- Project Limits
- Community Impacts Study Area
- Census Tract 5755
- Census Tract 5754.01
- Census Tract 5763.02
- Census Tract 5754.02
- Census Tract 5753
- Census Tract 5758.01
- Census Tract 5758.02
- Census Tract 5758.03
- Census Tract 5759.01
- Census Tract 5759.02
- Census Tract 5760.01
- Census Tract 5762
- Census Tract 5763.01
- Census Tract 9800.33

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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.2-1. Community Impacts Study Area**

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Table 2.2.1 provides the growth projections (population, housing, and employment) for the City from 2012 to 2040, as compared with the Gateway Cities Subregion and the County. Long-term population from 2012 to 2040 is expected to increase 4 percent at the City level and 17 percent at the County level. The number of households is expected to increase 7 percent at the City level and 19 percent at the County level. Similarly, long-term employment from 2012 to 2040 is expected to increase 19 percent at the City level and 23 percent at the County level.

**Table 2.2.1. Growth Trends**

| Jurisdiction | 2012 | 2040 | Percent (%) Change between 2012 and 2040 |
|---|---|---|---|
| ***City of Long Beach*** | | | |
| Population | 466,300 | 484,500 | 3.9 |
| Housing | 163,800 | 175,500 | 7.1 |
| Employment | 153,200 | 181,700 | 18.6 |
| ***Gateway Cities Subregion*** | | | |
| Population | 1,703,400 | 1,847,900 | 8.4 |
| Housing | 511,700 | 554,900 | 8.4 |
| Employment | 733,100 | 834,800 | 13.9 |
| ***Los Angeles County*** | | | |
| Population | 9,879,600 | 11,514,800 | 16.6 |
| Housing | 3,287,600 | 3,926,600 | 19.4 |
| Employment | 4,249,600 | 5,225,800 | 23.0 |

Source: Caltrans 2018c

The community impacts study area, as well as the City, is primarily built out. While the City identifies policies in the General Plan Land Use Element to promote quality development within the City, future development will likely involve the redevelopment of land that was previously occupied by other uses. This is consistent with the City's Downtown Plan for this area, which proposes to provide additional housing, employment, shopping, and entertainment opportunities while preserving intact residential neighborhoods. As such, the Downtown Plan provides for future plans to redevelop the area. Table 2.2.2 summarizes the existing local population changes for the geographic areas related to the community impacts study area. Both the County and City have seen an approximate 2 percent increase in population growth from 2010 to 2015. In contrast, approximately half of the affected census tracts have experienced greater increases in population growth ranging from 4 to 12 percent.

**Table 2.2.2. Existing Regional and Local Population Change**

| Geographic Area | 2010 | 2015 | Percent (%) Change (2010 to 2015) |
|---|---|---|---|
| County of Los Angeles | 9,818,605 | 10,038,388 | +2.2 |
| City of Long Beach | 462,257 | 470,237 | +1.7 |
| ***Community Impacts Study Area Census Tracts*** | | | |
| Census Tract 5753 | 4,947 | 5,179 | +4.7 |
| Census Tract 5754.01 | 5,155 | 5,224 | +1.3 |
| Census Tract 5754.02 | 4,065 | 4,221 | +3.8 |
| Census Tract 5755 | 76 | 37 | -105.4 |
| Census Tract 5758.01 | 2,446 | 2,260 | -7.6 |
| Census Tract 5758.02 | 5,167 | 5,282 | +2.2 |
| Census Tract 5758.03 | 2,837 | 2,884 | +1.7 |
| Census Tract 5759.01 | 3,454 | 3,365 | -2.6 |
| Census Tract 5759.02 | 4,762 | 4,699 | -1.3 |
| Census Tract 5760.01 | 4,969 | 5,422 | +9.1 |
| Census Tract 5762 | 6,158 | 5,564 | -9.6 |
| Census Tract 5763.01 | 4,176 | 4,682 | +12.1 |
| Census Tract 5763.02 | 4,107 | 4,485 | +9.2 |
| Census Tract 9800.33[1] | — | — | — |

Source: Caltrans 2018c

Notes:

[1] Census Tract 9800.33 is entirely within the POLB and does not contain any residential uses. No census data is available for this census tract.

## 2.2.3 Environmental Consequences

Growth-related effects represent permanent impacts of a project. Direct growth-inducing impacts are generally associated with the provision of urban services and the extension of infrastructure to an undeveloped area. The extension of services and facilities to an individual site can reduce development constraints for other nearby areas and can serve to induce further development in the vicinity. Indirect or secondary growth-inducing impacts consist of growth in the area by additional demand for housing, employment, and goods and services associated with population increases caused by, or attached to, new development.

The analysis of growth-related, indirect impacts was prepared based on the Guidance for *Preparers of Growth-Related, Indirect Impact Analyses* (Caltrans 2006a), which was developed by an interagency work group that included representatives from Caltrans, FHWA, and the U.S. Environmental Protection Agency (EPA). The analysis of growth-related impacts was developed by applying the following steps from the guidance document:

- Identify the potential for growth for each alternative (will the project change the location, rate, type, or amount of growth?)
- Assess the growth-related effects of each alternative to resources of concern (will these resources be affected?)
- Consider additional opportunities to avoid and minimize growth-related impacts
- Compare the results of the analysis for all alternatives
- Document the process and findings of the analysis

### 2.2.3.1 Temporary Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not result in construction activities associated with Alternatives 2 and 3 (Design Options A and B). Therefore, no temporary growth-related impacts are anticipated.

#### Alternatives 2 and 3 (Design Options A and B)

Alternatives 2 and 3 (Design Options A and B) would create short-term jobs for the area and help in lowering the current rates of unemployment during the construction phase of the Project. While the Project would generate additional employment opportunities during construction of the Project, the majority of these jobs are expected to be filled by residents of the City and surrounding communities. Therefore, substantial population growth impacts associated with Project construction is not anticipated.

### 2.2.3.2 Permanent Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not result in construction activities associated with Alternatives 2 and 3 (Design Options A and B). Therefore, no permanent impacts on existing and future land use would occur; therefore, no growth-related impacts are anticipated.

#### Alternatives 2 and 3 (Design Options A and B)

The potential growth-related impacts of the proposed Project were considered in the context of the first-cut screening analysis approach to assess the likely growth potential effects of the proposed Project. The potential for Alternatives 2 and 3 (Design Options A and B) to influence growth is summarized in Table 2.2.3.

## Table 2.2.3. Summary of First-Cut Screening Analysis

| Screening Criteria | Project Consideration |
|---|---|
| How, if at all, does the proposed Project potentially change accessibility? | The Project is expected to improve safety operations and connectivity between downtown Long Beach and regional transportation facilities. Alternatives 2 and 3 (Design Options A and B) would result in the construction of a replacement bridge. Therefore, the proposed Project would result in changes in accessibility to the transportation system in this area. However, the change in accessibility would not encourage unanticipated growth in the area, as the area is already built out. In addition, the proposed Project would not result in new access into areas that previously had no access.<br><br>The proposed bridge replacement would not maintain the 6th Street ramp entrance into downtown Long Beach, with traffic from SR-710 being diverted onto 7th Street and West Shoreline Drive. However, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would improve access to downtown Long Beach and multi-modal access to the City's open space.<br><br>Alternatives 2 and 3 (Design Options A and B) of the proposed Project would replace the existing Shoemaker Bridge and realign several connectors and roadways in downtown Long Beach to address structural deficiencies and geometric incompatibility with future planned projects (e.g., I-710 Corridor Project proposed by Metro and improvements to Cesar E. Chavez Park as part of the City's Drake/Chavez Master Plan). The proposed Project would maintain the access for all properties to the local streets within the area of the Project limits and would not result in adverse permanent impacts on access. The conversion of roadways into parkland, which currently split Cesar E. Chavez Park into various areas, would result in a beneficial effect of improved public access to the park. |
| How, if at all, do the Project type, Project location, and growth pressure potentially influence growth? | The Project would implement safety and efficiency improvements to existing infrastructure and would not propose to build new roadways that could increase capacity. The proposed improvements would address existing and projected future congestion within the Project limits. Since the City is primarily built out, it is unlikely that these roadway improvements would cause growth pressure or potentially influence growth within this area. Therefore, the Project would not affect variables such as economic opportunities, employment, or housing availability, which directly affect local and regional development growth. |
| Is Project-related growth reasonably foreseeable as defined in NEPA? Under NEPA, indirect impacts need only be evaluated if they are reasonably foreseeable as opposed to remote and speculative. | The proposed Project is consistent with the Final 2019 FTIP, SCAG Final 2016 RTP, and the transportation goals and policies of the City's General Plan. Growth in the City is expected to occur with or without the Project because, as stated previously, the proposed Project on its own cannot affect variables that contribute to growth. The proposed Project would only replace and realign existing roadways and would not increase capacity on Shoemaker Bridge and local roadways. It would not influence the amount, timing, or location of growth in the area.<br><br>Therefore, no growth-related impacts are anticipated as a result of Alternatives 2 and 3 (Design Options A and B). |

**Table 2.2.3. Summary of First-Cut Screening Analysis**

| Screening Criteria | Project Consideration |
|---|---|
| If there is Project-related growth, how, if at all, will it affect resources of concern? | While the proposed Project would include the construction of additional transportation infrastructure, the Project would be constructed along an existing transportation corridor in a highly urbanized area. There is no lack of existing infrastructure in the community impacts study area that would serve as an obstacle to growth. Projected population growth would occur in the community impacts study area with or without the additional infrastructure associated with the Project. In addition, potential growth has already been captured in plans adopted at the local and regional level. Therefore, no additional impacts associated with resources of concern are anticipated to occur with implementation of the proposed Project. |

Source: Caltrans 2018c

Notes:
FTIP=Federal Transportation Improvement Program; I-710=Interstate 710; NEPA=National Environmental Policy Act; RTP=Regional Transportation Plan; SCAG=Southern California Association of Governments; SR-710=State Route 710

The proposed Project would not establish new homes, result in permanent employment opportunities, or provide any new access into areas that previously had no access. The Project would result in transportation facility improvements that would improve accessibility via motor and non-motorized transportation options within the community impacts study area, resulting in improvements in accessibility to the overall transportation system. However, these improvements are already programmed and identified in the Final 2019 Adopted FTIP and SCAG's 2016 RTP for the County as Project ID: LAOG830. Based on the analysis in Table 2.2.3, implementation of the proposed Project would not result in additional substantial growth from that already identified in SCAG's 2016 RTP/Sustainable Communities Strategy (SCS).

The purpose of the Project is to implement safety and efficiency improvements to existing infrastructure. The Project is not proposing to build new roadways to increase capacity. Instead, the proposed improvements would address existing and projected future congestion within the Project limits. Additionally, this growth analysis was based on a comprehensive list of planned and programmed projects within the City (Table 2.1-1 in Section 2.1, Land Use). As the City is primarily built out, it is unlikely that these roadway improvements would encourage growth within this area that is not already projected or planned for. Therefore, no adverse impacts in the form of growth inducement are anticipated under Alternatives 2 and 3 (Design Options A and B).

## 2.2.4 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are required.

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# 2.3 Community Impacts

## 2.3.1 Community Character and Cohesion

### 2.3.1.1 Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). The Federal Highway Administration (FHWA) in its implementation of NEPA (23 USC 109[h]) directs that final decisions on projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under the California Environmental Quality Act (CEQA), an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this Project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the Project's effects.

### 2.3.1.2 Affected Environment

This section is based on the CIA (Caltrans 2018c) and Relocation Impact Memorandum (RIM) (Caltrans 2018d) prepared for the Project. The CIA identifies two geographical study areas that were used to define the socioeconomic and demographic characteristics using census tract information and identify and inventory community facilities within using a 0.5-mile buffer from the Project limits. These study areas are discussed further below.

#### Study Areas

Community character is defined as the combination of demographics, housing characteristics, economic conditions, and communities of the study area, as well as community facilities. With the exception of Cesar E. Chavez Park, the Project limits are developed and dominated by existing roadways and the Shoemaker Bridge. The broader area beyond the Project limits includes the SR-710, LA River, and POLB to the west; a mix of recreational, industrial, mixed use, commercial, and residential to the north; Drake Park and downtown Long Beach to the east, and the Long Beach Harbor and recreational facilities to the south.

*Community Impacts Study Area*

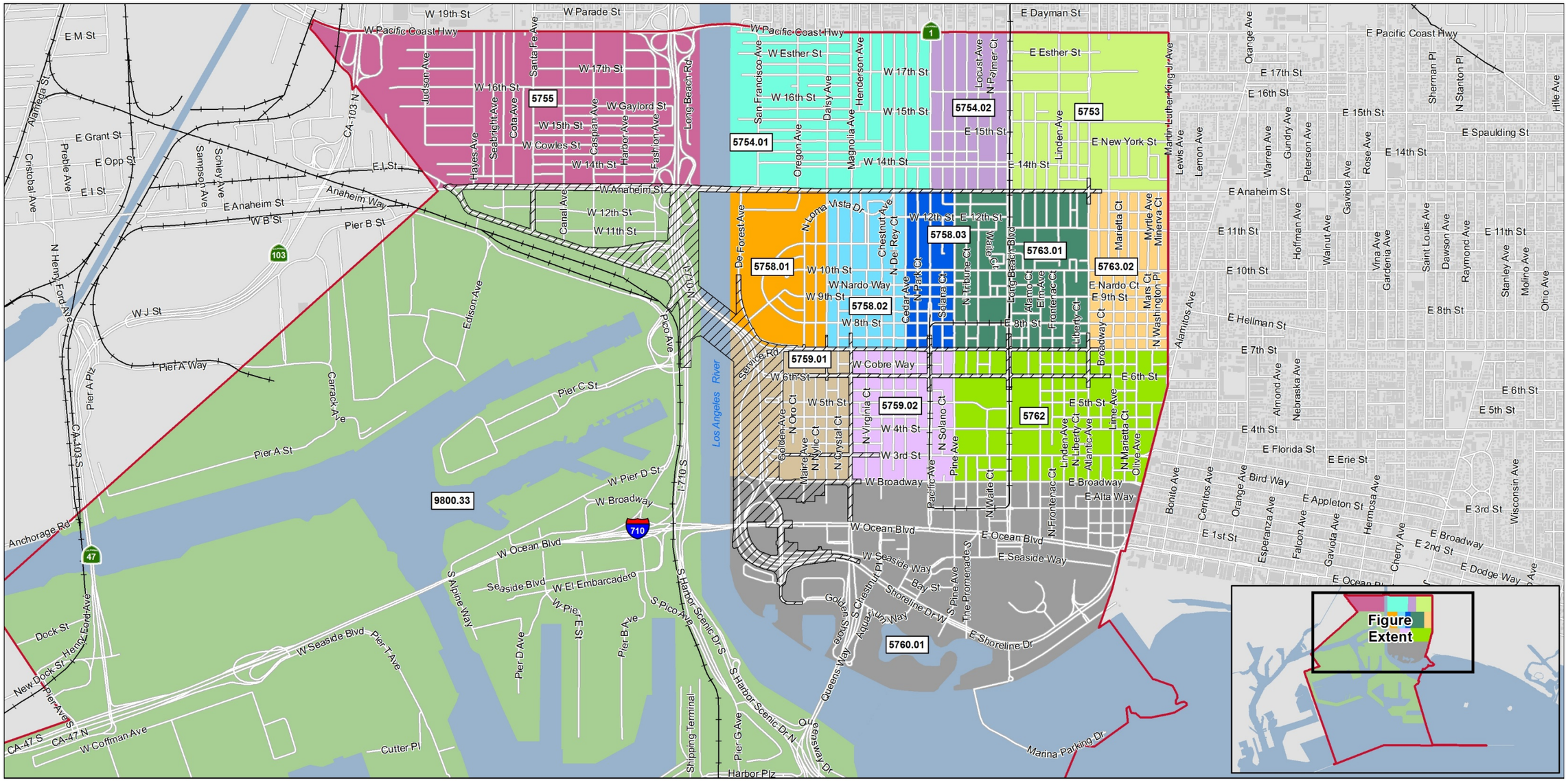
The community impacts study area was considered for the analysis of direct and indirect effects on land use, growth, community services, utilities, traffic and transportation, and pedestrian and bicycle facilities. The community impacts study area is defined as the geographic area that encompasses the Project area within the boundaries of the 2010 U.S. Census tracts. As shown on Figure 2.2-1 in Section 2.2, Growth, 14 census tracts are affected by the proposed Project. The census tracts are identified as 5753, 5754.01, 5754.02, 5755, 5758.01, 5758.02, 5758.03, 5759.01, 5759.02, 5760.01, 5762, 5763.01, 5763.02, and 9800.33.

Census tracts were used because they are the most complete data set for the level of detail required to analyze the surrounding demographic and socioeconomic character that is generally associated

with the community impacts study area. Census tracts are also used to incorporate populations that may not be directly impacted by the Project but may be indirectly affected by Project construction and operation. To assess the potential for the proposed Project to adversely or beneficially affect community cohesion, demographic characteristics of these census tracts were evaluated utilizing data from the 2011 to 2015 American Community Survey 5-year Estimates (U.S. Census Bureau 2016). Figure 2.3-1 depicts the community impacts study area (full extent of Census Tract 9800.33 is not shown since no community resources or populations reside in the census tract).

*Community Facilities Study Area*

The community facilities study area is defined as the area within 0.5 mile of the Project limits (Figure 2.3-2). The community facilities identified within the community facilities study area may be impacted either directly or indirectly during the construction of the proposed Project.




**LEGEND**

- Project Limits
- Community Impacts Study Area
- Census Tract 5755
- Census Tract 5754.01
- Census Tract 5763.02
- Census Tract 5754.02
- Census Tract 5753
- Census Tract 5758.01
- Census Tract 5758.02
- Census Tract 5758.03
- Census Tract 5759.01
- Census Tract 5759.02
- Census Tract 5760.01
- Census Tract 5762
- Census Tract 5763.01
- Census Tract 9800.33

0 Feet 1,500

Note: Full extent of Census Tract 9800.33 is not shown since no community resources or populations reside in the census tract.

07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.3-1. Community Impacts Study Area**

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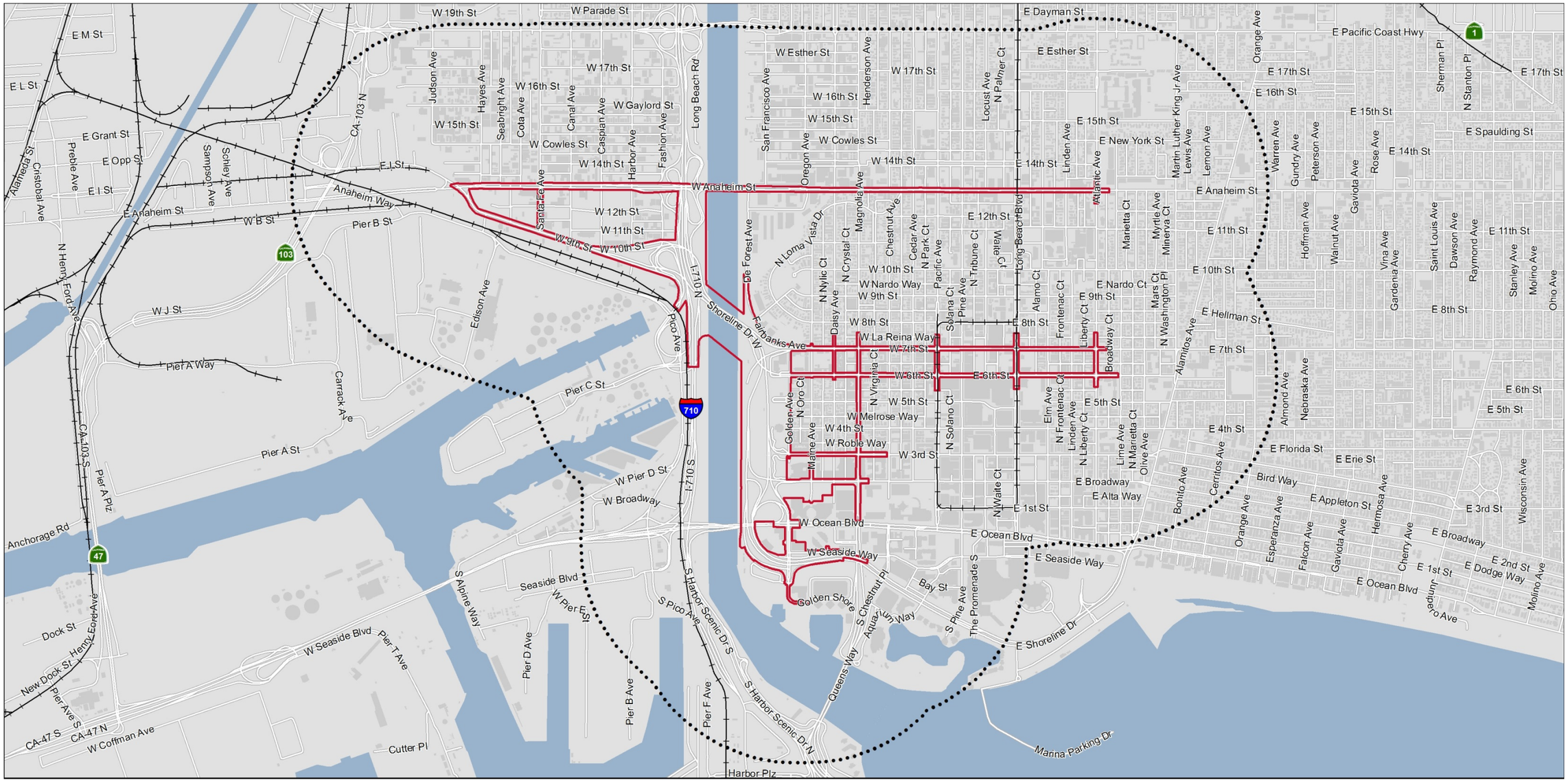


LEGEND

Project Limits

Community Facilities Project Study Area (Project Limit 0.5 Mile Buffer)

0 Feet 1,500

07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.3-2. Community Facilities Study Area**

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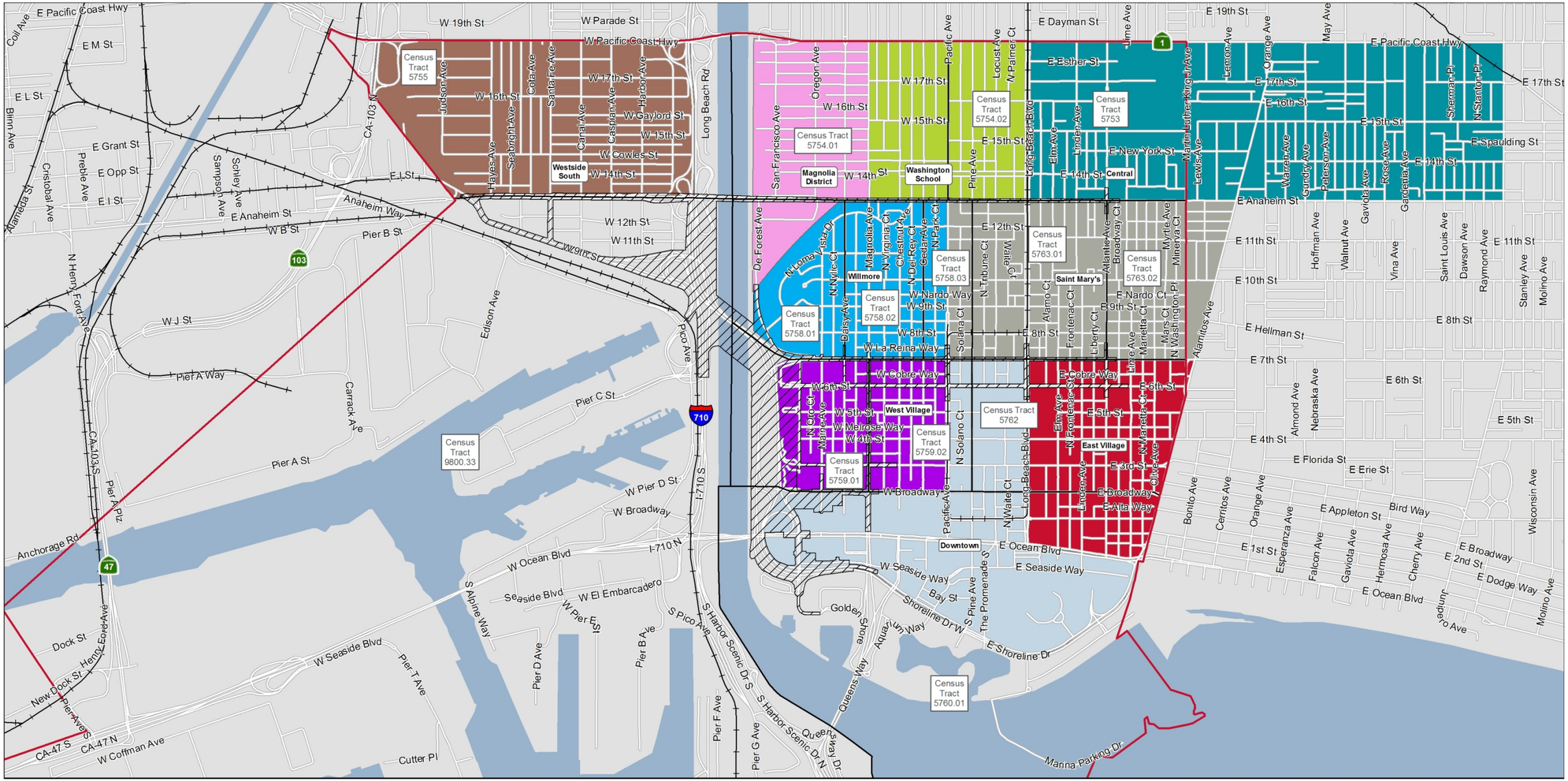
## Neighborhoods

Since the City was incorporated in 1888, it has continued to grow and develop, resulting in distinct neighborhoods, shown on Figure 2.3-3. Because of these distinct areas, the City has developed zoning regulations and other regulatory devices, based on the neighborhood boundaries (full extent of Census Tract 9800.33 is not shown since no community resources or populations reside in the census tract) to enhance housing opportunities, maintain quality neighborhoods, and facilitate a strong City economic base. The following describes the general neighborhood boundaries and characteristics within the proposed Project study area based on information from the City of Long Beach Neighborhood Map (City of Long Beach 2015a) and the City of Long Beach Planned Development Districts Map (City of Long Beach 2006).

- The Downtown neighborhood is bordered by Drake Park/Willmore neighborhood and 7th Street to the north, Alamitos Avenue and Long Beach Boulevard to the east, and Pacific Avenue (north of Ocean Boulevard), and the LA River (south of Ocean Boulevard) to the west. The northern portion of the Downtown neighborhood is located within the Downtown Long Beach Planned Development District (PD-30), and the southern portion of the Downtown neighborhood is located within the Downtown Shoreline Planned Development District (PD-6). The neighborhood includes a mix of civic related uses, office, commercial, and restaurant uses; entertainment venues; multi-family housing; high-rise buildings; a transit station; and a bicycle station. Schools in the Downtown neighborhood area include International Elementary School and Robert L. Stevenson Elementary School.
- The West Village neighborhood is bordered by SR-710 to the west, Broadway to the south, 7th Street to the north, and Pacific Avenue to the east. This neighborhood is located west of the downtown area, within the Downtown Planned Development District (PD-30). The neighborhood consists of some remaining single-family homes, mostly multi-family residential buildings, and a few commercial uses. The World Trade Center, the County Courthouse, Long Beach City Hall, Cesar Chavez Elementary School, and Thomas Edison Elementary School are all located in this neighborhood.
- The Willmore neighborhood is bordered by the LA River to the west, Anaheim Street to the north, 7th Street to the south, and Pacific Avenue to the east. The Willmore neighborhood is the oldest neighborhood in the City and is a City-designated historic district. The Willmore neighborhood is also within the Willmore City Planned Development Plan. The neighborhood is developed with a mix of residential structures of various types, ranging from single-family homes to dense multi-family apartments. Commercial uses are located along Anaheim Street and Pacific Avenue. Drake Park is located within this neighborhood.
- The East Village neighborhood is bordered by 7th Street to the north, by Long Beach Boulevard to the west, and Alamitos Avenue to the east. This area is northeast of the Downtown neighborhood and within the Downtown Planned Development District (PD-30). According to the Downtown Plan, the East Village is the City's center of local arts and culture, and the eclectic neighborhood boasts a collection of privately -owned businesses, galleries, shops, and complementary street experiences. The neighborhood is characterized by its nostalgic charm and diversity of uses, which attract tourists and locals.

- Saint Mary's neighborhood is bordered by Anaheim to the north, Pacific Avenue to the west, Alamitos Avenue to the east, and 7th Street to the south. This area is north of the Downtown and East Village Neighborhoods. Previously, the Saint Mary's Neighborhood was within the Long Beach Boulevard District (PD-29); however, as of June 14, 2016, it was repealed, and the neighborhood has since divided, with portions of the neighborhood incorporated into the Downtown Planned Development District (PD-30). Saint Mary's is characterized by traditional neighborhoods with Craftsman homes and other neighborhood uses. Saint Mary's Medical Center is also located within this community.
- The Magnolia District is bound to the north by Pacific Coast Highway, to the east by Magnolia Avenue, to the west by the LARIO Trail, and to the South by the Willmore neighborhood. The Magnolia District is not within a Planned Development District and is dominated by industrial uses, such as solid waste storage, transfer and processing conversion facilities, manufacturing, warehousing, and wholesale facilities. Portions of this district also allow for ancillary uses to industry, such as restaurants, financial uses, and employment centers.

Cesar E. Chavez Park and the LA River/LARIO Trail are located within the Project limits. In addition, there are 26 park and recreational facilities (Figure 2.1-6 in Section 2.1, Land Use), 12 public schools, 5 private schools, 38 worship centers, 2 health facilities, and 5 multi-service centers (MSC) (Figure 2.3-4).




**LEGEND**

- Project Limits
- Community Impacts Study Area
- Census Tracts

Neighborhoods

- Central
- Downtown
- East Village
- Magnolia District
- Saint Mary's
- Washington School
- West Village
- Westside South
- Willmore

0 Feet 1,500

Note: Full extent of Census Tract 9800.33 is not shown since no community resources or populations reside in the census tract.

07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.3-3. Neighborhoods**

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1 - Station 1
2 - Station 3
3 - Long Beach West Patrol Division
4 - Long Beach City Police Department
5 - Long Beach Multi-Service Center
6 - Cesar Chavez Elementary School
7 - Thomas A. Edison Elementary School
8 - Oropeza International Elementary School
9 - Lincoln Elementary School
10 - Roosevelt Elementary School
11 - Stevenson Elementary School
12 - Franklin Classical Middle School
13 - George Washington Middle School
14 - Long Beach Polytechnic High School
15 - PAAL Academy
16 - Renaissance High
17 - Educational Partnership High School
18 - St. Anthony High School
19 - St. Anthony Elementary School
20 - Montesorri on Elm
21 - First Baptist Church School
22 - Main Library
23 - City Hall
24 - Neighborhood Resource Center
25 - California Recreation Community Center
26 - Long Beach Senior Center
27 - Jenny Oropeza Community Center
28 - South Shore Launch Ramp
29 - Long Beach Aquarium of the Pacific
30 - St. Luke's Episcopal Church
31 - Neighborhood United Methodist
32 - Long Beach Harbor City Foursquare Church
33 - First Congregational Church
34 - Second Church of Christ Scientist
35 - First Methodist Church
36 - Central Southern Baptist Church
37 - First Baptist Church
38 - Shoreline Community Church
39 - Trinity Lutheran Church
40 - First United Presbyterian Church
41 - St. Anthony Church
42 - St. John's Baptist Church
43 - Mrytle Ave Church of Christ
44 - Gospel Memorial Church of God
45 - Christ Second Baptist Church
46 - White Rose Church-God-Christ
47 - St. Mark Baptist Church
48 - Unity Long Beach
49 - Long Beach Seven Adevntist Church
50 - LifeVINE Ministries
51 - Second Samoan Chruch
52 - The Universal Church
53 - Citylights Church
54 - South Coast interfaith Council
55 - Garden Church
56 - Spiritual Truth Unity Fellowship
57 - First Lutheran Church
58 - First Friends Church
59 - The Gathering Lutheran Church
60 - Namaste Center for Spiritual Living
61 - Covenant Presbyterian Church
62 - New Hope Baptist Church
63 - The Greater Harvest Church of God
64 - First Apostolic Church
65 - Central Church of Christ
66 - St. Mary Medical Center
67 - Long Beach Comprehensive Health Center

0 Feet 1,500

**LEGEND**

- Project Limits
- Community Facilities Project Study Area (Project Limit 0.5 Mile Buffer)
- Community Facilities
- Fire Station
- Place of Worship
- Police Station
- School

07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.3-4. Community Facilities**

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### Parks and Recreational Facilities

Parks and recreational facilities located within 0.5 mile of the Project limits are listed below:

- **LARIO Trail:** The LARIO Trail is a Class 1 bikeway that extends north-south for 29.1 miles along the east bank of the LA River and through the Downtown marina. The path connects to the shoreline pedestrian/bicycle path.
- **Shoreline Pedestrian Bike Path:** The Shoreline Pedestrian Bike Path is a Class 1 bikeway that extends 3.1 miles along East Shoreline Drive. The path can be accessed from East Shoreline Drive, the Queensway Bridge Bike Path, and the LARIO Trail.
- **Queensway Bridge Bike Path:** The Queensway Bridge Bike Path is a Class 1 bikeway that extends 0.5 mile from Shoreline Drive to Harbor Scenic Drive. The path can be accessed from West Shoreline Drive, Golden Shore Street, the Shoreline Pedestrian Bike Path, and the LARIO Trail.
- **Cesar E. Chavez Park, 401 Golden Avenue:** Cesar E. Chavez Park is approximately 33 acres in size and features basketball courts, a community center, a playground, a weight room, restrooms, and picnic areas. The park also includes a teen and senior center.
- **The Drake Chavez Soccer Fields and Greenbelt, 1000 DeForest Avenue:** The Drake Chavez Soccer Fields and Greenbelt is a key component of the Drake Chavez Greenbelt Master Plan. The park was completed January 20, 2018. This park is approximately 8.75 acres and provides a continuous green space between Anaheim Street and West Broadway along the LA River with links to the LARIO Trail and includes synthetic turf soccer fields. This park provides connections to Loma Vista Park.
- **Loma Vista Park, 1174 Loma Vista:** Loma Vista Park is 0.14 acre in size. Facilities include park benches, picnic tables, and play equipment. It was designed as a passive recreation area with a lawn area, trees, and a custom bench with artistic elements.
- **Drake Park, 951 Maine Avenue:** The facilities at this park include a basketball court, a community center, a handball/racquetball court, a picnic area, a playground, a soccer field, a softball field, a tennis court, a volleyball court, and restrooms.
- **Victory Park, Ocean Boulevard:** Victory Park is a total of 4.4 acres in size. It features a grassy area with a scenic ocean view along the south side of Ocean Boulevard between Alamitos Avenue and Magnolia Avenue.
- **Golden Shore RV Park, 101 Golden Avenue:** Golden Shore RV Park is approximately 5.16 acres in size. It features 77 spaces with full hook-ups, 30/50 amplifier services, large picnic areas with tables, a pool and spa, a recreation/club room with a small kitchen facility, video games, a sand volleyball court, horseshoes, shuffleboard, a children's playground, hot showers, a laundry room, a convenience store, barbecue pits, a phone hook-up, and restrooms.
- **Golden Shore Marine Biological Reserve, Golden Shore Avenue south of Shoreline Drive:** This 9.1-acre reserve is located near the Golden Shore RV Park. It is a bird and aquatic life sanctuary.

- **Lincoln Park, Broadway Street and Pacific Avenue:** Lincoln Park is a total of 5.6 acres in size. It features a picnic area and open space. Lincoln Park has the distinction of being the oldest park in the City. Originally known as Pacific Park, the area was officially designated as a park on the original town site of Long Beach in 1888.
- **Shoreline Aquatic Park, Aquarium Way:** Shoreline Aquatic Park is 12.3 acres in size and located between the Long Beach Arena and the Downtown Shoreline Marina. It is a wide, open green area used for picnics and special events.
- **Rainbow Harbor Esplanade, Pine Avenue and South Shoreline Drive:** This 7.2-acre park provides open green space for public use and special events. It also provides a wide walkway with paving and landscape area depicting native landscaping for habitats surrounding the Pacific Ocean.
- **Rainbow Lagoon, Shoreline Village Drive and Linden Avenue:** This 12-acre open space area is located on the north side of Shoreline Drive at Shoreline Village Drive and Linden Avenue. The Rainbow Lagoon provides an area for special events or a walking area along the water.
- **14th Street Park, 14th Street from Chestnut Avenue to a half block east of Locust Avenue:** The 60-foot-wide facility is located at 14th Street from Chestnut Avenue to Palmer Court and has one full-sized court and three half courts with new surfacing, seating and lights for evening play. A fitness zone with free exercise equipment was added in May 2014 between Locust Avenue and Palmer Court.
- **Santa Cruz Park, Cedar Avenue to Golden Avenue:** This open space is 1.9 acre in size. Amenities include a green space, as well as park benches.
- **Seaside Park, 14th Street and Chestnut:** This open space is 2.5 acres in size and serves the surrounding area with supervised after school programs, which include sports, games, tournaments, crafts, homework help, and more. Other amenities include shade structure, soccer field, staff office, play equipment, and restrooms.
- **East Village Arts Park, 150 Elm Avenue:** This park is 0.1 acre in size and is a unique pocket park and showcase for local art. The park was a collaborative effort with the City Department of Parks, Recreation, and Marine; Department of Community Development Redevelopment Bureau; Second District Councilmember Dan Baker; Public Corporation for the Arts; the East Village Association; and local artists. Amenities include park benches and open space.
- **Harvey Milk Promenade Park, 185 East Third Street:** The park and plaza converted a previously empty paved area located within a crowded urban environment lacking public space. Amenities include seating, chess tables, and planted areas that provide a place to rest along the long Promenade walkway. California native plants, including a small grove of orange trees, provide environmentally -sustainable landscaping.

- **Peace Park, 1411 Atlantic Avenue:** This 0.4 acre-park opened January 24, 2004, with a playground, walking path, and lawn area. The site had been a parking area for a shopping center across Atlantic Avenue that was never used. This site was owned by the Long Beach Redevelopment Agency in the Central Project Area, and the Long Beach Redevelopment Agency provided it for the park.
- **K-9 Corner Dog Park, 9th Street and Pacific Avenue:** This park is approximately 0.8 acre in size. The park serves residents in the North Pine Avenue area. It has a unique design that is environmentally friendly. It includes drought-tolerant landscaping and generates 100 percent of its energy from solar.
- **Promenade Square Park, Promenade North and East First Street:** This 0.65-acre park opened July 24, 2010, and was part of the Long Beach Redevelopment Agency's 2007 Promenade Plan. The Long Beach Redevelopment Agency has since been dissolved as of 2012. On June 4, 2015, a groundbreaking ceremony for the new tot lot planned for the park was held. The park upgrade included a tot lot with a slide, climbing features, and benches to serve the growing number of families in the downtown area.
- **Willmore Heritage Garden, 7th Street and Maine Avenue:** The garden was part of a beautification project that converted a narrow strip of underutilized land and hardscape adjacent to the 7th Street/SR-710 on-ramp. This garden includes park benches, bike racks, and the restored historic Jergin's Trust pillars that frame the garden's entrance, which leads into the future Drake/Chavez Park.
- **Ernest McBride Park, 1550 Martin Luther King Jr. Avenue:** This 2.5-acre park includes amenities such as a lite basketball court, game room, community center, gymnasium, picnic area, playground, and weight room.
- **Dr. Robert Gumbiner Park, 628-662 Martin Luther King Jr. Avenue:** This park opened April 23, 2017. It is a 36,590-square-foot park located on Martin Luther King Jr. Avenue between 6th and 7th Streets. The park includes a small outdoor performance area, playgrounds, a skate plaza, shade structures, and a picnic area.
- **Craftsman Village Park, 851 Orange Avenue:** This park received a grant from the Statewide Park Development and Community Revitalization Program, and the land was purchased from the former Long Beach Redevelopment Agency. The 0.34-acre park opened July 28, 2012. The park includes walkways, benches and picnic tables, and play equipment.

### Schools

Long Beach Unified School District (LBUSD) serves City residents for grades K-12. In addition, there are several private schools located in the City. The following existing public schools, shown on Figure 2.3-3, are located within 0.5 mile of the proposed Project improvements (full extent of Census Tract 9800.33 is not shown since no community resources or populations reside in the census tract):

- Cesar Chavez Elementary School, 730 W. 3rd Street: Grades K–5
- Thomas A. Edison Elementary School, 625 Maine Avenue: Grades K–5
- Oropeza International Elementary School, 700 Locust Avenue: Grades K-5

- Lincoln Elementary School, 1175 E. 11th Street: Grades K-5
- Roosevelt Elementary School, 1574 Linden Avenue: Grades K-5
- Stevenson Elementary School, 151 Lime Avenue: Grades K-5
- Franklin Classical Middle School, 540 Cerritos Avenue: Grades 6-8
- George Washington Middle School, 1540 Cedar Avenue: Grades 6-8
- Long Beach Polytechnic High School, 1600 Atlantic Avenue: Grades 9-12
- Poly Academy of Achievers and Leaders (PAAL) High School, 1545 Long Beach Boulevard: Grades 9-12
- Clear Passage Charter School, 1471 Martin Luther King Jr. Avenue: Grades 9-12
- Renaissance High School, 1400 E. 20th Street: Grades 9-12

The following existing private schools are located within 0.5 mile of the proposed Project improvements:

- Educational Partnership High School, 1794 Cedar Avenue: Grades 9-12
- St. Anthony High School, 620 Olive Avenue: Grades 9-12
- St. Anthony Elementary School, 855 E. 5th Street: Pre-K-8th
- Montesorri on Elm, 930 Elm Avenue: 6 weeks-9 years of age
- First Baptist Church School, 1000 Pine Avenue: K-12

There are no planned schools located within 0.5 mile of the proposed Project improvements.

### Health Facilities

The following health facilities are located within 0.5 mile of the Project limits:

- **St. Mary Medical Center Long Beach:** St. Mary Medical Center is located at 1050 Linden Avenue. The medical center has more than 600 medical physicians; 389 patient rooms; and includes clinics on the campus for children, pregnant women, families and seniors, and specialty care. A full range of acute care services is also provided.
- **Long Beach Comprehensive Health Center:** Long Beach Comprehensive Health Center is located at 1333 Chestnut Avenue. The health center is part of a coastal cluster of clinics run by the Department of Health and Human Services (DHHS) Ambulatory Care Network. It focuses on primary care for adults, families, and children and includes limited specialty and ancillary services on site, as well as urgent care.

### Community Facilities

The City has 1 main library and 11 branch libraries to meet the informational, educational, and recreational needs of its residential and business communities. The main library, located at 101 Pacific Avenue, is within 0.5 mile of the proposed Project improvements. The main library was built in 1976

and is approximately 145,000 square feet in size. The library serves close to 500,000 City residents, as well as 6 schools.

The following MSC are located in the northwestern portion of the community facilities study area:

- **California Recreation Community Center:** California Recreation Community Center is located at 1550 Martin Luther King Jr. Avenue. It serves the adjacent Long Beach Polytechnic High School and neighborhood teens by providing homework assistance, computer labs, weight rooms, game rooms, and study rooms; as well as courses in cooking, drama and theatre, and dance.
- **Long Beach Senior Center:** This 75,000-square-foot senior center is located on 1150 E. 4th Street. It offers activities and series tailored to the interests and needs of adults age 50 and over. The center also includes a gift shop; a thrift shop; and resources, such as meeting rooms, a ballroom, an auditorium, and dining facilities for rent.
- **Jenny Oropeza Community Center:** The center opened in 2001 and was renamed to Jenny Oropeza Community Center in 2011. It is located within Cesar E. Chavez Park at 401 Golden Avenue and provides youth and teen recreation, as well as senior programs.
- **Neighborhood Resource Center:** The Neighborhood Resource Center (NRC) is located at 100 West Broadway, Suite 550. The NRC assists neighborhood and community organizations to increase their effectiveness and improve their neighborhoods by providing library materials, access to computers, information to city services, and materials for neighborhood events.
- **Long Beach Multi-Service Center**: This facility houses 12 public and private partner organizations that collaborate to provide comprehensive assistance for those experiencing homelessness. The MSC averages about 26,000 client visits per year and is the primary facility for persons seeking homeless service assistance in the City. Services range from basic amenities of shower, laundry, mail, and message center to street outreach, van shuttle, transportation, medical care, mental health services, substance abuse treatment, HIV/AIDS services, integrated case management, and housing coordination (City of Long Beach DHHS n.d.).

Other activity centers within the community facilities study area are the Long Beach Aquarium of the Pacific and the South Shore Launch Ramp, which are identified as special use parks within the City's General Plan. These special use parks are considered resources providing unique cultural heritage or educational features that attract a broad audience locally and regionally. The City also has 38 places of worship within the community facilities study area (Figure 2.3-4) that provides community gathering places.

## Community Cohesion

Community cohesion is the degree to which residents have a sense of belonging to their neighborhood; a commitment to the community; and/or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time (Caltrans 1997). Some specific indicators of community cohesion include:

- **Age:** Elderly populations tend to be more active in their community since they have time to become involved. The transit-dependent population comprises the population under age 19 and age 65 or older.
- **Ethnicity:** Ethnic homogeneity is associated with a higher degree of community cohesion.
- **Household Type and Housing Tenure:** Households of two or more people tend to correlate with a higher degree of community cohesion. Housing costs could also indicate how affordable a particular neighborhood may be, which could be a motivating factor for residents to remain or move out of the neighborhood, affecting community cohesion. Households that have been part of a community for a longer period of time tend to correlate with a higher degree of community cohesion.
- **Homeless Population:** Homeless populations tend to be transient and correlate with a lower degree of community cohesion.
- **Transit-Dependent Population:** Residents who walk or use public transportation for travel tend to correlate with a higher degree of community cohesion.

The indicators of community cohesion in the community impacts study area and the applicable local jurisdiction are described in more detail below.

### *Age*

The median age for the City and County are 34.1 and 35.6 years, respectively. At the census tract level, the median age of 10 of the affected census tracts are younger when compared with the City and County median age. The majority of the census tracts also have a higher percentage of residents under the age of 18 when compared with the City (24.23 percent) and County (23.13 percent). Census Tracts 5755, 5758.03, and 5760.01 have higher percentages of residents over 65 years old when compared with the City (10 percent) and County (12 percent).

### *Ethnicity*

As identified in Table 2.3-1, of the total population in the County, the largest group was persons of Hispanic or Latino origin (48 percent) with the next largest group being White (27 percent). The remaining population categories in descending order of proportion were Asian, Black or African American, two or more races, Native Hawaiian/Pacific Islander, other race, and American Indian/Alaskan Native.

In the City, the racial and ethnic distribution is similar to that identified for the County with the largest group being persons of Hispanic or Latino origin (42 percent). The next largest group was White (28 percent) and the remaining population categories in descending order of proportion were Asian, Black or African American, two or more races, Native Hawaiian/Pacific Islander, and American Indian/Alaskan Native.

## Table 2.3-1. Existing Regional and Local Race/Ethnicity Characteristics

| Geographic Area | Hispanic or Latino (of any race) (%) | Not Hispanic or Latino | | | | | | | Total Minority Population (%) |
|---|---|---|---|---|---|---|---|---|---|
| | | White (%) | Black or African American (%) | American Indian or Alaskan Native (%) | Asian (%) | Native Hawaiian/ Pacific Islander (%) | Other Race (%) | Two or More Races (%) | |
| County of Los Angeles | 48 | 27 | 8 | 0.2 | 14 | 0.2 | 0.27 | 2 | 73 |
| City of Long Beach | 42 | 28 | 12 | 0.3 | 13 | 1 | 0 | 3 | 72 |
| ***Community Impacts Study Area Census Tracts*** | | | | | | | | | |
| Census Tract 5753 | 60 | 3 | 12 | 0 | 24 | 0 | 0 | 1 | 97 |
| Census Tract 5754.01 | 81 | 7 | 5 | 0 | 3 | 0 | 0 | 5 | 93 |
| Census Tract 5754.02 | 81 | 6 | 7 | 0 | 5 | 0 | 0 | 0.8 | 94 |
| Census Tract 5755 | 89 | 11 | 0 | 0 | 0 | 0 | 0 | 0.0 | 89 |
| Census Tract 5758.01 | 80 | 10 | 7 | 0 | 3 | 0 | 0 | 0 | 90 |
| Census Tract 5758.02 | 73 | 6 | 6 | 0 | 8 | 2 | 0 | 4 | 94 |
| Census Tract 5758.03 | 63 | 14 | 12 | 0 | 12 | 0 | 0 | 2 | 86 |
| Census Tract 5759.01 | 52 | 19 | 22 | 0 | 6 | 0 | 0 | 1 | 81 |
| Census Tract 5759.02 | 33 | 37 | 19 | 0 | 6 | 0 | 0 | 4 | 63 |
| Census Tract 5760.01 | 17 | 41 | 12 | 1 | 24 | 0 | 0 | 5 | 59 |
| Census Tract 5762 | 52 | 24 | 14 | 0 | 6 | 1 | 0 | 3 | 76 |
| Census Tract 5763.01 | 53.37 | 13 | 18 | 0 | 10 | 1 | 0.1 | 5 | 87 |

## Table 2.3-1. Existing Regional and Local Race/Ethnicity Characteristics

| Geographic Area | Hispanic or Latino (of any race) (%) | Not Hispanic or Latino | | | | | | | Total Minority Population (%) |
|---|---|---|---|---|---|---|---|---|---|
| | | White (%) | Black or African American (%) | American Indian or Alaskan Native (%) | Asian (%) | Native Hawaiian/ Pacific Islander (%) | Other Race (%) | Two or More Races (%) | |
| Census Tract 5763.02 | 61 | 6 | 14 | 0 | 14 | 0 | 0 | 5 | 94 |
| Census Tract 9800.33[a] | —[b] | — | — | — | — | — | — | — | — |

Source: Caltrans 2018c
Notes:
[a] Census Tract 9800.33 is entirely within the POLB and does not contain any residential uses. No census data is available for this census tract.
[b] Census tract data is not available or data may not be available because of the number of sample cases is too small.
POLB=Port of Long Beach

Several of the census tracts in the community impacts study area are more ethnically diverse than the City and County. Census Tracts 5753, 5754.01, 5754.02, 5755, 5758.01, 5758.02, 5758.03, 5759.01, 5762, 5763.01, and 5763.02 have higher percentages of Hispanic/Latino residents than the City and County. Census Tracts 5753 and 5760.01 have higher percentages of Asian residents than the City and County. Census Tract 5760.01 has a higher percentage of American Indian/Alaskan Native, and Census Tract 5758.02 has a higher percentage of Native Hawaiian/Pacific Islander than the City and County. Census Tracts 5759.01, 5759.02, 5763.01, and 5763.02 have higher percentages of Black or African American residents than the City and County. Census Tracts 5754.01, 5758.02, 5759.02, 5760.01, 5763.01, and 5763.02 have higher percentage of residents that identify as two or more races than the City and County. Eleven of the 14 census tracts have a minority population percentage higher than the City's and County's minority population of 72 percent and 73 percent, respectively.

*Homeless*

During site reconnaissance conducted in May 2017, several homeless individuals were observed north of the existing Shoemaker Bridge on Fairbanks Avenue and West Chester Place, as well as along the LARIO Trail. The Long Beach Health Department leads the Long Beach Continuum of Care (CoC), a local planning body funded by U.S. Department of Housing and Urban Development (HUD) that coordinates housing and services funding for homeless families and individuals (City of Long Beach DHHS n.d.). The Long Beach DHHS conducts homeless counts every 2 years with the coordination and help of 400 agency staff and volunteers to assist with a citywide street and service-based count process. A survey was recently completed in January 2017, and within the general community impacts study area, a range of 188 to 270 people were counted (City of Long Beach DHHS 2017).

*Transit-Dependent Population*

According to the FHWA *Environmental Justice Emerging Trends and Best Practices Guidebook* (FHWA 2011), transit-dependent populations are typically described as the population that relies on public transit for travel. This may include the disabled, the elderly, the young, low-income individuals, and households without vehicles available. Transit dependency can be attributed to any combination of the group characteristics listed, making it difficult to identify based on census data because these groups often overlap. For the purpose of this this analysis, the transit-dependent population was calculated by determining the number of person in households that are eligible to drive but lack vehicle access. This was calculated by taking the number of residents aged 15 and over within the geographic areas, subtracting the number of persons living in group quarters (e.g., correctional facilities, nursing homes, mental hospitals, college dormitories, military barracks, group homes, or missions) where driving is not typically required, subtracting the number of vehicles available, and then dividing the result by the population 15 and over. Table 2.3-2 shows the approximate percentage of transit-dependent population for the census tracts, City, and County, which range from 27 to 57 percent.

**Table 2.3-2. Transit-Dependent Populations**

| Geographic Area | Age 15 and Over | Group Quarters Population | Aggregate Number of Vehicles Available | Transit Dependent (%) |
|---|---|---|---|---|
| County of Los Angeles | 8,129,461 | 175,353 | 5,712,747 | 28 |

**Table 2.3-2. Transit-Dependent Populations**

| Geographic Area | Age 15 and Over | Group Quarters Population | Aggregate Number of Vehicles Available | Transit Dependent (%) |
|---|---|---|---|---|
| City of Long Beach | 377,268 | 8,510 | 265,831 | 27 |
| ***Community Impacts Study Area Census Tracts*** | | | | |
| Census Tract 5753 | 3,846 | 5 | 1,749 | 54 |
| Census Tract 5754.01 | 3,985 | 509 | 1,483 | 50 |
| Census Tract 5754.02 | 2,896 | 60 | 1,295 | 53 |
| Census Tract 5755 | 32 | 0 | —[b] | — |
| Census Tract 5758.01 | 1,631 | 23 | 718 | 55 |
| Census Tract 5758.02 | 3,922 | 11 | 1,672 | 57 |
| Census Tract 5758.03 | 2,252 | 16 | 1,040 | 53 |
| Census Tract 5759.01 | 2,663 | 0 | 1,634 | 39 |
| Census Tract 5759.02 | 4,251 | 0 | 2,722 | 36 |
| Census Tract 5760.01 | 4,934 | 147 | 4,206 | 12 |
| Census Tract 5762 | 4,656 | 183 | 2,410 | 44 |
| Census Tract 5763.01 | 3,620 | 216 | 2,090 | 36 |
| Census Tract 5763.02 | 3,032 | 137 | 1,581 | 43 |
| Census Tract 9800.33[a] | — | — | — | — |

Source: Caltrans 2018c

Notes:

[a] Census Tract 9800.33 is entirely within the POLB and does not contain any residential uses. No census data is available for this census tract.

[b] Census tract data is not available or data may not be available because of the number of sample cases is too small.

POLB=Port of Long Beach

### *Household Type and Housing Tenure*

According to the 2011 to 2015 American Community Survey 5-year Estimates (U.S. Census Bureau 2016), there were 174,742 housing units in the City. Of these units, 164,406 units (94 percent) were occupied, and the remaining 10,336 units (6 percent) were vacant. The percentage of vacant housing units varies among the census tracts, from a low of 2 percent of total vacant housing units in Census Tract 5753 to a high of 19 percent total vacant housing units in Census Tract 5760.01.

Based on the data collected, the vast majority of the population in the community impacts study area rents rather than owns. The majority of the census tracts have 85 percent to 96 percent of the population in renter-occupied housing units. As indicated in Table 2.3-3, the community impacts study area has a high proportion of multi-family residential housing when compared with the City (53 percent) and County (42 percent).

**Table 2.3-3. Housing Types**

| Geographic Area | Total Housing Units | Single-Family Units (%) | Multi-Family Units (%) | Mobile Homes (%) |
|---|---|---|---|---|
| County of Los Angeles | 3,476,718 | 50 | 42 | 2 |
| City of Long Beach | 174,742 | 46 | 53 | 1 |
| ***Community Impacts Study Area Census Tracts*** | | | | |
| Census Tract 5753 | 1,413 | 27 | 73 | 0 |
| Census Tract 5754.01 | 1,304 | 11 | 88 | 1 |
| Census Tract 5754.02 | 1,063 | 16 | 84 | 0 |
| Census Tract 5755 | 17 | 47 | 53 | 0 |
| Census Tract 5758.01 | 740 | 20 | 80 | 0 |
| Census Tract 5758.02 | 1,683 | 19 | 79 | 1 |
| Census Tract 5758.03 | 1,327 | 9 | 91 | 0 |
| Census Tract 5759.01 | 1,522 | 11 | 89 | 0 |
| Census Tract 5759.02 | 3,118 | 3 | 97 | 0 |
| Census Tract 5760.01 | 3,903 | 2 | 96 | 0 |
| Census Tract 5762 | 3,108 | 4 | 94 | 2 |
| Census Tract 5763.01 | 1,813 | 11 | 89 | 0 |
| Census Tract 5763.02 | 1,256 | 32 | 68 | 0 |
| Census Tract 9800.33[a] | —[b] | — | — | — |

Source: Caltrans 2018c

Notes:

[a] Census Tract 9800.33 is entirely within the POLB and does not contain any residential uses. No census data is available for this census tract.

[b] Census tract data is not available or data may not be available because of the number of sample cases is too small.

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Median monthly rents within the Community impacts study area fluctuate between low income and market rate levels. As shown in Table 2.3-4, 11 of the census tracts have lower median monthly rents when compared with the City ($1,122.00) and County ($1,231.00) median monthly rents. The low median monthly rents in these census tracts could be attributed to the low-income apartment complexes in the area.

### Table 2.3-4. Housing Characteristics

| Geographic Area | Median Home Value ($) | Median Monthly Rent ($) |
|---|---|---|
| County of Los Angeles | 441,900 | 1,231.00 |
| City of Long Beach | 431,300 | 1,122.00 |
| ***Community Impacts Study Area Census Tracts*** | | |
| Census Tract 5753 | 271,400 | 840.00 |
| Census Tract 5754.01 | 157,700 | 886.00 |
| Census Tract 5754.02 | 235,500 | 955.00 |
| Census Tract 5755 | —[b] | — |
| Census Tract 5758.01 | 359,500 | 863.00 |
| Census Tract 5758.02 | 292,600 | 928.00 |
| Census Tract 5758.03 | 223,000 | 770.00 |
| Census Tract 5759.01 | 217,800 | 944.00 |
| Census Tract 5759.02 | 173,300 | 978.00 |
| Census Tract 5760.01 | 362,300 | 1,790.00 |
| Census Tract 5762 | 252,000 | 872.00 |
| Census Tract 5763.01 | 262,500 | 926.00 |
| Census Tract 5763.02 | 325,000 | 965.00 |
| Census Tract 9800.33[a] | — | — |

Source: Caltrans 2018c

Notes:

[a] Census Tract 9800.33 is entirely within the POLB and does not contain any residential uses. No census data is available for this census tract.

[b] Census tract data is not available or data may not be available because of the number of sample cases is too small.

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As shown in Table 2.3-5, the majority of the residential population within the community impacts study area has moved into their current residence within the last 15 years. On average, fewer than 2 percent of the population moved into the community impacts study area in 2015 or later. The length of housing tenure indicates that the community has been established for a relatively long period of time to enable social connectedness and community cohesion. In addition, the length of established residences indicate that the community impacts study area is not a transient neighborhood with short-term residents.

**Table 2.3-5. Housing Tenure Characteristics**

| Geographic Area | Year Householder Moved Into Unit (%) | | | | | |
|---|---|---|---|---|---|---|
| | 1979 or Earlier | 1980-1989 | 1990-1999 | 2000-2009 | 2010-2014 | 2015 or later |
| County of Los Angeles | 8.4 | 7.4 | 16.1 | 34.1 | 32.7 | 1.2 |
| City of Long Beach | 6.4 | 5.7 | 14.7 | 33.9 | 38.0 | 1.4 |
| ***Community Impacts Study Area Census Tracts*** | | | | | | |
| Census Tract 5753 | 3.3 | 4.6 | 10.9 | 29.5 | 51.0 | 0.6 |
| Census Tract 5754.01 | 1.2 | 1.1 | 1.7 | 50.8 | 44.5 | 0.7 |
| Census Tract 5754.02 | 0.4 | 1.5 | 6.8 | 45.3 | 45.6 | 0.4 |
| Census Tract 5755 | 47.1 | 0.0 | 0.0 | 0.0 | 52.9 | 0.0 |
| Census Tract 5758.01 | 0.0 | 0.6 | 11.1 | 38.0 | 46.0 | 4.3 |
| Census Tract 5758.02 | 0.0 | 0.9 | 6.9 | 32.0 | 58.5 | 1.7 |
| Census Tract 5758.03 | 0.6 | 1.5 | 14.6 | 47.0 | 36.4 | 0.0 |
| Census Tract 5759.01 | 0.4 | 2.9 | 10.1 | 42.7 | 37.7 | 6.2 |
| Census Tract 5759.02 | 0.5 | 3.7 | 5.0 | 30.3 | 57.1 | 3.4 |
| Census Tract 5760.01 | 0.0 | 0.0 | 7.5 | 37.8 | 50.8 | 4.0 |
| Census Tract 5762 | 1.6 | 2.3 | 8.4 | 31.1 | 54.4 | 2.2 |
| Census Tract 5763.01 | 0.0 | 0.5 | 12.8 | 33.6 | 52.6 | 0.6 |
| Census Tract 5763.02 | 0.7 | 0.0 | 8.8 | 43.4 | 1.2 | 1.2 |
| Census Tract 9800.33[a] | —[b] | — | — | — | — | — |

Source: Caltrans 2018c

Notes:

[a] Census Tract 9800.33 is entirely within the POLB and does not contain any residential uses. No census data is available for this census tract.

[b] Census tract data is not available or data may not be available because of the number of sample cases is too small.

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## Economics

**Income and Poverty Level.** The median household income for the community impacts study area ranges from $22,656 to $66,302. Eleven of the 14 community impacts study area census tracts have median household incomes lower than the City's median household income of $52,783. Two of the 14 community impacts study area census tracts have median household incomes lower than the 2017 DHHS poverty guidelines of $24,600 for a family of four. In addition, 11 of the 14 community impacts study area census tracts have higher percentages of households below poverty level when compared with City.

**Sales Tax.** According to the California State Board of Equalization, 2015 taxable sales in the City totaled $4.9 billion, a decrease of approximately 2.7 percent from the previous year. There were approximately 11,168 businesses operating within the City when the report was prepared. The California State Board of Equalization tabulates sales tax revenues by business and jurisdiction quarterly and annually.

The concurrent City's General Fund revenue for the 2015 fiscal year shows all taxable retail sales in the City were charged 9 percent. This amount included 1.75 percent to the County and 6.50 percent was retained by the state. Another 1 percent, known as the Bradley-Buns sales tax, is returned to the City; however, with the passing of Proposition 57 in 2004, the state has "flipped" 0.25 percent of the Bradley-Burns sales tax to the state to repay a $15 billion deficit in financial bonds known as the Economic Recovery Bonds (ERB). Therefore, only 0.75 percent is currently returned to the City by the state to use for general and transportation purposes. Table 2.3-6 shows the distribution of sales tax revenues generated in the City.

**Table 2.3-6. 2014 Sales Tax Revenue in City of Long Beach**

| Jurisdiction | Tax Rate Distribution (%) | City of Long Beach Taxable Sales ($) | Total Sales Tax Revenue ($) | Average Sales Tax/Business ($)[a] |
|---|---|---|---|---|
| City of Long Beach | 0.75 | 4,999,872,212 | 37,499,042 | 3,358 |
| County of Los Angeles | 1.75 | 4,999,872,212 | 87,497,764 | 7,835 |
| State of California | 6.50 | 4,999,872,212 | 342,991,694 | 30,712 |

Source: Caltrans 2018c

Notes:

[a] Average sales tax/business is based on 11,168 total permits (total number of permits calculated by averaging 2015 Quarter 1 through Quarter 4 number of outlets.).

Measure R is a 30-year half-cent sales tax on each dollar of taxable sales made in the County to fund new transportation projects and programs. The funds collected are distributed as follows: 35 percent to new rail and bus rapid transit projects; 3 percent to Metrolink projects; 2 percent to Metro Rail system improvement projects; 20 percent to carpool lanes, highways and other highway-related improvements; 5 percent to rail operations; 20 percent to bus operations; and 15 percent for City-sponsored improvements. In November 2016, Measure M, which is an extension and update to Measure R, was passed. Measure M is a half-cent sales tax enacted 180 days after January 1, 2017, and will increase to 1 percent when Measure R expires July 1, 2039. Measure M will increase the half-cent sales tax another half-cent, which will provide approximately 7 million dollars in new revenues per year to the City to improve local roadways. Measure M increases the 15 percent local return rate to 17 percent to provide funding for the proposed Project, which has been recognized by Metro as an EAP with priority for funds allocated to the I-710 projects.

**Property Tax.** Property taxes in the City are collected by the County and apportioned to the incorporated cities in the County, including the City. Property taxes are levied on the assessed value of privately owned property (the amount levied is approximately 1 percent of the assessed property value). For fiscal year 2014-2015, the state assessed value of City property taxes for the 2015-2016 fiscal year totaled $821 million.

The actual revenues from property taxes for the 2015 fiscal year amounted to $151.1 million. According to the City's General Fund report for the 2015 fiscal year (City of Long Beach 2015b), on average, the City only received 22 percent of property taxes paid by the City's property owners in non-redevelopment designated areas of the City. Approximately 23 percent of the $95.2 million within the City's General Fund revenue is sourced from local property taxes, which includes secured real property tax and unsecured person property tax, net of refunds. Therefore, property tax is a major source of revenue for important City services, which include police, fire, public works, recreation, and library services.

**Employment.** Table 2.3-7 provides a summary of employment status among the community impacts study area, City, and County. According to the 2011 to 2015 American Community Survey 5-year Estimates (U.S. Census Bureau 2016), unemployment status within the community impacts study area census tracts ranges from 30 to 46 percent. When compared with the City's 34 percent of people not in the labor force, eight of the census tracts have higher percentage of the population that is unemployed.

### Table 2.3-7. Employment Status

| Geographic Area | Population (Age 16 and Over) | In Labor Force (%) | Not in Labor Force (%) |
|---|---|---|---|
| County of Los Angeles | 7,997,089 | 64 | 36 |
| City of Long Beach | 370,403 | 66 | 34 |
| ***Community Impacts Study Area Census Tracts*** | | | |
| Census Tract 5753 | 3,694 | 63 | 37 |
| Census Tract 5754.01 | 3,892 | 64 | 37 |

## Table 2.3-7. Employment Status

| Geographic Area | Population (Age 16 and Over) | In Labor Force (%) | Not in Labor Force (%) |
|---|---|---|---|
| Census Tract 5754.02 | 2,856 | 67 | 34 |
| Census Tract 5755 | 32 | 59 | 41 |
| Census Tract 5758.01 | 1,600 | 58 | 42 |
| Census Tract 5758.02 | 3,806 | 63 | 37 |
| Census Tract 5758.03 | 2,231 | 54 | 46 |
| Census Tract 5759.01 | 2,635 | 66 | 34 |
| Census Tract 5759.02 | 4,212 | 63 | 37 |
| Census Tract 5760.01 | 4,934 | 70 | 30 |
| Census Tract 5762 | 4,656 | 59 | 41 |
| Census Tract 5763.01 | 3,615 | 67 | 33 |
| Census Tract 5763.02 | 2,888 | 69 | 31 |
| Census Tract 9800.33[a] | —[b] | — | — |

Source: Caltrans 2018c

Notes:

[a] Census Tract 9800.33 is entirely within the POLB and does not contain any residential uses. No census data is available for this census tract.

[b] Census tract data is not available or data may not be available because of the number of sample cases is too small.

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**Economic Sectors and Labor Force Characteristics.** In the City, manufacturing; retail trade; professional, scientific, management, and administrative and waste management services; educational services, and health care and social assistance; and arts, entertainment, recreation, and accommodation and food services educational services; manufacturing; and professional, scientific, and management services were the largest economic sectors (U.S. Census Bureau 2016). Table 2.3-8 provides economic sector data showing the number of employees in the affected census tracts, City, and County for each economic sector.

**Table 2.3-8. Economic Statistics (Number of Employees)**

| Economic Sectors | Community Impacts Study Area Census Tracts | | | | | | | | | | | | | | City of Long Beach | County of Los Angeles |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5753 | 5754.01 | 5754.02 | 5755 | 5758.01 | 5758.02 | 5758.03 | 5759.01 | 5759.02 | 5760.01 | 5762 | 5763.01 | 5763.02 | 9800.33[a] | | |
| Agriculture, Forestry, Fishing, and Hunting and Mining | 63 | 7 | 0 | 0 | 0 | 63 | 0 | 9 | 0 | 0 | 59 | 9 | 8 | 0 | 1,090 | 23,963 |
| Construction | 124 | 187 | 174 | 4 | 91 | 240 | 85 | 146 | 103 | 43 | 134 | 95 | 53 | 0 | 11,667 | 264,911 |
| Manufacturing | 188 | 274 | 220 | 0 | 185 | 342 | 95 | 138 | 142 | 199 | 213 | 212 | 175 | 0 | 22,371 | 476,733 |
| Wholesale Trade | 1 | 251 | 103 | 0 | 29 | 86 | 33 | 68 | 54 | 78 | 13 | 74 | 93 | 0 | 7,710 | 164,447 |
| Retail Trade | 182 | 192 | 202 | 0 | 96 | 127 | 251 | 112 | 174 | 177 | 94 | 231 | 313 | 0 | 22,620 | 496,377 |
| Transportation and Warehousing, and Utilities | 165 | 184 | 47 | 0 | 60 | 111 | 73 | 161 | 111 | 413 | 156 | 225 | 91 | 0 | 15,119 | 247,032 |
| Information | 49 | 0 | 10 | 0 | 16 | 31 | 6 | 48 | 47 | 189 | 69 | 6 | 0 | 0 | 5,306 | 202,539 |
| Finance, Insurance, Real Estate, and Rental and Leasing | 56 | 0 | 60 | 0 | 10 | 115 | 78 | 89 | 187 | 550 | 102 | 102 | 48 | 0 | 14,006 | 291,123 |

## Table 2.3-8. Economic Statistics (Number of Employees)

| Economic Sectors | Community Impacts Study Area Census Tracts | | | | | | | | | | | | | | City of Long Beach | County of Los Angeles |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5753 | 5754.01 | 5754.02 | 5755 | 5758.01 | 5758.02 | 5758.03 | 5759.01 | 5759.02 | 5760.01 | 5762 | 5763.01 | 5763.02 | 9800.33[a] | | |
| Professional, Scientific, Management, and Administrative and Waste Management Services | 307 | 169 | 213 | 4 | 58 | 217 | 88 | 147 | 361 | 571 | 666 | 255 | 187 | 0 | 25,298 | 577,740 |
| Educational Services, and Health Care and Social Assistance | 303 | 301 | 132 | 0 | 117 | 273 | 122 | 311 | 507 | 695 | 421 | 440 | 432 | 0 | 49,021 | 956,389 |
| Arts, Entertainment, Recreation, and Accommodation and Food Services | 290 | 367 | 238 | 0 | 86 | 377 | 197 | 146 | 357 | 226 | 426 | 361 | 193 | 0 | 23,900 | 498,731 |
| Other Services, except Public Administration | 134 | 148 | 168 | 11 | 30 | 77 | 75 | 86 | 122 | 30 | 184 | 134 | 90 | 0 | 11,265 | 288,830 |
| Public Administrative | 22 | 39 | 38 | 0 | 17 | 35 | 0 | 46 | 161 | 114 | 74 | 26 | 0 | 0 | 7,927 | 146,650 |

Source: Caltrans 2018c

Notes:

[a] Census Tract 9800.33 is entirely within the POLB and does not contain any residential uses. No census data is available for this census tract.

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### Conclusion

The community impacts study area and community facilities study area are primarily divided into transportation and port facilities and a downtown area with commercial and some high-density residential and older residential neighborhoods. The nearby parks and recreational facilities, transit facilities, and entertainment and tourist uses contribute to a healthful, productive, and aesthetically and culturally pleasing environment.

According to several indicators of community cohesion for the affected census tracts and neighborhoods described in this section, including the long tenure (15 years) of many of the residents in the community impacts study area, low number of people (less than 2 percent) moving into the area in 2015 or later, a high degree of ethnic homogeneity, a high percentage of persons either age 65 and over or under age 19, and a large number of residents who are transit dependent, there is a high degree of community cohesion within each of the affected census tracts in the City.

## 2.3.1.3 Environmental Consequences

The analysis in this section focuses on potential impacts related to community character and cohesion resulting from the proposed Project. Impacts on the community character and cohesion relate to changes in land use, neighborhoods, visual, economy, or community facilities and services. In analyzing community character and cohesion, the following questions were used in assessing whether the proposed Project would result in adverse or beneficial effects:

- What features, services, and/or amenities in this city contribute to the overall community character and cohesiveness of the City? What is the overall character of the City?
- Would the proposed Project result in adverse effects that would result in degradation of the community character of the entire City or parts of the City?
- Would the proposed Project result in adverse effects that would contribute to the degradation of the existing cohesiveness of the City?
- Would the proposed Project result in beneficial effects that might positively affect the overall community character and/or cohesiveness of the City?

### Temporary Impacts

*Alternative 1 (No Build)*

There would be no construction under Alternative 1 (No Build); therefore, no adverse temporary construction-related community impacts would occur.

*Alternatives 2 and 3 (Design Options A and B)*

Construction activities associated with Alternatives 2 and 3 (Design Options A and B) would result in temporary direct impacts on community character and cohesion; minority, elderly, and low-income groups that are comprised of transit-dependent populations; and public access due to road detours and access restrictions.

The proposed Project would result in direct impacts on public transit, including increased service times for LBT bus, Passport Shuttle, and/or Dial-A-Lift services. Bus stops in the vicinity of the proposed improvements along Anaheim Street, 3rd Street, 6th Street, 7th Street, Pacific Avenue, Long Beach Boulevard, Atlantic Avenue, and Broadway Avenue from Cesar E. Chavez Park to Magnolia Avenue may also experience an increase in service times. Bus stops in the vicinity of the proposed

improvements along Ocean Boulevard and 6th Street may be temporarily relocated during construction.

Additionally, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in a temporary loss of approximately 20 out of 72 available parking spaces in a parking lot located along Broadway (between the Ocean Boulevard on-ramp to NB W Shoreline Drive and Magnolia Avenue) and a temporary loss of street parking along 6th and 7th Streets during construction. It is anticipated that the remaining number of available spaces within the parking lot, and surrounding parking garages and parking lots will temporarily provide adequate parking to accommodate for the continued function of the adjacent hotel and businesses that utilize the parking lot along Broadway. Temporary impacts on street parking along 6th and 7th Streets would be minimized through a Transportation Management Plan (TMP), identified as Project Feature, PF-3 (Section 2.5, Traffic and Transportation/Pedestrian and Bicycle Facilities). All these impacts would be temporary and cease after completion of construction. Once construction is complete, temporary parking impacts that would result in a temporary loss of parking would be restored. Thus, impacts would not result in temporary substantial adverse effects on access, circulation, and parking during construction.

Although temporary interruptions to public transit and surrounding communities, including the minority, elderly, and low-income groups within these communities, would occur as a result of construction activities, it is not anticipated that these impacts would temporarily separate residences from other community facilities, result in substantial changes to quality of life, or result in increasing urbanization or isolation. The community impacts study area is primarily built-out in nature, already offers a multitude of transportation modes to navigate through the Project limits, and would include elements of a TMP (identified as Project Feature PF-3) that would assist in minimizing these impacts to the extent feasible.

Construction activities would also cause traffic delays for local residents, businesses, community facilities, schools, and commuters and cause short-term noise impacts in some local neighborhoods. Alternatives 2 and 3 (Design Options A and B) have the potential to result in temporary impacts on access along Anaheim Street, Golden Avenue, Maine Avenue, Daisy Avenue, Magnolia Avenue, Pacific Avenue, Long Beach Boulevard, Atlantic Avenue, 3rd Street, 7th Street, 6th Street, and West Broadway Avenue. However, a TMP included as a Project feature would assist in managing traffic congestion and provide for community outreach and signage to affected residents and businesses in the event temporary closures or detours are warranted during construction activities. With the inclusion of TMP under Project Feature PF-3, substantial disruptions to the majority of local neighborhoods in the community impacts study area and community facilities study area would not be anticipated. Specifically for Thomas A. Edison Elementary, the entrance to the staff parking lot along 7$^{th}$ Street will be relocated along 6$^{th}$ Street, and improvements to drop off locations around the school would be implemented. Continued access to the staff parking lot during construction would be available, and improvements to the entrance would be conducted during the summer when school is not in session. Coordination with LBUSD has been conducted on July 19, 2019 and November 8, 2019. However, additional coordination during final design would be required to finalize the location of the drop offs and timing of construction per Minimization Measure CI-3.

As discussed in Section 2.1, Land Use, portions of Cesar E. Chavez Park would be temporarily unusable to the public during realignment of local streets and the bridge. However, the park facilities, including playgrounds and the community center located at the park, would remain open during construction. In addition, to ensure the safety of construction workers and trail users, it may be necessary to temporarily close the LARIO Trail crossings at SR-710 for 2 out of the 3-year construction

period and/or local streets during construction of Alternatives 2 and 3 (Design Options A and B). A TMP per Project Feature PF-3 was included to address these temporary impacts on trail access during construction. Since access to community facilities would be maintained throughout construction and detours would be provided to ensure access and connectivity to recreational resources and community services within the area through a TMP identified as Project Feature PF-3, the Project would not separate residences from community facilities. Further, with the implementation of Minimization Measures LU-1 and PR-11 through PR-19 (Section 2.1, Land Use), no adverse temporary impacts on community character and cohesion would be anticipated.

During site reconnaissance conducted in May 2017, several homeless individuals were observed just north of the existing Shoemaker Bridge on Fairbanks Avenue and West Chester Place, as well as along the LARIO Trail. The construction of the bridge replacement and associated roadway improvements would result in the removal of homeless populations from the Project area, where construction would occur. Since impacts on this population would occur prior to and during Project construction, temporary and permanent impacts would occur; a more detailed discussion is provided below.

### Permanent Impacts

*Alternative 1 (No Build)*

Alternative 1 (No Build) would not involve the replacement of the Shoemaker Bridge and its associated connectors or realign local streets in this area. Therefore, no permanent impacts on the community would occur.

*Alternatives 2 and 3 (Design Options A and B)*

Alternatives 2 and 3 (Design Options A and B) would replace Shoemaker Bridge and realign local roadways almost entirely within City right-of-way (ROW), with the exception of a partial acquisition, aerial easement, and TCEs from the Los Angeles Flood Control District (LACFCD). A small partial acquisition and a TCE may be required from an existing parking lot to complete the downtown street modifications along West Broadway. However, this acquisition would not prevent the operation of the existing land use but would require conversion of a nominal amount of land use for transportation purposes. No business or residential displacements would occur.

Project implementation would increase traffic volumes along some local streets as a result of the proposed roadway reconfigurations that would shift or redistribute traffic; however, the Project is not expected to increase total volumes once construction is complete. Under the future build conditions, the majority of roadways are forecasted to operate at acceptable LOS E or better. Therefore, bus operations are not expected to be adversely impacted.

Due to planned roadway improvements, the proposed Project would result in a permanent loss of 58 street parking spaces along 6th Street and 7th Street (between Nylic Court and Lime Avenue) and along Magnolia Avenue (between Ocean Boulevard and West Broadway). Additionally, 173 street parking spaces along 7th Street would be restricted during AM and PM peak under Measure TR-1. Although there would be a loss in available street parking, improvements along these streets would improve safety particularly along 6th and 7th Streets by slowing down traffic and providing new connections to recreational resources throughout the Project limits.

Along 6th and 7th Streets is a mix of residential, religious, office, and commercial, and school uses and along Magnolia are governmental uses. However, most of these uses have their own dedicated parking spaces, parking lots, or nearby public parking facilities within walking distance. There are

4 public parking structures and lots located along 6th Street and 7th Streets, between Pacific Avenue and Locust Avenue, with a total of 1,860 available parking spaces. These lots are located approximately mid-point of the most affected portions of 6th Street and 7th Street, with two of the structures offering free parking for the first 2 hours, and all parking structures providing daily and monthly parking rates. Furthermore, most of these uses already have dedicated parking spaces or parking lots, such as the Civic Center Project, which includes an underground parking structure with 509 available parking spaces and another parking structure with 725 available parking spaces to serve the new city hall and proposed mix-use. Thus, with the amount of parking still available and the implementation of TR-1 it is not anticipated that the permanent loss of street parking would result in permanent substantial adverse impacts on adjacent local businesses and residential uses.

In addition, as discussed in Section 2.1, Land Use, Alternatives 2 and 3 (Design Options A and B) would impact approximately 2.51 acres for Design Option A and 2.39 acres for Design Option B within Cesar E. Chavez Park. However, existing NB West Shoreline Drive would be reclaimed for the park, resulting in a net increase in approximately 3.2 acres for Design Option A and 3.33 acres for Design Option B in available park space. Under Alternative 2 (Design Options A and B), 2.54 acres of additional park space would be available as a result of reuse of a portion of the existing bridge. However, the parcels affected by the partial acquisition along West Broadway Avenue and the conversion of transportation uses to park uses within Cesar E. Chavez Park are both located within an area the City has designated as mixed use within its General Plan Land Use Element, with no sub division of specific land uses within. Therefore, no changes to the City's General Plan Land Use Element would be required, and no adverse permanent impacts would occur as a result of Alternatives 2 and 3 (Design Options A and B).

Alternatives 2 and 3 (Design Options A and B) would also accommodate the Drake-Chavez Greenbelt Project Master Plan, which would enhance Drake and Cesar E. Chavez Park and benefit the local neighborhoods, including the Willmore neighborhood, which is adjacent to Drake Park.

Removal of the 6th Street off-ramp would result in the removal of two murals located on the side facing the park. The loss of these murals would adversely impact community character. However, to lessen the impact on the community, Caltrans and the City would determine if they can be relocated prior to the ramp removal. This requirement is specified in Minimization Measure CI-1.

While improvements would realign roadways and/or modify access, Alternatives 2 and 3 (Design Options A and B) are intended to benefit the community and improve existing community character and cohesion and overall connectivity from areas of Long Beach west of the LA River to downtown Long Beach by providing increased vehicular and pedestrian accessibility and connectivity. The Shoemaker Bridge and affected roadways already exist, and Alternatives 2 and 3 (Design Options A and B) would improve the operation of the bridge, connectors, and local roadways by eliminating structural deficiencies and increasing usable park area at Cesar E. Chavez Park, which would allow for additional safe and efficient non-motorized and transit options for location communities, including minority, elderly, and low-income communities within the surrounding area. Because Alternatives 2 and 3 (Design Options A and B) would replace an existing bridge, improve roadways, add park acreage, allow for greater park access, and not result in substantial land use impacts on existing facilities, community character and cohesion would not be adversely affected. Thus, the Project would allow improved access to existing recreational and community facilities, improving the overall quality of life for City residents and contribute in decreasing urbanization or isolation in the area. Members of the public also had the opportunity to provide feedback on the Project and input on potential context sensitive solutions during the public circulation of the Draft EIR/EA.

As stated above, during site reconnaissance, several homeless individuals were observed within the Project limits. The construction of the bridge replacement and associated roadway improvements would not create or support other large development projects that would separate the homeless population within the Project limits from the rest of the community. The City of Long Beach DHHS provides assistance to homeless individuals and families within the City. It also coordinates with non-profit agencies, Long Beach Police Department (LBPD) Quality of Life Unit, Department of Mental health, and private entities to provide support and reduce homelessness through outreach, case management, and permanent housing placement. Before and during Project construction, if homeless encampments are present within the Project limits, the City of Long Beach DHHS will implement an Outreach and Engagement Plan, per Minimization Measure CI-2.

#### 2.3.1.4 Avoidance, Minimization, and/or Mitigation Measures

In addition to Project Feature PF-3 and Minimization Measure TR-1 in Section 2.5, Traffic and Transportation/Pedestrian and Bicycle Facilities, and Minimization Measure LU-1 in Section 2.1, Land Use, Minimization Measure CI-1 will help to avoid and minimize impacts on community character.

**CI-1** At least 60 days prior to completion of final design, the City of Long Beach (City) Planning Department will determine whether portions or all of the two affected murals along the 6th Street on-ramp (“A History of Long Beach” and “Community History Mural”) will be restored, relocated, and/or repainted after Shoemaker Bridge Replacement Project (Project) completion. The City will coordinate with the muralist regarding potential funding and mitigation sites.

Minimization Measure CI-2 is proposed to address temporary and permanent impacts associated with impacts on the homeless population within the Project limits:

**CI-2** Before and during Shoemaker Bridge Replacement Project (Project) construction, if homeless encampments are present within the Project limits, the City of Long Beach (City) Department of Health and Human Services (DHHS) will implement an Outreach and Engagement Plan, which will include, but is not limited to, the following best management practices (BMP):

- Coordinated outreach
  - Three-day notification to vacate property
- Identify interdisciplinary teams (mental health, veterans, law enforcement, etc.)
- Create a targeted proactive response
- Conduct assessments for:
  - Medical, psychiatric, safety, and necessities
  - Basic needs
  - Emergency temporary and permanent housing, and relocation assistance
- Provide housing, services and support through:
  - Linkage to continuum of care (CoC), obtaining documents, and establishing income

- Coordinate with organizations (Mental Health America, The Children's Clinic, US Veterans, Goodwill, etc.)
- Provide subsidies, deposits, housing location assistance, and employment and education services

Minimization Measure CI-3 is proposed to address temporary impacts associated with impacts on schools as a result of Alternatives 2 and 3 (Design Options A and B):

**CI-3** During the final design phase, and prior to construction, the City of Long Beach (City) will coordinate with Long Beach Unified School District (LBUSD) to finalize the timing of construction for improvements to the staff parking lot entrance and to determine the location of the new drop off locations.

## 2.3.2 Relocations and Real Property Acquisition

### 2.3.2.1 Regulatory Setting

Caltrans's Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act), and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of the RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please see Appendix C for a summary of the RAP.

All relocation services and benefits are administered without regard to race, color, national origin, persons with disabilities, religion, age, or sex. Please see Appendix B for a copy of Caltrans's Title VI Policy Statement.

### 2.3.2.2 Affected Environment

This section is based on the CIA report (Caltrans 2018c) and RIM (Caltrans 2018d); provides a summary on whether the Project would require the relocation of housing or businesses; and identifies indirect effects from relocations, such as changes in employment resulting from business relocations.

A full property acquisition is defined as an area in which occupants of residential and nonresidential units would be displaced by the Project and would be expected to permanently relocate. A partial acquisition is when a small area of property is acquired, but full use of the property and dwelling structures, including multi-family units, would remain. Generally, partial acquisitions consist of portions of a back, side, or front yard; landscaping; or parking.

### 2.3.2.3 Environmental Consequences

#### Temporary Impacts

*Alternative 1 (No Build)*

Under Alternative 1 (No Build), no construction is anticipated; therefore, no TCEs would be required, and no property impacts would occur.

*Alternatives 2 and 3 (Design Options A and B)*

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would not require any TCEs on any residential properties; however, the proposed Project would require TCEs within non-residential properties. No temporary displacement of residents or businesses would occur, and a

disruption to the current function of the properties would not occur. In addition, no temporary or permanent relocation of personal property would occur. Therefore, no temporary displacements that could result in the relocation of a resident or business are anticipated. Table 2.3-9 summarizes the total number of affected parcels, their land use designations, and type of ROW impact.

**Table 2.3-9. Summary of Impacts on Parcels by Land Use Designation**

| Non-Residential Property Type | Partial Acquisition/ROE Permits | TCE and Permanent Easement | TCE only |
|---|---|---|---|
| Residential | — | — | — |
| Waterfront | 2 | 3 | 1 |
| Waterfront and Open Space | 1 | -- | 3 |
| Open Space | 14 | 9 | 12 |
| Open Space and Regional Serving Facility | 1 | — | 2 |
| Regional Serving Facility | 1 | — | — |
| Downtown | 1 | — | — |
| Downtown and Open Space | 1 | 1 | — |
| Freeway | — | — | 1 |
| Total Number of Parcels Potentially Affected | 21 | 13 | **19** |

Source: Caltrans 2018c and 2018d

Notes:
TCE=temporary construction easement; ROE=right-of-entry

Of the 53 affected parcels, 13 would require TCEs and permanent easements, and 19 parcels would require only TCEs under Alternatives 2 and 3 (Design Options A and B). As previously stated, none of the affected parcels would result in the relocation or displacement of residents or non-residential properties or in a change of the property's existing use and function. After construction, the land utilized would be restored to its existing condition. Therefore, direct impacts during construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not be adverse.

### Permanent Impacts

*Alternative 1 (No Build)*

Alternative 1 (No Build) would not involve the replacement of the Shoemaker Bridge and its associated connectors or realign local streets in this area. Therefore, no property impacts would occur.

*Alternatives 2 and 3 (Design Options A and B)*

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would not require any partial or full acquisitions of any residential properties. However, there are partial acquisitions anticipated for non-residential properties. No permanent displacement of residents or non-residential properties or disruption to the current function of the properties would occur.

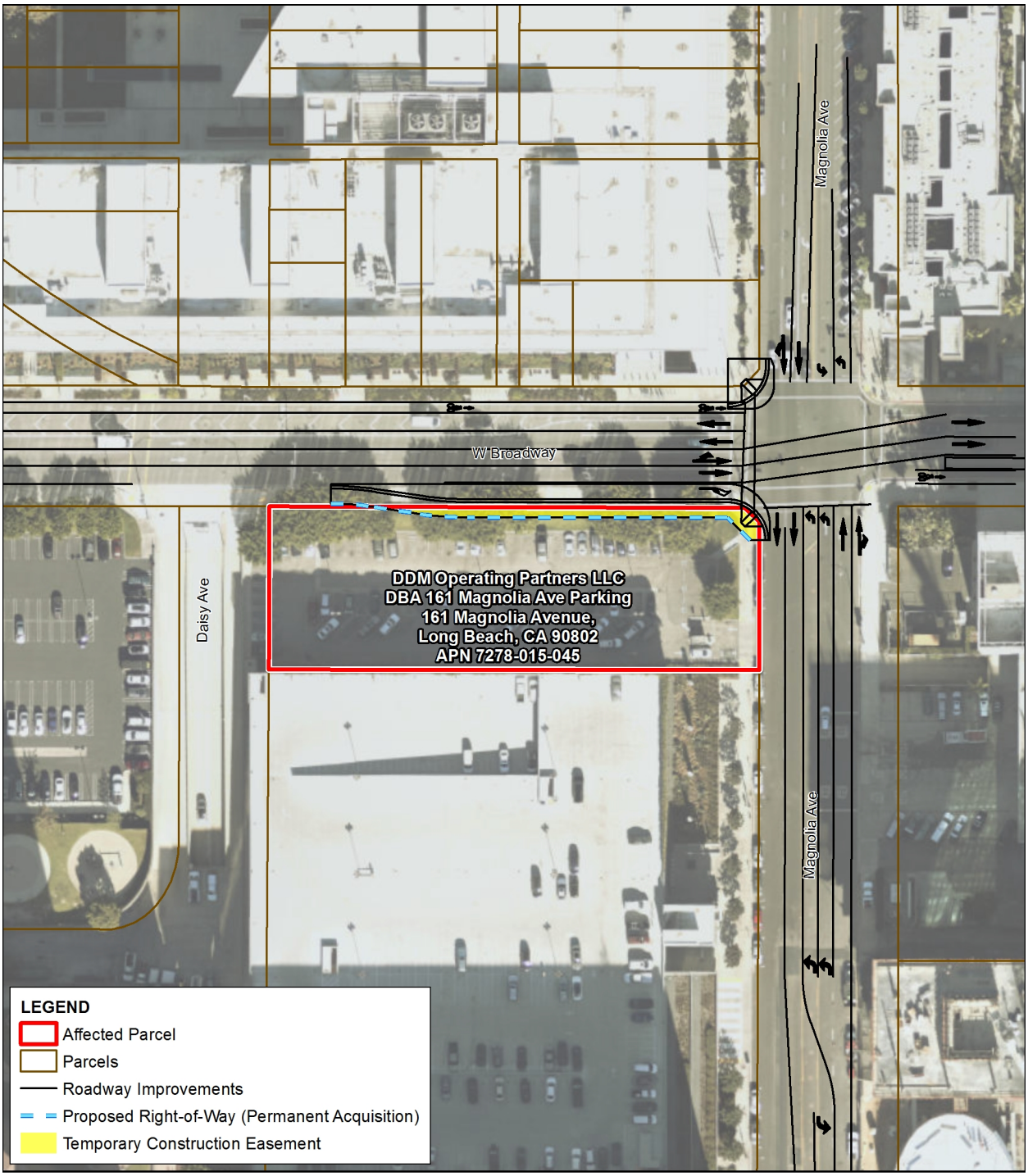
In addition, no temporary or permanent relocation of personal property would occur. As shown in Table 2.3-9, of the 53 affected parcels, 21 would require partial acquisition, and 13 would require TCEs and permanent easements under Alternatives 2 and 3 (Design Options A and B). As previously stated, none of the affected parcels would result in the relocation or displacement of residents or commercial establishments or in a change in the property's existing use and function. Seventeen of the 21 non-residential parcels requiring partial acquisition are City/government-owned. The use of City-/government-owned parcels would be coordinated through ROE and/or encroachment permits from the City and would not be subject to partial acquisition.

Figure 2.3-5 through Figure 2.3-8 show the remaining four privately owned non-residential parcels that would require partial acquisitions, TCEs, and permanent easements under Alternatives 2 and 3 (Design Options A and B). Of these parcels, one parcel is designated for Downtown land use, one parcel is designated for Waterfront land use, and two parcels are designated for Open Space land use.

No physical structures are located within the impacted portions of these parcels; therefore, partial acquisition of these parcels would not result in any non-residential displacements where existing businesses are present. Therefore, the proposed Project under Alternative 2 and 3 (Design Options A and B) would not require the permanent displacement or relocation of residential owners/tenants, and would not require the relocation of residents needing comparable relocation housing or community facilities (e.g., schools, health-care, public transportation).

The majority of improvements and construction associated with Alternatives 2 and 3 (Design Options A and B) would occur within the existing Caltrans and City ROW. Partial acquisitions and an easement would be required adjacent private properties and LACFCD property. However, it is anticipated that land acquisitions required for Alternatives 2 and 3 (Design Options A and B) would not temporarily affect existing use or function of these properties. All property acquisition and relocation under Alternatives 2 and 3 (Design Options A and B) would be handled in accordance with the Uniform Act, as identified in Minimization Measure CI-4.

As discussed in Section 2.3.1.3, the proposed Project would result in a permanent loss in street parking along 6th Street and 7th Street (between Nylic Court and Lime Avenue) and Magnolia Avenue (between Ocean Boulevard and West Broadway). However, most of the adjacent residential units and businesses along these roadways have dedicated parking, parking lots, or nearby public parking facilities within walking distance. Therefore, it is not anticipated that residents or businesses would be forced to relocate due to the loss of business or loss of access as a result of the permanent impacts to street parking. With the implementation of Minimization Measure CI-4, no permanent adverse impacts as a result of property acquisition would occur under Alternatives 2 and 3 (Design Options A and B).




0 Feet 50

DDM Operating Partners LLC
DBA 161 Magnolia Ave Parking
161 Magnolia Avenue,
Long Beach, CA 90802
APN 7278-015-045

07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.3-5. Properties Requiring Right-of-Way Acquisition (Assessor's Parcel Number 7278-015-045)**

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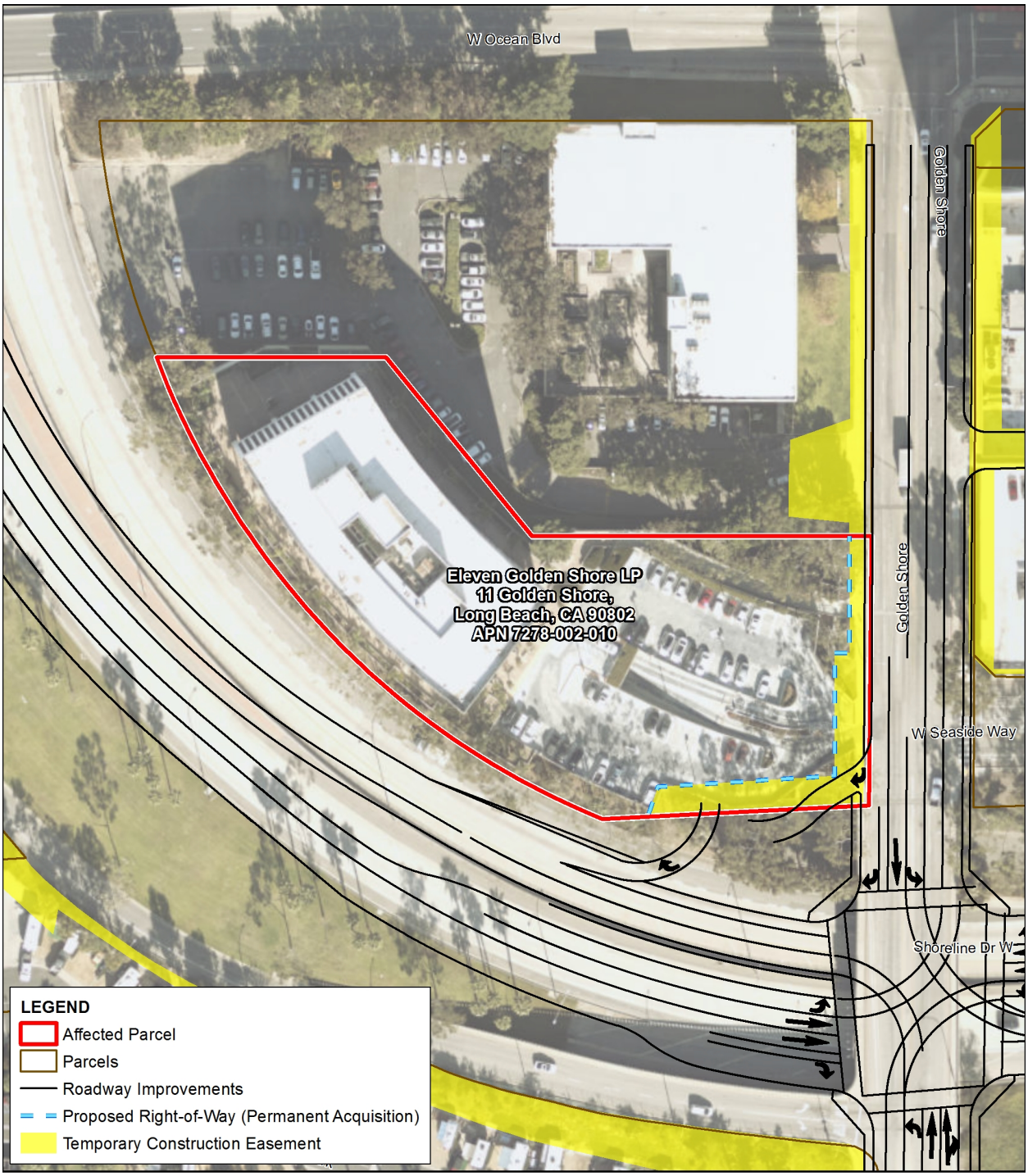


Eleven Golden Shore LP
11 Golden Shore,
Long Beach, CA 90802
APN 7278-002-010

07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.3-6. Properties Requiring Right-of-Way Acquisition (Assessor's Parcel Number 7278-002-010)**

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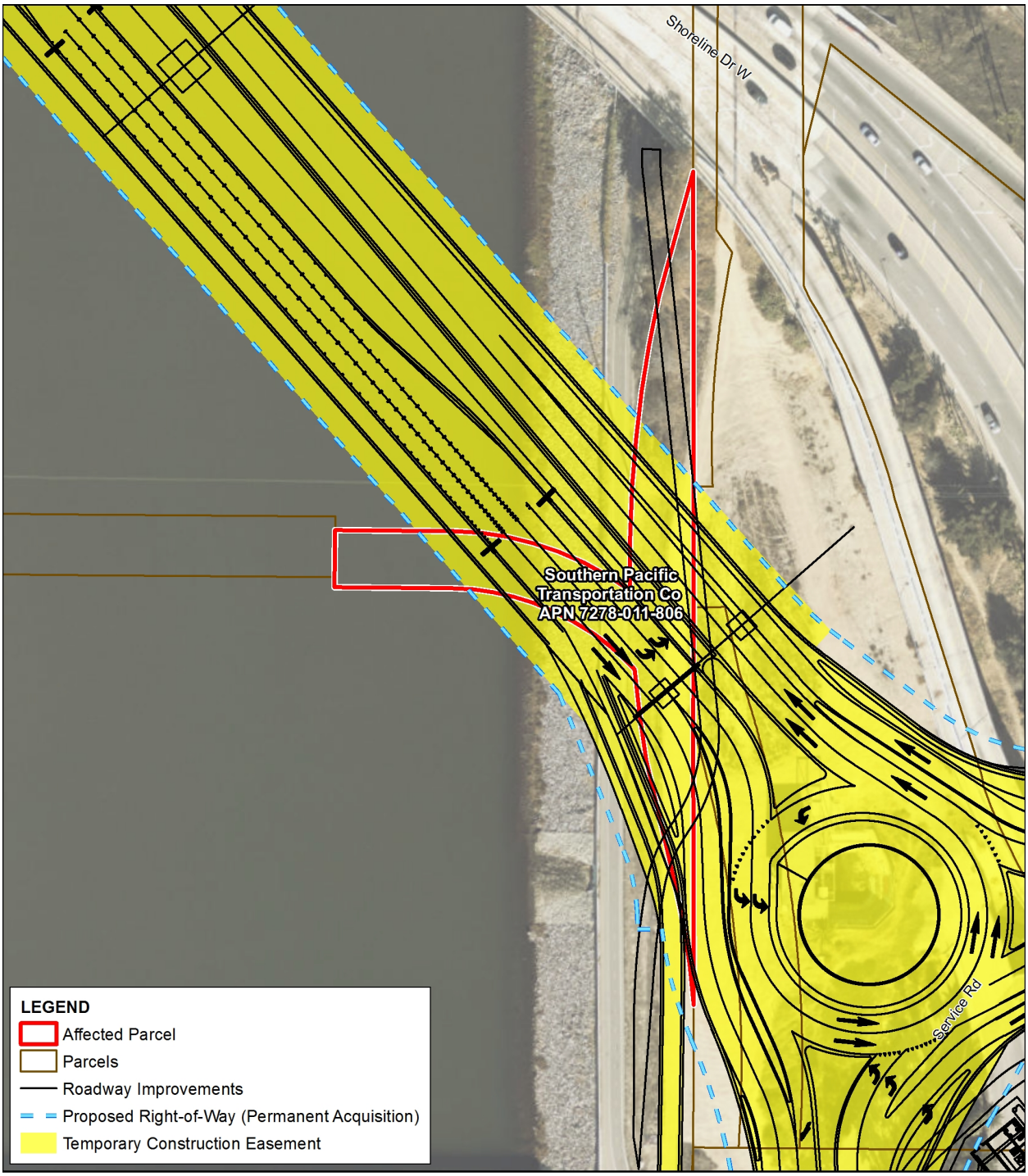


Southern Pacific Transportation Co
APN 7278-011-806

07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.3-7. Properties Requiring Right-of-Way Acquisition (Assessor's Parcel Number 7278-011-806)**

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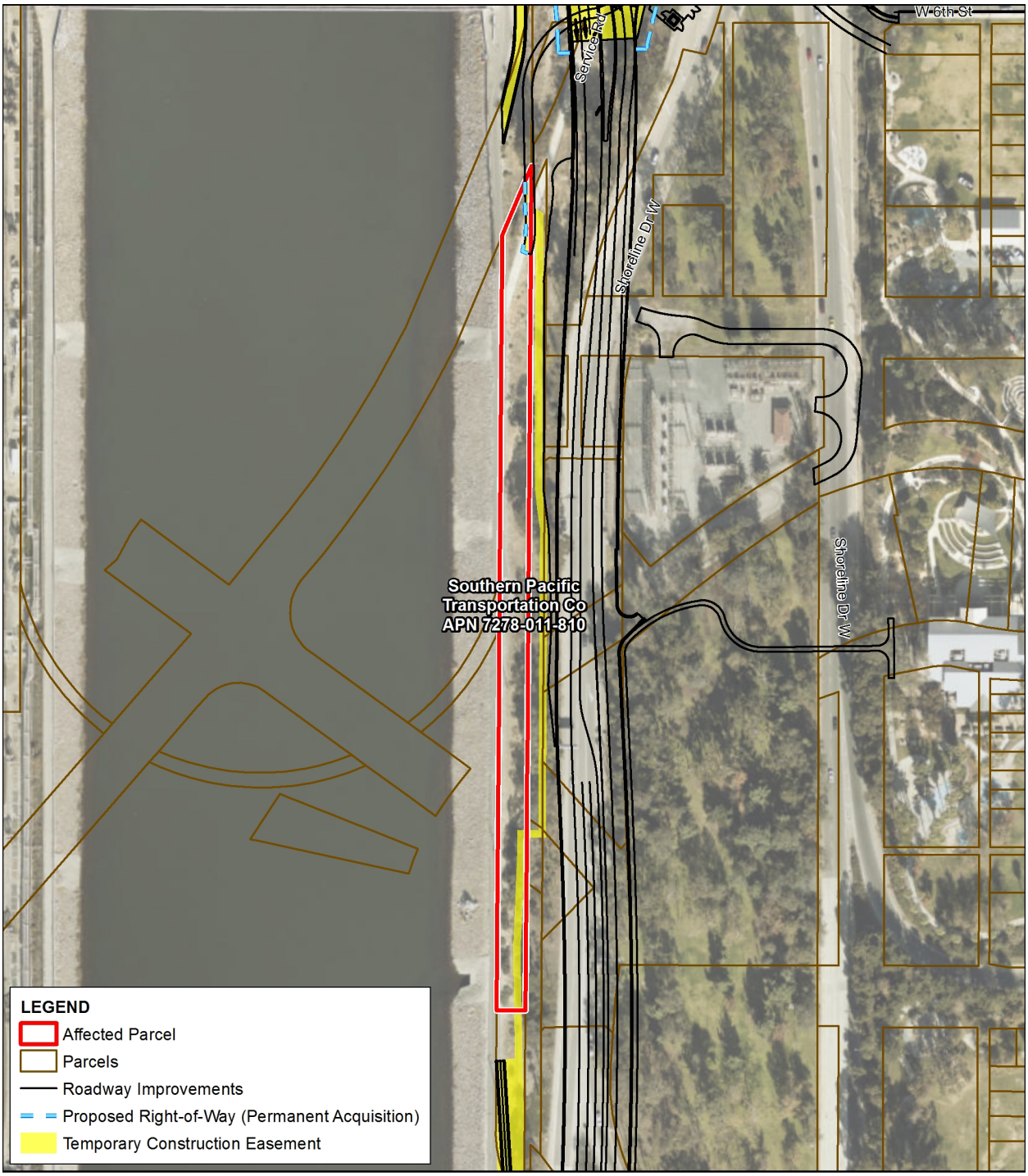


Southern Pacific Transportation Co
APN 7278-011-810

07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.3-8. Properties Requiring Right-of-Way Acquisition (Assessor's Parcel Number 7278-011-810)**

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#### 2.3.2.4 Avoidance, Minimization, and/or Mitigation Measures

No full acquisition or displacement would occur under Alternatives 2 and 3 (Design Options A or B). Minimization measures are provided below to reduce impacts relating to partial acquisitions. Implementation of Minimization Measure CI-4 will help to avoid and minimize impacts on community character.

**CI-4** Prior to final design, the City of Long Beach (City) will ensure that all property acquisition will be handled in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) (Public Law 91-646, 84 Statue 1894). The Uniform Act mandates that certain relocation services and payments by the City be made available to eligible residents, businesses, and nonprofit organizations displaced by its projects. The Uniform Act provides for uniform and equitable treatment by federal or federally assisted programs of persons displaced from their homes, businesses, or farms, and establishes uniform and equitable land acquisition policies.

### 2.3.3 Environmental Justice

#### 2.3.3.1 Regulatory Setting

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed by President William J. Clinton on February 11, 1994. This EO directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the DHHS poverty guidelines. For 2017, this was $24,600 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964, and related statutes, have also been included in this Project. Caltran's commitment to upholding the mandates of Title VI is demonstrated by its Title VI Policy Statement, signed by the Director, which can be found in Appendix B of this document.

#### 2.3.3.2 Affected Environment

The environmental justice (EJ) analysis was conducted using census tract level information from the 2011 to 2015 American Community Survey 5-year Estimates (U.S. Census Bureau 2016). Potential EJ impacts are detected by locating minority populations and low-income populations in and near the Project area, calculating their percentage in the area relative to a reference population, and determining whether there would be adverse impacts. The reference community is typically a county, city, or town and is called the community of comparison (COC). The community that overlaps the Project limits is called the affected community (AC). The AC needs to be contained within the COC. For purposes of this analysis, the COC is considered to be the City, and the AC is considered to be the community impacts study area census tracts. The following analysis provides a comparison of five measures with which to evaluate EJ:

- Percentage of non-White residents
- Percentage of Hispanic residents (the U.S. Census Bureau considers Hispanic or Latino ethnicity distinct from racial background)
- Percentage of population below the poverty level

- Median household income
- Transit-dependent population

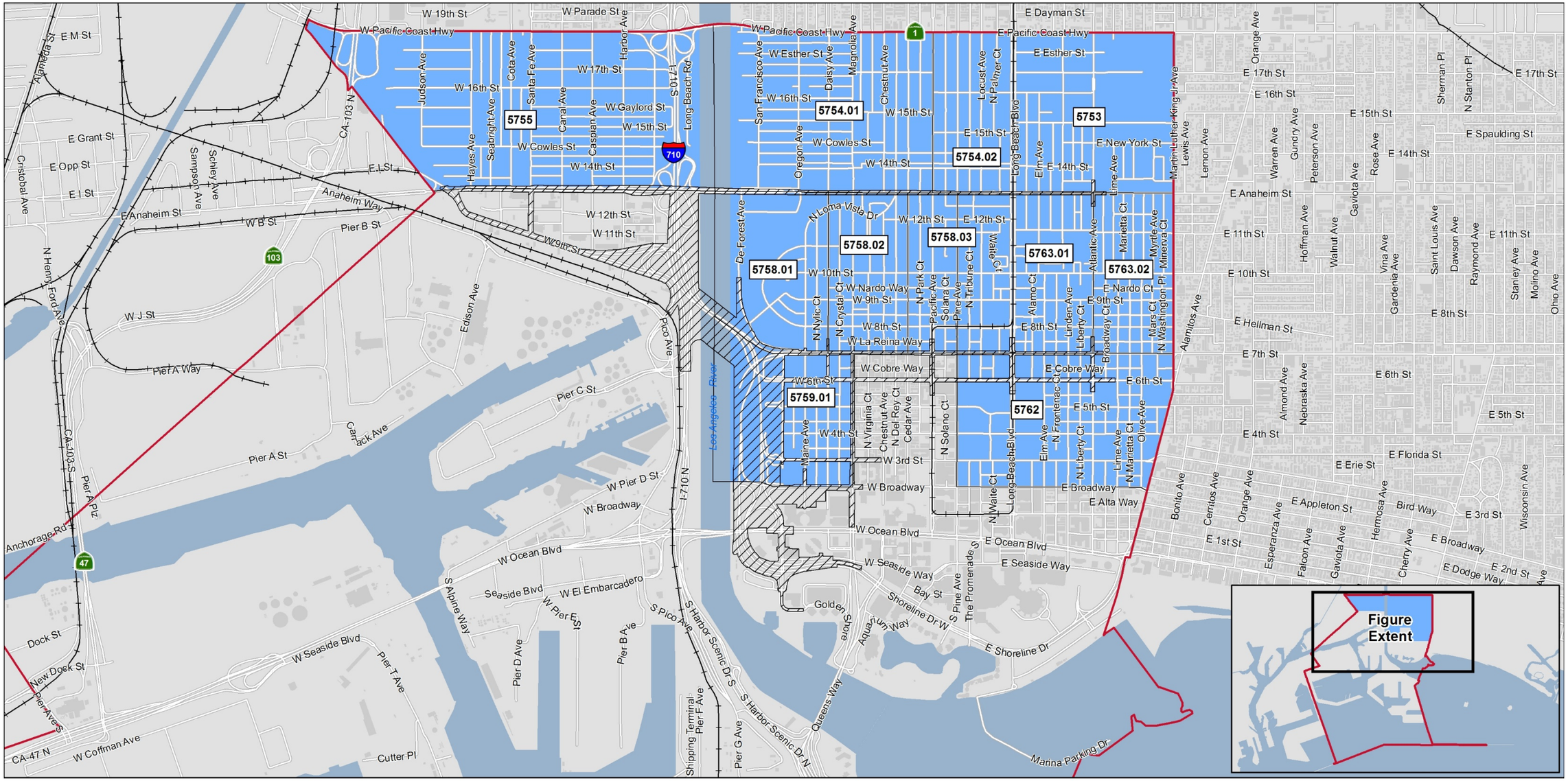
In addition, as identified by U.S. Department of Transportation (USDOT) and FHWA, a "low-income household" is defined as "a person whose household income is at or below the DHHS Poverty Guidelines." As previously stated, the 2017 DHHS Poverty Guidelines for a family of four is $24,600. For purposes of this analysis, low-income populations in the affected area occur when the median household income for an AC is below the DHHS Poverty Guideline income of $24,600.

As shown on Figure 2.3-9, the EJ area analyzed included all census tracts having any part that lie within the community impacts study area.

EJ areas are defined as census tract populations that meet either of the following criteria:

- The percentage of minority persons in any census tract that is more than 10 percent greater than the average of the surrounding area; minority persons were defined as all individuals not identified as White only in the 2011 to 2015 American Community Survey 5-year Estimates (U.S. Census Bureau 2016), including those identified as Hispanic or Latino
- The census track has a median household income below the DHHS Poverty Guideline income of $24,600; low-income persons were defined as those individuals with household incomes below the DHHS poverty threshold

As depicted on Figure 2.3-9, the majority of the community impacts study area contains populations that meet EJ criteria of minority or low-income.




**LEGEND**

- Project Limits
- Community Impacts Study Area
- Environmental Justice Population

0 Feet 1,500

Note: Full extent of Census Tract 9800.33 is not shown since no community resources or populations reside in the census tract.

07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.3-9. Environmental Justice Population**

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### Non-White Population

The percentage of non-White, non-Hispanic residents was calculated by subtracting the number of White residents (one race only, as identified by the 2011 to 2015 American Community Survey 5-year Estimates [U.S. Census Bureau 2016]) from the non-Hispanic population. Census Tracts 5759.02 and 5760.01 have a lower percentage of non-White population than the City and County averages and the remaining census tracts, which also have higher percentage of non-White populations than the City and County averages.

### Hispanic Population

As shown in Table 2.3-9, Census Tracts 5759.02 and 5760.01 have a lower percentage of Hispanic population than the City and the County. The remaining census tracts have higher percentage of Hispanic populations than the City and County averages.

### Poverty Level

Census Tract 5760.01 is the only Census Tract with a lower percentage of persons living below the poverty level than the City and the County. Census Tracts 5758.03 and 5762 both have populations that are earning less than the DHHS Poverty Income of $24,600.

### Median Household Income

All census tracts within the community impacts study area, with the exception of Census Tract 5760.01, have lower median household income than either the City or the County. Census Tract 5760.01 represents a higher median household income than the City or the County.

### Transit-Dependent Population

As shown in Table 2.3-2, Census Tracts 57533, 5754.01, 5754.02, 5758.01, 5758.02, 5758.03, 5759.01,5762, and 5763.02 have transit-dependent population percentages of 40 percent and higher. Census Tracts 5758.02 and 5763.01 have percentages of transit-dependent population percentages similar to the City and County. Census Tract 5760.01 has much lower percentage of transit-dependent population than the other census tracts, the City, or the County.

### Conclusion

The previously defined local benchmarks were used to analyze the data for potential EJ impacts. Potential EJ impacts are detected by locating minority populations and low-income populations in and near the Project area, calculating their percentage in the area relative to a reference population (City), and determining whether there would be adverse impacts.

As shown in Table 2.3-10, 10 of the census tracts (5753, 5754.01, 5754.02, 5755, 5758.01, 5758.02, 5758.03, 5759.01, 5763.01, and 5763.02) have been identified as having minority EJ populations, and two census tracts (5758.03 and 5762) have been identified as having low-income EJ populations. Only two census tracts (5759.02 and 5760.01) are not identified as having EJ populations because they have a lower percentage of residents that are minority and low-income than the COC.

## Table 2.3-10. Environmental Justice Minority and Low-Income Populations in Community Impacts Study Area

| Geographic Area | Minority Populations | | | Low-Income Populations | | |
|---|---|---|---|---|---|---|
| | Percent (%) Non-White/Minority | Percent Minority in AC > 110% of COC (79.07%) | Minority EJ Population | Median Household Income ($) | Median Household Income Below DHHS Poverty Income of $24,600? | Low-Income EJ Population? |
| ***COC*** | | | | | | |
| City of Long Beach | 72 | N/A | N/A | 52,783 | N/A | N/A |
| ***AC*** | | | | | | |
| Census Tract 5753 | 97 | Yes | Yes | 30,828 | No | No |
| Census Tract 5754.01 | 93 | Yes | Yes | 30,204 | No | No |
| Census Tract 5754.02 | 94 | Yes | Yes | 32,500 | No | No |
| Census Tract 5755 | 89 | Yes | Yes | —[b] | N/A | N/A |
| Census Tract 5758.01 | 90 | Yes | Yes | 26,569 | No | No |
| Census Tract 5758.02 | 94 | Yes | Yes | 28,150 | No | No |
| Census Tract 5758.03 | 86 | Yes | Yes | 23,176 | Yes | Yes |
| Census Tract 5759.01 | 81 | Yes | Yes | 37,425 | No | No |
| Census Tract 5759.02 | 63 | No | No | 29,768 | No | No |
| Census Tract 5760.01 | 59 | No | No | 66,302 | No | No |
| Census Tract 5762 | 76 | No | No | 22,656 | Yes | Yes |
| Census Tract 5763.01 | 87 | Yes | Yes | 31,868 | No | No |

**Table 2.3-10. Environmental Justice Minority and Low-Income Populations in Community Impacts Study Area**

| | Minority Populations | | | Low-Income Populations | | |
|---|---|---|---|---|---|---|
| Geographic Area | Percent (%) Non-White/Minority | Percent Minority in AC > 110% of COC (79.07%) | Minority EJ Population | Median Household Income ($) | Median Household Income Below DHHS Poverty Income of $24,600? | Low-Income EJ Population? |
| Census Tract 5763.02 | 94 | Yes | Yes | 36,715 | No | No |
| Census Tract 9800.33[a] | 0 | N/A | N/A | 0 | N/A | N/A |

Source: Caltrans 2018c

Notes:

[a] Census Tract 9800.33 is entirely within the Port of Long Beach and does not contain any residential uses. No census data is available for this census tract.

[b] Census tract data is not available or data may not be available because of the number of sample cases is too small.

AC=affected community; COC=community of comparison; DHHS= Department of Health and Human Services; EJ=environmental justice

### 2.3.3.3 Environmental Consequences

#### Temporary Impacts

*Alternative 1 (No Build)*

Alternative 1 (No Build) would not replace Shoemaker Bridge or realign local connectors; therefore, it would not result in impacts on the community, including EJ populations.

*Alternative 2 and 3 (Design Options A and B)*

As shown in Table 2.3-10, 10 of the census tracts (5753, 5754.01, 5754.02, 5755, 5758.01, 5758.02, 5758.03, 5759.01, 5763.01, and 5763.02) have been identified as having minority EJ populations, and two census tracts (5758.03 and 5762) have been identified as having low-income EJ populations. As discussed, the Project under Alternatives 2 and 3 (Design Options A and B) would result in disruptions to the community, including minority and low-income populations, during construction.

As discussed further in Section 2.13, Air Quality, emissions from construction equipment powered by gasoline and diesel engines are anticipated and would include carbon monoxide (CO), nitrogen oxide ($NO_x$), volatile organic compounds (VOC), directly-emitted particulate matter broken down into particles of 10 micrometers (microns) or less ($PM_{10}$) and particulate matter broken down into particles of 2.5 micrometers (microns) or less ($PM_{2.5}$), and toxic air contaminants (TAC), such as diesel particulate matter (DPM). Construction activities are expected to increase traffic congestion in the area, resulting in increases in emissions from traffic during the delays. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Temporary air quality impacts associated with construction activities as a result of vehicle and equipment emissions and earth-disturbing activities would be reduced by the inclusion of Project Features PF-60 through PF-74. Although these Project features are anticipated to reduce construction-related emissions, these reductions cannot be quantified at this time. The Project features that would assist in managing impacts on air quality during construction activities are provided below:

**PF-60** During construction, the City's Resident Engineer will ensure that the construction contractor complies with the Caltrans' Standard Specifications in Section 14-9 (2018).

- Section 14.9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.

**PF-61** During construction, the City's Resident Engineer or designated contractor will ensure that water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions.

**PF-62** During construction, the City's Resident Engineer or designated contractor will ensure that a soil binder will be spread on any unpaved roads used for construction purposes and on all Project construction parking areas.

**PF-63** During construction, the City's Resident Engineer or designated contractor will ensure that trucks will be washed as they leave the ROW, as necessary, to control fugitive dust emissions.

**PF-64** During construction, the City's Resident Engineer or designated contractor will ensure that construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by CCR Title 17, Section 93114.

**PF-65** Prior to construction, the City's Resident Engineer or designated contractor will ensure that a dust control plan will be developed, documenting sprinkling, temporary paving, speed limits, and timely revegetation of disturbed slopes, as needed, to minimize construction impacts on existing communities.

**PF-66** During construction, the City's Resident Engineer or designated contractor will ensure that equipment and materials storage sites will be located as far away from residential and park uses as practicable. Construction areas will be kept clean and orderly.

**PF-67** Prior to construction, the City's Resident Engineer or designated contractor will ensure that environmentally sensitive areas will be established near sensitive air receptors. Within these areas, construction activities involving the extended idling of diesel equipment or vehicles will be prohibited, to the extent feasible.

**PF-68** During construction, the City's Resident Engineer or designated contractor will ensure that track out reduction measures, such as gravel pads at Project access points to minimize dust and mud deposits on roads affected by construction traffic, will be used.

**PF-69** During construction, the City's Resident Engineer or designated contractor will ensure that all transported loads of soils and wet materials will be covered before transport or adequate freeboard (space from the top of the material to the top of the truck) will be provided to minimize emission of dust during transportation

**PF-70** During construction, the City's Resident Engineer or designated contractor will ensure that dust and mud deposited on paved, public roads due to construction activity and traffic will be promptly and regularly removed to reduce particulate matter emissions.

**PF-71** During construction, the City's Resident Engineer or designated contractor will ensure, to the extent feasible, that construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times..

**PF-72** During construction, the City's Resident Engineer or designated contractor will ensure that mulch will be installed or vegetation planted as soon as practical after grading to reduce windblown particulate matter in the area.

**PF-73** During construction, the City's Resident Engineer or designated contractor will ensure that all trucks that are to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.

**PF-74** During construction, the City's Resident Engineer will ensure that the contractor will adhere to Caltrans' Standard Specifications for Construction (Sections 14.9-02).

In addition, Measures AQ-1 and AQ-2 (Section 2.13, Air Quality) will also assist in minimizing impacts on air quality during construction activities.

As discussed further in Section 2.14, Noise, there would be two types of short-term noise impacts during construction, which include noise from construction crew commutes and the transport of construction equipment and materials to the Project site. A high single-event noise exposure potential at a maximum level of 87 A-weighted decibel (dBA) maximum noise level ($L_{max}$) from trucks passing at 50 feet would occur. However, the projected construction traffic would be short term. Therefore, short-term construction-related worker commutes and equipment transport noise impacts would not be adverse.

The second type of short-term noise impact is related to noise generated during roadway construction. The site preparation phase, which includes grading and paving, tends to generate the highest noise levels because the noisiest construction equipment is earth-moving equipment. The worst-case composite noise level at the nearest residence during this phase of construction would be 91 dBA equivalent noise level ($L_{eq}$) (at a distance of 50 feet from an active construction area). Receptors within 50 feet of the Project construction area may be exposed to short-term noise higher than 91 dBA $L_{eq}$ generated by construction activities along the Project alignment.

Temporary noise and vibration impacts associated with construction activities from vehicle and equipment operations and earth-disturbing activities would be reduced by the inclusion of Project Features PF-75 through PF-79. The Project features that would assist in managing impacts from noise during construction activities are provided below:

**PF-75** During construction, the City's Resident Engineer will ensure that the contractor will use an alternative warning method instead of a sound signal unless required by safety laws.

**PF-76** During construction, the City's Resident Engineer will ensure that the contractor will equip all internal combustion engines with the manufacturer-recommended muffler and will not operate any internal combustion engine on the job site without the appropriate muffler.

**PF-77** During construction, the City's Resident Engineer or designated contractor will ensure that all construction equipment, fixed or mobile, will be equipped with properly operating and maintained mufflers consistent with manufacturers' standards during all Project site excavation and grading on site.

**PF-78** During construction, the City of Long Beach's Resident Engineer or designated contractor will ensure that all stationary construction equipment will be placed so that emitted noise is directed away from noise-sensitive locations nearest the Project site.

**PF-79** During construction, the City of Long Beach's Resident Engineer or designated contractor will ensure that construction vehicle staging areas and equipment maintenance areas will be located as far as possible from sensitive receptor locations.

In addition, Measure N-1 (Section 2.14, Air Quality) would also assist in minimizing impacts on the surrounding community from noise during construction activities.

The inclusion of the South Coast Air Quality Management District (SCAQMD) and Caltrans standard measures as Project Features PF-75 through PF-79, identified above, and the implementation of Minimization Measures AQ-1, AQ-2, and N-1, indirect temporary impacts on the community from air quality and noise during construction activities would not be anticipated.

Following construction, temporary impacts associated with construction would cease. Residents would also be required to take alternate routes during construction, as discussed above; however, only a small number of residents in the adjacent neighborhoods would experience an increase in traffic during construction, as the majority of the Project limits contain transportation and industrial uses. Inclusion of the TMP, Project Feature PF-3, would assist in managing impacts on traffic and circulation during construction activities and is provided below:

**PF-3** The TMP will include, but is not limited to, the following measures:

- A Maintenance of Traffic (MOT) Plan will be established that provides at least one lane of traffic in each direction on roads during construction.
- Local access will be maintained to businesses and residential properties at all times.
- Pedestrian access points to businesses, parks, and schools within the construction area will be maintained throughout the construction period, where feasible. If usual access points are lost, provisions for alternative access to the affected parcels will be made. Appropriate signage will be placed to inform pedestrians and bicyclists of the alternative access to local businesses. Disabled access will be maintained during construction where feasible.
- During construction, appropriate signage and advanced warning will be developed and displayed to direct pedestrian, bicycle, and vehicular traffic alternate routes.
- During construction, the City will establish an information field office near the construction site. The field office will serve the following purposes:

- Provide information pertaining to construction and lane closures;
- Notify property owners, residences, and businesses of major construction activities (e.g., utility relocation/disruption, rerouting of delivery trucks);
- Provide information via the City website.

Furthermore, the implementation of Minimization Measure LU-1 (Section 2.1, Land Use) will minimize indirect temporary impacts on the surrounding communities as a result of construction-related impacts on traffic and circulation.

A larger percentage of minority and low-income residents live within the affected census tracts; however, the proposed Project would not result in direct temporary adverse impacts on EJ populations with the implementation of the minimization measures and Project features, as discussed above. Additionally, the Project would not temporarily displace any residents, HUD units, and businesses on a temporary basis.

Based on the analysis above, the proposed Project would not negatively impact the local economy, access to jobs, and community services. With the application of the minimization measures identified above, all community impacts are not considered adverse, and the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not cause disproportionately high and adverse temporary effects on any minority or low-income populations, as per EO 12898 regarding EJ.

### Permanent Impacts

*Alternative 1 (No Build)*

Alternative 1 (No Build) would result in no physical changes to the community. This alternative would not result in permanent impacts on the community, including EJ populations.

*Alternatives 2 and 3 (Design Options A and B)*

As discussed above, 10 of the census tracts (5753, 5754.01, 5754.02, 5755, 5758.01, 5758.02, 5758.03, 5759.01, 5763.01, and 5763.02) have been identified as having minority EJ populations, and two census tracts (5758.03 and 5762) have been identified as having low-income EJ populations. However, disruptions to the community related to Alternatives 2 and 3 (Design Options A and B) would result from the construction phase of the Project, as discussed above. The Project is not a capacity-enhancing transportation Project and proposes improvements to existing infrastructure that would implement improvements to safety and efficiency. Additionally, Cesar E. Chavez Park is currently spilt into two main sections by NB West Shoreline Drive with no pedestrian crossings connecting the western portion of the park to the eastern portion. With the closure of NB West Shoreline Drive and the 3rd Street I-710 North connection, and their incorporation into Cesar E. Chavez Park, the park would become one continuous open space. This would provide safe access for park users and students who utilize the crosswalk on 3rd Street. Furthermore, a residential community is located east of Golden Avenue, across from Cesar E. Chavez Park. Operation of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would provide safer access to park facilities, as well as improve the aesthetic values for nearby residences. This may promote a stronger “sense of place,” thereby enhancing the community’s identity, as the Project would promote accessibility and remove roadways that create unsafe and physical divisions within the community impacts study area (Caltrans 2018c). The Project would not result in increased vehicle emissions during the operational period, nor would it permanently displace any residents or businesses within the study area.

Based on the above discussion analysis, Alternatives 2 and 3 (Design Options A and B) will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of EO 12898. No further EJ analysis is required.

In accordance with 23 CFR 772, noise abatement is considered where noise impacts are predicted in areas of frequent human use that would benefit from a lowered noise level. Although the Project fully fulfills the basic requirements of 23 CFR 772, additional design features may be incorporated during final design of the bridge to further reduce potential noise impacts. With the implementation of Mitigation Measure N-2, no adverse effects from noise are anticipated.

#### 2.3.3.4 Avoidance, Minimization, and/or Mitigation Measures

With the inclusion of the Project features, such as a TMP (Section 2.5, Traffic and Transportation/Pedestrian and Bicycle Facilities) and SCAQMD and Caltrans standard measures (Section 2.13, Air Quality), and Minimization Measure LU-1 (Section 2.1, Land Use), impacts related to traffic circulation and access during construction would be minimized. In addition, Minimization Measures AQ-1 and AQ-2 (Section 2.13, Air Quality) and N-1 (Section 2.14, Noise) would reduce potential air quality and noise impacts within the community during construction.

In order to locate and quantify potential noise impacts due to the Project bridge replacement, design elements identified within the DEA Draft Noise Notes for Bridge Projects will be implemented within the bridge design to the extent feasible. With the implementation of Mitigation Measure N-2 (Section 2.14, Noise), permanent noise impacts within the community during operation of the Project.

# 2.4 Utilities and Emergency Services

## 2.4.1 Affected Environment

This section analyzes the potential impacts of the Project on utilities and emergency services. This section is based on information from the CIA (Caltrans 2018c) and the City of Long Beach General Plan, Public Safety Element (City of Long Beach 1975).

### 2.4.1.1 Utilities

Major utility operations that serve the City include water, gas, telephone, and electricity. The City provides both water and gas services to City residents and businesses, while other utilities services are provided by the providers identified in Table 2.4-1.

**Table 2.4-1. Utility Service Providers**

| Utility | Provider |
|---|---|
| Water | Long Beach Water District |
| Wastewater | LACSD |
| Gas | Long Beach Oil and Gas |
| | Southern California Gas |
| Electricity | SCE |
| | City Light & Power |
| | Covanta Long Beach Renewable Energy |

Source: Long Beach Chamber of Commerce 2017
Notes:
LACSD=Los Angeles County Sanitation District; SCE=Southern California Edison

Utility facilities located within the proposed Project limits include the 6th Street Pump Station, an electrical substation, and Occidental Oil (Oxy Oil) facilities, and the 6th Street Pump Station, which is owned by the City and located just off De Forest Avenue, near the existing Shoemaker Bridge.

According to the Public Safety Element of the City's General Plan, Southern California Edison (SCE) maintains an electrical power generating and distributing network through the City. This network includes overhead transformers and distribution lines, as well as underground utility facilities where surface or aboveground facilities are not required. A SCE-owned and -operated substation is located within the Project limits between SB and NB West Shoreline Drive, northwest of Jenny Oropeza Community Center in Cesar E. Chavez Park.

Oxy Oil drilling operations are also located within the Project limits. Oxy Oil has obtained long-term leases from the City on a property located on the west bank of the LA River to operate and connect several pipelines, extraction/injection wells, and tanks to off-site storage facilities. Access to the Oxy

Oil facilities between Ocean Boulevard and Anaheim Street is provided between the LA River and the SR-710 via Pico Avenue.

In addition, a partial acquisition and an aerial easement is required for the proposed Project under Alternatives 2 and 3 (Design Options A and B) for the construction of columns or bridge abutments for the new Shoemaker Bridge within the LACFCD property located within the LA River and associated levees.

### 2.4.1.2 Fire Protection

Fire protection services that serve the area within the proposed Project limits are provided through a fire service district that is administered and staffed by the Long Beach Fire Department (LBFD). LBFD provides fire and emergency medical response, marine safety and lifeguards, fire prevention, hazardous materials spill response, and hazardous materials regulatory enforcement services to the area within the Project limits.

LBFD consists of four bureaus (Administration, Operations, Fire Prevention, and Support Services) and maintains a staff of approximately 450 fire personnel. The Operations Bureau includes the Emergency Medical Services (EMS) Division and the Marine Safety Division. Two LBFD fire stations that serve the area within the Project limits are located within 0.5 mile of the Project. These fire stations are listed below:

- **Fire Station Number (No.) 1**: located at 100 Magnolia Avenue
- **Fire Station No. 3**: located at 1222 Daisy Avenue

### 2.4.1.3 Law Enforcement

LBPD is responsible for police patrol and protection services in the area within the Project limits. There are no police stations within the Project limits. The area within the Project limits is currently serviced by the LBPD West Patrol Division, located at 1835 Santa Fe Avenue, approximately 0.74 mile north of the Project limits.

The California Highway Patrol (CHP) has jurisdiction on highways and freeways within the state of California, including SR-710 within the Project limits. There are no CHP offices within the Project limits; however, the closest CHP office is located at 19700 Hamilton Avenue in the City of Torrance, located approximately 6 miles northwest from the proposed Project limits.

### 2.4.1.4 Health Facilities

There are two health facilities within 0.5 mile of the Project limits (Figure 2.3-2), which are listed below:

- **St. Mary Medical Center Long Beach:** located at 1050 Linden Avenue (approximately 0.2 mile southwest of the Anaheim Street and Atlantic Avenue intersection within the Project limits)
- **Long Beach Comprehensive Health Center:** located at 1333 Chestnut Avenue (north of Anaheim Street, adjacent to the Project limits)

## 2.4.2 Environmental Consequences

### 2.4.2.1 Temporary Impacts

#### Alternative 1 (No Build)

Under Alternative 1 (No Build), the Project would not be implemented and would not result in construction activities. As such, no temporary adverse impacts on utilities and emergency services would occur.

#### Alternatives 2 and 3 (Design Options A and B)

A partial acquisition and an aerial easement is required for the proposed Project under Alternatives 2 and 3 (Design Options A and B) for the construction of columns or bridge abutments for the new Shoemaker Bridge within the LACFCD property located within the LA River and associated levees.

As a result, during construction activities, Alternatives 2 and 3 (Design Options A and B) would require the removal or relocation of overhead SCE transmission lines. Design, construction, and inspection of utilities that would result in the relocation of utilities would be undertaken in accordance with City requirements. The City will coordinate with the affected service provider in each instance to ensure work is conducted during times of low demand and in accordance with the appropriate requirements and criteria.

With the inclusion of Project Features PF-1 and PF-2 (referenced in Table 1-5, Chapter 1, and identified below) as part of the Project, no temporary substantial direct or indirect adverse impacts would result on utilities during construction:

**PF-1** During construction, the City's Resident Engineer will ensure that all public utility lines, pipes, and cables disturbed or removed to accommodate the Project must be replaced or relocated within the Project limits to continue to meet the needs of residents and businesses in the community. In addition, arrangements must be made to avoid disruption of utility services. If interruption in service is unavoidable, notice must be given, and proper arrangements will be made with residents and businesses.

**PF-2** To ensure that emergency response times are not disrupted during construction, the City's Resident Engineer will ensure that LBFD be informed of the Project construction schedule, lane closures (if any), and detour plans (if any) at least 2 weeks in advance of any detour plan or lane closure being implemented throughout construction.

Alternatives 2 and 3 (Design Options A and B) would cause temporary indirect construction-related traffic impacts in the proposed Project vicinity during construction activities. However, under Alternatives 2 and 3 (Design Options A and B), the new Shoemaker Bridge would be constructed on a new alignment allowing the existing Shoemaker Bridge to remain open throughout construction, maintaining traffic flow on the existing Shoemaker Bridge. This would keep the existing Shoemaker Bridge closures limited to a maximum of 2 days on the weekends during the construction period.

During construction, it is anticipated that LBFD fire service response time would not be impacted within the Project limits. Both LBFD Fire Stations 1 and 3 are located east of the LA River; therefore, LBFD would still have continued access in the Project area during construction activities. The LBPD West Patrol Division, which is located west of the LA River and north of East Pacific Coast Highway, would continue to have access to the East Pacific Coast Highway and Anaheim Street Bridges, both of which

are closer in proximity than the existing Shoemaker Bridge. These delays could affect motorist travel times and the response time of emergency service vehicles within the Project limits. However, the construction-related traffic impacts would be temporary, and the inclusion of a TMP (Section 2.5, Traffic and Transportation, and identified as PF-3 below) would reduce temporary traffic and circulation impacts during Project construction.

**PF-3** The TMP will include, but is not limited to, the following measures:

A Maintenance of Traffic (MOT) Plan will be established that provides at least one lane of traffic in each direction on roads during construction.

- Local access will be maintained to businesses and residential properties at all times.
- Pedestrian access points to businesses, parks, and schools within the construction area will be maintained throughout the construction period, where feasible. If usual access points are lost, provisions for alternative access to the affected parcels will be made. Appropriate signage will be placed to inform pedestrians and bicyclists of the alternative access to local businesses. Disabled access will be maintained during construction where feasible.
- During construction, appropriate signage and advanced warning will be developed and displayed to direct pedestrian, bicycle, and vehicular traffic alternate routes.
- During construction, the City will establish an information field office near the construction site. The field office will serve the following purposes:
    - Provide information pertaining to construction and lane closures;
    - Notify property owners, residences, and businesses of major construction activities (e.g., utility relocation/disruption, rerouting of delivery trucks);
    - Provide information via the City website.

With implementation of PF-3, no substantial direct or indirect adverse construction-related traffic impacts on emergency services would occur as a result of the proposed Project.

The construction of columns or bridge abutments for the new Shoemaker Bridge would cause temporary impacts on the LACFCD property. However, with the implementation of PF-1 through PF-3, no temporary substantial adverse impacts associated access to this property during construction is anticipated.

The existing 6th Street Pump Station would be relocated as a result of the proposed Project. The pump station is currently located directly below the proposed bridge support structure on the eastern end of the new Shoemaker Bridge. As a result, temporary impacts may occur during the time the 6th Street Pump Station is taken offline and relocated. Therefore, a temporary stormwater drainage plan, as identified in Avoidance Measure U-3 in Section 2.4.3, will be implemented to ensure all stormwater can be accommodated between Project construction and when the 6th Street Pump Station is relocated. With the implementation of Avoidance Measure U-3, no substantial temporary adverse impacts are anticipated.

There would be several smaller diameter utilities, including utilities that provide power to existing streetlights and communication conduits that would require removal and/or relocation as part of the

street realignments. As stated above, every effort will be made to avoid disruption in utility services during construction activities. However, if interruption in service is unavoidable during construction activities, residents and businesses will be notified, as noted in PF-1. With the implementation of Avoidance Measure U-1, along with PF-1 and PF-3, no substantial temporary adverse impacts on the SCE transmission lines under Alternatives 2 and 3 (Design Options A and B) are anticipated.

### 2.4.2.2 Permanent Impacts

#### Alternative 1 (No Build)

Under Alternative 1 (No Build), the Project would not be implemented; therefore, there would be no permanent impacts on utilities or emergency services.

#### Alternatives 2 and 3 (Design Options A and B)

Alternatives 2 and 3 (Design Options A and B) would impact the following utility resources:

- **LACFD Property:** A partial acquisition and aerial easement is required as part of the proposed Project under Alternatives A and B (Design Options A and B). However, at this time, it is not anticipated that the improvements as a result of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would affect the long-term operation of the facility or the long-term maintenance activities that may occur at the facility. Therefore, no temporary adverse impacts on the Oxy Oil facility are anticipated as a result of Alternatives 2 and 3 (Design Options A and B).
- **SCE Transmission Lines:** Alternatives 2 and 3 (Design Options A and B) would require the removal or relocation of overhead SCE transmission lines in conflict with the new Shoemaker Bridge alignment over the LA River. With the implementation of PF-1, it is anticipated that no substantial permanent adverse impacts would occur under Alternatives 2 and 3 (Design Options A and B).
- **Oxy Oil Facility:** A permanent aerial easement from the City (property owner) and agreement with Oxy Oil (lessee) would be required under Alternatives 2 and 3 (Design Options A and B). No acquisition of property would occur. It is not anticipated that the easement would adversely impact the use of the facility, and no avoidance, minimization, or mitigation measures will be required.
- **6th Street Pump Station:** The existing 6th Street Pump Station is located directly below the proposed support structure on the eastern end of the new Shoemaker Bridge. This pump station would be relocated in conjunction with the planned LB MUST facility, as outlined in Avoidance Measure U-3. The new proposed location of the 6th Street Pump Station has been identified within Figure 1-3, Sheet 3; however, the exact location will be determined during PS&E phase.

All other major utilities would be protected in-place. There would be several smaller diameter utilities, including power to existing streetlights and communication conduits that would require removal and/or relocation as part of the street realignments. However, all utility services would be permanently restored upon Project completion. In addition, the Project would not increase the need for domestic water services, wastewater facilities, or solid waste disposal. Therefore, no permanent impacts on other utilities would occur.

As previously stated, under Alternative 2 (Design Options A and B), portions of the existing Shoemaker Bridge would remain open during construction. Once the new Shoemaker Bridge is open to traffic, the existing Shoemaker Bridge would be closed and retrofitted for public non-motorized purposes. Under Alternative 3 (Design Options A and B), the existing Shoemaker Bridge would be removed once the new Shoemaker Bridge is open to traffic.

Once constructed, the proposed Project would improve connectivity and access between the western portion of Long Beach and downtown Long Beach. These improvements would provide the surrounding communities with more efficient access to alternative transportation modes, as well as improved operations on local roads. Implementation of Alternatives 2 and 3 (Design Options A and B) would neither increase nor decrease the demand for emergency services; however, improved operations on the local roadway network may result in an improved response time associated with fire and police protection services in the area.

### 2.4.3 Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures should be implemented under Alternatives 2 and 3 (Design Options A and B) to minimize temporary and permanent impacts on utilities during construction:

**U-1** Prior to grading activities, the City of Long Beach's (City) Resident Engineer will require the design/build contractor to notify Underground Service Alert (USA) at least 2 days prior to excavation by calling 811 to require that all utility owners within the Shoemaker Bridge Replacement Project (Project) disturbance limits identify the locations of underground transmission lines and facilities.

**U-2** During the final design phase, and prior to construction, the City of Long Beach (City) will develop a temporary drainage plan that will ensure all stormwater can be accommodated during construction.

**U-3** During final design, and prior to construction, the City of Long Beach's (City) Resident Engineer will ensure the 6th Street Pump Station is relocated to an alternate location under Alternatives 2 and 3 (Design Options A and B). A suitable relocation site will be coordinated with the design of the City and the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility.

# 2.5 Traffic and Transportation/Pedestrian and Bicycle Facilities

## 2.5.1 Regulatory Setting

Caltrans, as assigned by the Federal Highway Administration (FHWA), directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 Code of Federal Regulations [CFR] 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

In July 1999, the U.S. Department of Transportation (USDOT) issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally assisted programs is governed by the USDOT regulations (49 CFR 27) implementing Section 504 of the Rehabilitation Act (29 United States Code [USC] 794). The FHWA has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the ADA requirements to Federal-aid projects, including Transportation Enhancement Activities.

## 2.5.2 Affected Environment

This section is primarily based on the *Traffic Operational Analysis Report* (TOAR) (Caltrans 2019a) prepared for the Project. The TOAR studied the existing traffic conditions (2017), opening year traffic conditions (2025), and the design year conditions (2035) and assessed the impact of the proposed Project on traffic conditions. The Project limits are generally bounded by Anaheim Street to the north, Santa Fe Avenue to the west, Pacific Avenue to the east, and West Shoreline Drive to the south. The Project limits on the east side extend beyond Magnolia Avenue along Anaheim, 6th and 7th Streets to Atlantic Boulevard. These limits provide the logical termini to facilitate the replacement of the existing bridge and accommodate planned City improvements, as well as the proposed improvements in the I-710 Corridor Project. This section also references the CIA (Caltrans 2018c) for the discussion of existing public transportation facilities within the Project limits and within the vicinity.

The evaluation of traffic conditions pertaining to the proposed Project is closely tied to the overall I-710 Corridor Project RDEIR/SDEIS. The Final I-710 Corridor Project Environmental Document is scheduled to be approved in early 2020. In 2012, a TOAR (herein referred to as “2012 Traffic Study”) was prepared (URS 2012). The TOAR (Caltrans 2019a) is an update to the 2012 Traffic Study report. The update to the 2012 Traffic Study report was required due to expansion of the Project limits, the addition of two design options associated with the proposed Shoemaker Bridge, as well as the collection of recent count (2017) data on arterials and at intersections.

### 2.5.2.1 Methodology

Both freeway and local intersection traffic flow can be defined in terms of level of service (LOS). For both freeway and intersections, there are six LOS, ranging from LOS A to LOS F. LOS A represents free traffic flow with low volumes and high speeds, resulting in low densities, while LOS F represents traffic volumes that exceed capacity and result in forced flow operations at low speeds, resulting in high densities, as shown on Figure 2.5-1. As shown on Figure 2.5-2, LOS at signalized intersections

is calculated using the time (delay) that vehicles wait to pass through an intersection. The delay is measured in seconds for each movement at an intersection (e.g., through movement, right turn, left turn). These individual delays are averaged to provide LOS for the intersection as a whole.

# LEVELS OF SERVICE
for Freeways

| Level of Service | Flow Conditions | Density (pc/mi/ln*) | Technical Descriptions |
|---|---|---|---|
| A | | ≤11 | Highest quality of service. Traffic flows freely with little or no restrictions on speed or maneuverability. **No delays** |
| B | | >11-18 | Traffic is stable and flows freely. The ability to maneuver in traffic is only slightly restricted. **No delays** |
| C | | >18-26 | Few restrictions on speed. Freedom to maneuver is restricted. Drivers must be more careful making lane changes. **Minimal delays** |
| D | | >26-35 | Speeds decline slightly and density increases. Freedom to maneuver is noticeably limited. **Minimal delays** |
| E | | >35-45 | Vehicles are closely spaced, with little room to maneuver. Driver comfort is poor. **Significant delays** |
| F | | Demand exceeds capacity or Density >45 | Very congested traffic with traffic jams, especially in areas where vehicles have to merge. **Considerable delays** |

*pc/mi/in = Passenger car per mile per lane
Source: HCM 2010 Version, Volume 2 -Exhibit 11-5

**Figure 2.5-1. Levels of Service for Freeway**

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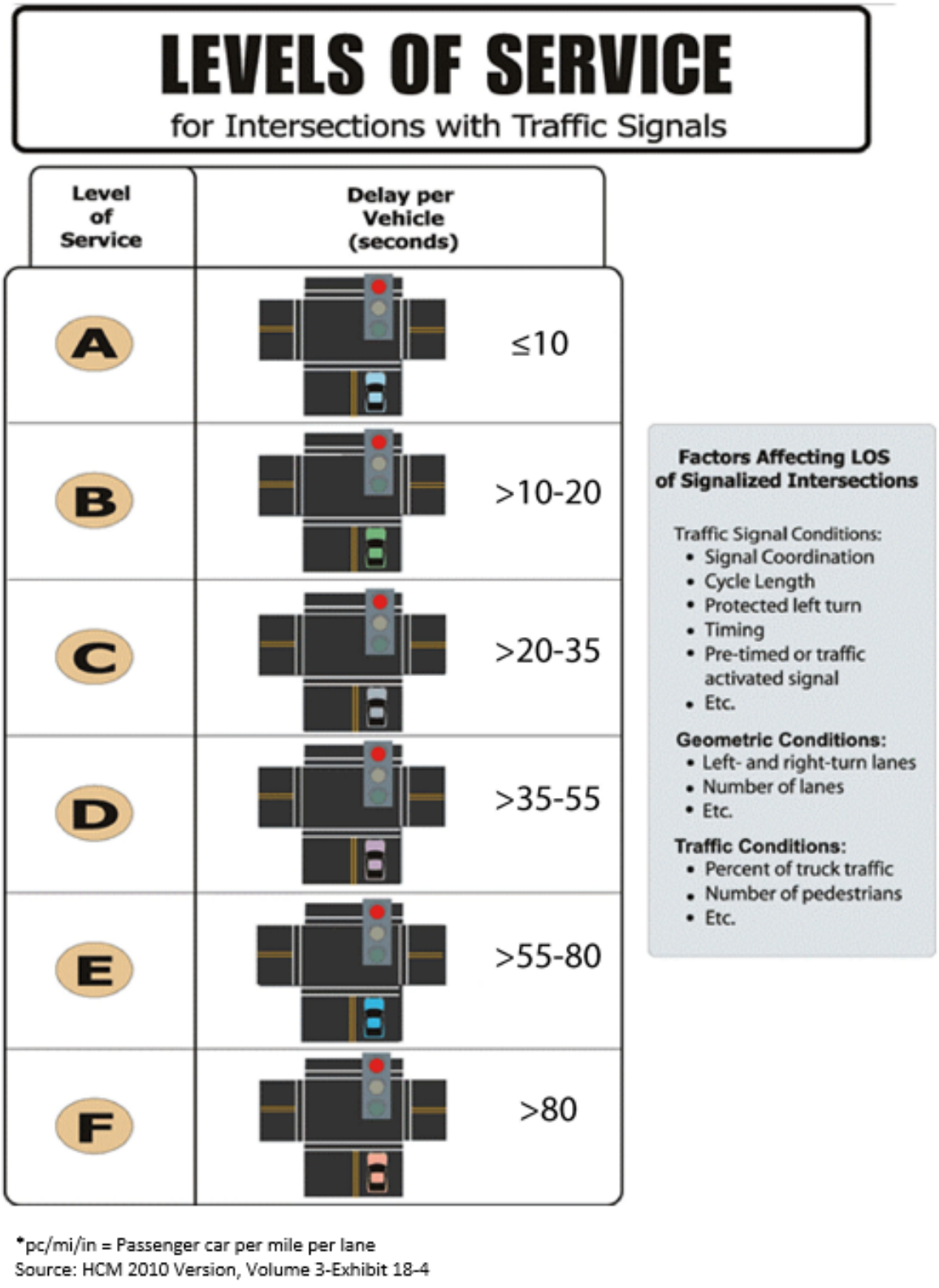


**Figure 2.5-2. Levels of Service for Intersections with Traffic Signals**

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Roadway segments are evaluated based on the capacity of the roadway (number of vehicles that can freely flow within a roadway segment) versus the volume of vehicles counted or projected for future years. A volume to capacity ratio (v/c) greater than one indicates that a roadway is congested. The Project opening year (2025) traffic estimate represents a straight-line interpolation between the existing year (2017) traffic conditions and the design year (2035) conditions, both with and without the Project.

### 2.5.2.2 Existing (2017) Traffic Conditions

#### Existing (2017) Conditions Freeway Operations

Table 2.5-1 shows freeway analysis results for mainline and ramps under existing conditions. Existing volumes were obtained from I-710 Corridor Project Traffic Study. As shown in Table 2.5-1, all traffic study area freeway segments and ramp junctions currently operate at LOS D or better under existing conditions.

**Table 2.5-1. Existing (2017) Conditions, Freeway Operations Analysis**

| Location Description | Type | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Density[1] | LOS | Density[1] | LOS |
| ***SR-710 NB*** | | | | | |
| WB Anaheim Street On-Ramp to SB PCH Off-Ramp | Weave | 26.4 | C | 24.0 | C |
| WB Anaheim Street Off-Ramp to WB Anaheim Street On-Ramp | Basic | 18.7 | C | 17.4 | B |
| EB Anaheim Street On-Ramp to WB Anaheim Street Off-Ramp | Weave | 18.2 | B | 18.0 | B |
| Shoreline Drive On-Ramp to EB Anaheim Street On-Ramp | Basic | 18.3 | C | 16.6 | B |
| EB Anaheim Street Off-Ramp to Shoreline Drive On-Ramp | Basic | 6.6 | A | 10.8 | A |
| 9th and Pier B and Pico Street On-Ramp to EB Anaheim Street Off-Ramp | Weave | 16.5 | B | 11.7 | B |
| ***Shoemaker Bridge/Shoreline Drive NB*** | | | | | |
| 7th Street On-Ramp /10th Street Off-Ramp | Weave | 32.5 | D | 21.7 | C |
| ***SR-710 SB*** | | | | | |
| North of WB Anaheim Street Off- Ramp | Basic | 32.2 | D | 30.6 | D |
| WB Anaheim Street Off-Ramp | Off | 30.9 | D | 29.6 | D |
| WB Anaheim Street Off-Ramp to WB Anaheim Street On-Ramp | Basic | 29.0 | D | 27.9 | D |

### Table 2.5-1. Existing (2017) Conditions, Freeway Operations Analysis

| Location Description | Type | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Density[1] | LOS | Density[1] | LOS |
| WB Anaheim Street On-Ramp to EB Anaheim Street Off-Ramp | Weave | 21.4 | C | 20.5 | C |
| EB Anaheim Street Off-Ramp to Shoreline Drive Off-Ramp | Basic | 16.0 | B | 15.1 | B |
| Shoreline Drive Major Off-Ramp | Off | 13.4 | B | 12.6 | B |
| Shoreline Drive Major Off-Ramp to EB Anaheim Street On-Ramp | Basic | 9.2 | A | 7.1 | A |
| EB Anaheim Street On-Ramp | On | 12.7 | B | 10.6 | B |
| South of EB Anaheim Street On-Ramp | Basic | 11.0 | B | 8.9 | A |
| ***Shoemaker Bridge/Shoreline Drive SB*** | | | | | |
| 9th Street On-Ramp / 6th Street Off-Ramp | Weave | 24.3 | C | 27.2 | C |

Source: Caltrans 2019a
Notes:

[1] Density = passenger car/mile/lane

EB=eastbound; LOS=level of service; NB=northbound; PCH=Pacific Coast Highway; SB=southbound; SR-710=State Route 710; WB=westbound

## Existing (2017) Conditions Roadway Segment Analysis

Table 2.5-2 shows the results of the roadway segment analysis conducted for the surrounding roadway circulation system within the immediate vicinity of the Shoemaker Bridge. All roadway segments in the traffic study area have adequate capacity in the Existing (2017) Conditions.

## Table 2.5-2. Existing (2017) Conditions, Roadway Segment Analysis

| ID | Roadway Segment | Description | No. of Lanes | LOS E Hourly Capacity | Existing (2017) Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 1 | EB Anaheim Street | West of Oregon Avenue | 3 | 2530 | 788 | 1,766 | 0.31 | 0.70 | Yes | Yes |
| | WB Anaheim Street | West of Oregon Avenue | 3 | 2530 | 1,256 | 910 | 0.50 | 0.36 | Yes | Yes |
| 2 | WB 7th Street | East of W. Shoreline Drive | 2 | 2020 | 1,207 | 648 | 0.60 | 0.32 | Yes | Yes |
| 3 | WB 7th Street | West of Daisy Avenue | 2 | 2020 | 1,263 | 771 | 0.63 | 0.38 | Yes | Yes |
| 4 | WB 7th Street | West of Magnolia Avenue | 3 | 3040 | 1,453 | 691 | 0.48 | 0.23 | Yes | Yes |
| 5 | EB 6th Street | West of Magnolia Avenue | 3 | 3040 | 812 | 1,449 | 0.27 | 0.48 | Yes | Yes |
| 6 | EB 6th Street | West of Daisy Avenue | 2 | 2020 | 971 | 1,551 | 0.48 | 0.77 | Yes | Yes |
| 7 | EB 6th Street | East of Shoreline Drive | 2 | 2020 | 697 | 1,454 | 0.35 | 0.72 | Yes | Yes |
| 8 | SB Shoreline Drive | North of Broadway | 2 | 3950 | 2,153 | 1,547 | 0.55 | 0.39 | Yes | Yes |
| 9 | NB Shoreline Drive | North of 3rd Street | 2 | 3950 | 1,999 | 1,820 | 0.51 | 0.46 | Yes | Yes |
| 10 | NB Golden Avenue | South of 6th Street | 1 | 620 | 37 | 41 | 0.06 | 0.07 | Yes | Yes |
| | SB Golden Avenue | South of 6th Street | 1 | 620 | 16 | 19 | 0.03 | 0.03 | Yes | Yes |

## Table 2.5-2. Existing (2017) Conditions, Roadway Segment Analysis

| ID | Roadway Segment | Description | No. of Lanes | LOS E Hourly Capacity | Existing (2017) Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 11 | NB Maine Avenue | South of 6th Street | 1 | 620 | 41 | 41 | 0.07 | 0.07 | Yes | Yes |
| | SB Maine Avenue | South of 6th Street | 1 | 620 | 15 | 19 | 0.02 | 0.03 | Yes | Yes |
| 12 | NB Daisy Avenue | South of 6th Street | 1 | 620 | 65 | 123 | 0.10 | 0.20 | Yes | Yes |
| | SB Daisy Avenue | South of 6th Street | 1 | 620 | 98 | 129 | 0.16 | 0.21 | Yes | Yes |
| 13 | NB Magnolia Avenue | South of 6th Street | 1 | 840 | 205 | 538 | 0.24 | 0.64 | Yes | Yes |
| | SB Magnolia Avenue | South of 6th Street | 1 | 840 | 491 | 311 | 0.58 | 0.37 | Yes | Yes |
| 14 | WB 3rd Street | East of Maine Avenue | 2 | 2020 | 895 | 541 | 0.44 | 0.27 | Yes | Yes |
| 15 | WB 3rd Street | West of Maine Avenue | 2 | 2020 | 869 | 529 | 0.43 | 0.26 | Yes | Yes |
| 16 | WB 3rd Street | West of Golden Avenue | 2 | 2020 | 1,160 | 546 | 0.57 | 0.27 | Yes | Yes |
| 17 | EB Broadway | East of Shoreline Drive | 2 | 2020 | 1,158 | 857 | 0.57 | 0.42 | Yes | Yes |
| 18 | EB Broadway | West of Maine Avenue | 2 | 2020 | 1,199 | 884 | 0.59 | 0.44 | Yes | Yes |
| 19 | NB Magnolia Avenue | North of Ocean Boulevard | 2 | 1680 | 323 | 421 | 0.19 | 0.25 | Yes | Yes |
| | SB Magnolia Avenue | North of Ocean Boulevard | 2 | 1680 | 471 | 642 | 0.28 | 0.38 | Yes | Yes |

## Table 2.5-2. Existing (2017) Conditions, Roadway Segment Analysis

| ID | Roadway Segment | Description | No. of Lanes | LOS E Hourly Capacity | Existing (2017) Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 20 | EB Ocean Boulevard | East of Magnolia Avenue | 3 | 2530 | 766 | 1,785 | 0.30 | 0.71 | Yes | Yes |
| | WB Ocean Boulevard | East of Magnolia Avenue | 3 | 2530 | 1,792 | 1,274 | 0.71 | 0.50 | Yes | Yes |
| 21 | EB Ocean Boulevard | West of Magnolia Avenue | 3 | 2530 | 774 | 1,834 | 0.31 | 0.72 | Yes | Yes |
| | WB Ocean Boulevard | West of Magnolia Avenue | 4 | 3390 | 1,839 | 1,420 | 0.54 | 0.42 | Yes | Yes |
| 22 | NB W Shoreline Drive | South of 3rd Street | 2 | 3950 | 574 | 1,083 | 0.15 | 0.27 | Yes | Yes |
| 23 | NB W Shoreline Drive | Off-Ramp to Ocean Boulevard | 1 | 840 | 74 | 78 | 0.09 | 0.09 | Yes | Yes |
| 24 | EB Ocean Boulevard | West of Golden Shore | 3 | 2530 | 967 | 1,861 | 0.38 | 0.74 | Yes | Yes |
| | WB Ocean Boulevard | West of Golden Shore | 3 | 2530 | 1,365 | 1,175 | 0.54 | 0.46 | Yes | Yes |
| 25 | NB W Shoreline Drive | South of Ocean Boulevard | 3 | 2530 | 440 | 494 | 0.17 | 0.20 | Yes | Yes |
| 26 | SB W Shoreline Drive | North of Ocean Boulevard | 2 | 3950 | 990 | 697 | 0.25 | 0.18 | Yes | Yes |

## Table 2.5-2. Existing (2017) Conditions, Roadway Segment Analysis

| ID | Roadway Segment | Description | No. of Lanes | LOS E Hourly Capacity | Existing (2017) Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 27 | NB W Shoreline Drive | On Shoemaker Bridge | 3 | 5920 | 3,183 | 2,403 | 0.54 | 0.41 | Yes | Yes |
| | SB W Shoreline Drive | On Shoemaker Bridge | 3 | 5920 | 2,850 | 2,910 | 0.48 | 0.49 | Yes | Yes |
| 28 | NB Golden Shore Street | B/w Ocean Boulevard and Shoreline | 2 | 1310 | 220 | 707 | 0.17 | 0.54 | Yes | Yes |
| | SB Golden Shore Street | B/w Ocean Boulevard and Shoreline | 2 | 1310 | 242 | 115 | 0.18 | 0.09 | Yes | Yes |
| 29 | NB Golden Shore Street | South of W Shoreline Drive | 2 | 1310 | 66 | 314 | 0.05 | 0.24 | Yes | Yes |
| | SB Golden Shore Street | South of W Shoreline Drive | 2 | 1310 | 327 | 396 | 0.25 | 0.30 | Yes | Yes |

Source: Caltrans 2019a

Notes:
EB=eastbound; ID=identification; LOS=level of service; NB=northbound; No.=number; SB=southbound; V/C=volume to capacity; WB=westbound

### Existing (2017) Conditions Intersection Analysis

Table 2.5-3 shows intersection LOS and average vehicle delay results for traffic study area intersections under existing conditions.

As shown in Table 2.5-3, all traffic study area intersections currently operate at LOS D or better under existing conditions with the exception of the intersection of Pier B Street/Pico Avenue at 9th Street/SR-710 Ramps, which operates at LOS F during the AM peak hour. This is a result of the existing transportation deficiencies in the traffic study area.

**Table 2.5-3. Existing (2017) Conditions, Intersection Analysis**

| ID | North-South Street | East-West Street | Control | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | | | Delay | LOS | Delay | LOS |
| 1 | Harbor Avenue | Anaheim Street | Signalized | 8.6 | A | 11.7 | B |
| 2 | Santa Fe Avenue | Anaheim Street | Signalized | 24.6 | C | 27.9 | C |
| 3 | Santa Fe Avenue | 9th Street | Signalized | 11.7 | B | 41.5 | D |
| 4 | Pier B Street / Pico Avenue | SR-710 Ramps/9th Street | Signalized | >100 | **F** | 17.2 | B |
| 5 | Pico Avenue | Ocean Boulevard Ramps | Signalized | 17.9 | B | 20.9 | C |
| 6 | Golden Shore Street | Ocean Boulevard | Signalized | 23.5 | C | 25.6 | C |
| 7 | Magnolia Avenue/Queens Way | Ocean Boulevard | Signalized | 17.6 | B | 14.2 | B |
| 8 | Magnolia Avenue | Broadway | Signalized | 20.0 | B | 20.1 | C |
| 9 | Maine Avenue | Broadway | Signalized | 3.0 | A | 6.0 | A |
| 10 | Golden Avenue | 3rd Street | Signalized | 15.7 | B | 11.1 | B |
| 11 | Maine Avenue | 3rd Street | Signalized | 13.2 | B | 13.0 | B |
| 12 | Magnolia Avenue | 3rd Street | Signalized | 16.8 | B | 17.2 | B |
| 13 | Magnolia Avenue | 6th Street | Signalized | 16.7 | B | 28.5 | C |
| 14 | Daisy Avenue | 6th Street | Signalized | 6.4 | A | 5.7 | A |
| 15 | Daisy Avenue | 7th Street | Signalized | 15.5 | B | 13.1 | B |
| 16 | Magnolia Avenue | 7th Street | Signalized | 17.7 | B | 18.6 | B |
| 17 | Magnolia Avenue | 10th Street | Signalized | 13.2 | B | 13.7 | B |
| 18 | Pacific Avenue | Anaheim Street | Signalized | 16.5 | B | 12.5 | B |

**Table 2.5-3. Existing (2017) Conditions, Intersection Analysis**

| ID | North-South Street | East-West Street | Control | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | | | Delay | LOS | Delay | LOS |
| 19 | Magnolia Avenue | Anaheim Street | Signalized | 19.1 | B | 14.3 | B |
| 20 | Oregon Avenue | Anaheim Street | Signalized | 4.1 | A | 13.5 | B |
| 21 | Cedar Avenue | Anaheim Street | Signalized | 11.9 | B | 6.4 | A |
| 22 | Pacific Avenue | 7th Street | Signalized | 27.7 | C | 15.3 | B |
| 23 | Pacific Avenue | 6th Street | Signalized | 16.7 | B | 22.5 | C |
| 24 | Pacific Avenue | 3rd Street | Signalized | 22.7 | C | 12.4 | B |
| 25 | Pacific Avenue | Broadway | Signalized | 19.3 | B | 20.6 | C |
| 26 | Pacific Avenue | Ocean Boulevard | Signalized | 21.1 | C | 11.4 | B |
| 27 | Atlantic Avenue | Anaheim Street | Signalized | 24.9 | C | 24.1 | C |
| 28 | Atlantic Avenue | 7th Street | Signalized | 20.4 | C | 16.2 | B |
| 29 | Atlantic Avenue | 6th Street | Signalized | 16.4 | B | 23.2 | C |
| 30 | Atlantic Avenue | 3rd Street | Signalized | 12.0 | B | 20.3 | C |

Source: Caltrans 2019a

Notes:

**Bold:** Indicates LOS E or F

ID=identification; LOS=level of service; SR-710=State Route 710

## Alternative 1 (No Build) Freeway Operations Analysis (2025 and 2035)

Table 2.5-4 displays freeway analysis results for mainline and ramps under 2025 No Build Conditions. Traffic volumes were interpolated from existing and future forecast volumes provided in I-710 Corridor Project TOAR. All basic freeway segments, weaving segments, and ramp junction areas are expected to operate at LOS D or better; except for the following, which operates at LOS E:

- SB SR-710 - North of westbound (WB) Anaheim Street Off-Ramp during the AM peak hour

## Table 2.5-4. Alternative 1 (No Build) Freeway Operations Analysis (2025)

| Location Description | Type | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Density[1] | LOS | Density[1] | LOS |
| ***SR-710 NB*** | | | | | |
| WB Anaheim Street On-Ramp to SB PCH Off-Ramp | Weave | 30.9 | D | 26.2 | C |
| WB Anaheim Street Off-Ramp to WB Anaheim Street On-Ramp | Basic | 21.6 | C | 18.9 | C |
| EB Anaheim Street On-Ramp to WB Anaheim Street Off-Ramp | Weave | 21.5 | C | 20.0 | C |
| Shoreline Drive On-Ramp to EB Anaheim Street On-Ramp | Basic | 21.1 | C | 17.9 | B |
| EB Anaheim Street Off-Ramp to Shoreline Drive On-Ramp | Basic | 12.1 | B | 12.0 | B |
| 9th and Pier B and Pico Street On-Ramp to EB Anaheim Street Off-Ramp | Weave | 10.6 | B | 12.8 | B |
| ***Shoemaker Bridge NB*** | | | | | |
| 7th Street On-Ramp/10th Street Off-Ramp | Weave | 33.9 | D | 22.2 | C |
| ***SR-710 SB*** | | | | | |
| North of WB Anaheim Street Off-Ramp | Basic | 35.3 | **E** | 30.9 | D |
| WB Anaheim Street Off-Ramp | Off | 33.0 | D | 29.9 | D |
| WB Anaheim Street Off-Ramp to WB Anaheim Street On-Ramp | Basic | 31.4 | D | 28.0 | D |
| WB Anaheim Street On-Ramp to EB Anaheim Street Off-Ramp | Weave | 23.4 | C | 20.7 | C |
| EB Anaheim Street Off-Ramp to Shoreline Drive Off-Ramp | Basic | 17.4 | B | 15.2 | B |
| Shoreline Drive Major Off-Ramp | Off | 17.8 | B | 15.5 | B |
| Shoreline Drive Major Off-Ramp to EB Anaheim Street On-Ramp | Basic | 11.7 | B | 8.4 | A |
| EB Anaheim Street On-Ramp | On | 15.5 | B | 12.6 | B |

**Table 2.5-4. Alternative 1 (No Build) Freeway Operations Analysis (2025)**

| Location Description | Type | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Density[1] | LOS | Density[1] | LOS |
| South of EB Anaheim Street On-Ramp | Basic | 13.7 | B | 10.0 | A |
| ***Shoemaker Bridge SB*** | | | | | |
| 9th Street On-Ramp / 6th Street Off-Ramp | Weave | 25.8 | C | 29.6 | D |

Source: Caltrans 2019a

Notes:

[1] Density = passenger car/mile/lane

**Bold**: Indicates LOS E or F

EB=eastbound; SR-710=State Route 710; LOS=level of service; NB=northbound PCH=Pacific Coast Highway; SB=southbound; WB=westbound

Table 2.5-5 displays freeway analysis results for mainline and ramps under 2035 No Build Conditions. In 2035, traffic congestion increases on SR-710. Due to ambient growth, in 2035, traffic congestion increases on SR-710. However, all basic freeway segments, weaving segments, and ramp junction areas are expected to operate at LOS D or better; except for the following, which operate at LOS E:

- NB SR-710 - WB Anaheim Street On-Ramp to (SB) Pacific Coast Highway (PCH) Off-Ramp during the AM peak hour
- SB SR-710 - North of WB Anaheim Street Off-Ramp during the AM peak hour
- NB Shoemaker Bridge - 7th Street On-Ramp/10th Street Off-Ramp during the AM peak hour

**Table 2.5-5. Alternative 1 (No Build) Freeway Operations Analysis (2035)**

| Location Description | Type | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Density[1] | LOS | Density[1] | LOS |
| ***SR-710 NB*** | | | | | |
| WB Anaheim Street On-Ramp to SB PCH Off-Ramp | Weave | 35.4 | **E** | 28.5 | D |
| WB Anaheim Street Off-Ramp to WB Anaheim Street On-Ramp | Basic | 24.5 | C | 20.5 | C |
| EB Anaheim Street On-Ramp to WB Anaheim Street Off-Ramp | Weave | 24.9 | C | 22.2 | C |
| Shoreline Drive On-Ramp to EB Anaheim Street On-Ramp | Basic | 24.0 | C | 19.2 | C |

## Table 2.5-5. Alternative 1 (No Build) Freeway Operations Analysis (2035)

| Location Description | Type | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Density[1] | LOS | Density[1] | LOS |
| EB Anaheim Street Off-Ramp to Shoreline Drive On-Ramp | Basic | 17.5 | B | 13.3 | B |
| 9th and Pier B and Pico Street On-Ramp to EB Anaheim Street Off-Ramp | Weave | 15.2 | B | 14.0 | B |
| ***Shoemaker Bridge NB*** | | | | | |
| 7th Street On-Ramp / 10th Street Off-Ramp | Weave | 35.3 | **E** | 22.7 | C |
| ***SR-710 SB*** | | | | | |
| North of WB Anaheim Street Off-Ramp | Basic | 39.5 | **E** | 31.3 | D |
| WB Anaheim Street Off-Ramp | Off | 35.0 | D | 30.2 | D |
| WB Anaheim Street Off-Ramp to WB Anaheim Street On-Ramp | Basic | 33.8 | D | 28.3 | D |
| WB Anaheim Street On-Ramp to EB Anaheim Street Off-Ramp | Weave | 25.4 | C | 21.1 | C |
| EB Anaheim Street Off-Ramp to Shoreline Drive Off-Ramp | Basic | 18.9 | C | 15.3 | B |
| Shoreline Drive Major Off-Ramp | Off | 18.9 | B | 15.2 | B |
| Shoreline Drive Major Off-Ramp to EB Anaheim Street On-Ramp | Basic | 14.1 | B | 9.7 | A |
| EB Anaheim Street On-Ramp | On | 17.6 | B | 13.4 | B |
| South of EB Anaheim Street On-Ramp | Basic | 16.3 | B | 11.2 | B |
| ***Shoemaker Bridge SB*** | | | | | |
| 9th Street On-Ramp / 6th Street Off-Ramp | Weave | 27.4 | C | 32.2 | D |

Source: Caltrans 2019a

Notes:

[1] Density = passenger car/mile/lane

**Bold**: Indicates LOS E or F

EB=eastbound; SR-710=State Route 710; LOS=level of service; NB=northbound; PCH=Pacific Coast Highway; SB=southbound; WB=westbound

### Alternative 1 (No Build) Roadway Segment Analysis (2025 and 2035)

Table 2.5-6 summarizes the result of the 2025 Opening Year No Build roadway segment analysis conducted for the surrounding roadway circulation system within the immediate vicinity of the Shoemaker Bridge. All the roadway segments analyzed operate at LOS E or better.

Table 2.5-7 is the result of the 2035 Project Design Year No Build roadway segment analysis conducted for the surrounding roadway circulation system within the immediate vicinity of the Shoemaker Bridge. All the roadway segments analyzed operate at LOS E or better.

## Table 2.5-6. Alternative 1 (No Build) Roadway Segment Analysis (2025)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | 2025 No Build Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 1 | EB Anaheim Street | West of Oregon Avenue | 3 | 2530 | 828 | 1855 | 0.33 | 0.73 | Yes | Yes |
| | WB Anaheim Street | West of Oregon Avenue | 3 | 2530 | 1319 | 956 | 0.52 | 0.38 | Yes | Yes |
| 2 | WB 7th Street | East of Shoreline Drive | 2 | 2020 | 1237 | 664 | 0.61 | 0.33 | Yes | Yes |
| 3 | WB 7th Street | West of Daisy Avenue | 2 | 2020 | 1295 | 791 | 0.64 | 0.39 | Yes | Yes |
| 4 | WB 7th Street | West of Magnolia Avenue | 3 | 3040 | 1490 | 709 | 0.49 | 0.23 | Yes | Yes |
| 5 | EB 6th Street | West of Magnolia Avenue | 3 | 3040 | 833 | 1485 | 0.27 | 0.49 | Yes | Yes |
| 6 | EB 6th Street | West of Daisy Avenue | 2 | 2020 | 981 | 1567 | 0.49 | 0.78 | Yes | Yes |
| 7 | EB 6th Street | East of Shoreline Drive | 2 | 2020 | 708 | 1476 | 0.35 | 0.73 | Yes | Yes |
| 8 | SB Shoreline Drive | North of Broadway | 2 | 3950 | 2304 | 1656 | 0.58 | 0.42 | Yes | Yes |
| 9 | NB Shoreline Drive | North of 3rd Street | 2 | 3950 | 2139 | 1948 | 0.54 | 0.49 | Yes | Yes |
| 10 | NB Golden Avenue | South of 6th Street | 1 | 620 | 38 | 42 | 0.06 | 0.07 | Yes | Yes |
| | SB Golden Avenue | South of 6th Street | 1 | 620 | 17 | 20 | 0.03 | 0.03 | Yes | Yes |

## Table 2.5-6. Alternative 1 (No Build) Roadway Segment Analysis (2025)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | 2025 No Build Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 11 | NB Maine Avenue | South of 6th Street | 1 | 620 | 47 | 47 | 0.08 | 0.08 | Yes | Yes |
| | SB Maine Avenue | South of 6th Street | 1 | 620 | 17 | 22 | 0.03 | 0.04 | Yes | Yes |
| 12 | NB Daisy Avenue | South of 6th Street | 1 | 620 | 67 | 126 | 0.11 | 0.20 | Yes | Yes |
| | SB Daisy Avenue | South of 6th Street | 1 | 620 | 101 | 132 | 0.16 | 0.21 | Yes | Yes |
| 13 | NB Magnolia Avenue | South of 6th Street | 1 | 840 | 209 | 549 | 0.25 | 0.65 | Yes | Yes |
| | SB Magnolia Avenue | South of 6th Street | 1 | 840 | 501 | 317 | 0.60 | 0.38 | Yes | Yes |
| 14 | WB 3rd Street | East of Maine Avenue | 2 | 2020 | 922 | 557 | 0.46 | 0.28 | Yes | Yes |
| 15 | WB 3rd Street | West of Maine Avenue | 2 | 2020 | 891 | 542 | 0.44 | 0.27 | Yes | Yes |
| 16 | WB 3rd Street | West of Golden Avenue | 2 | 2020 | 1189 | 560 | 0.59 | 0.28 | Yes | Yes |
| 17 | EB Broadway | East of Shoreline Drive | 2 | 2020 | 1187 | 879 | 0.59 | 0.44 | Yes | Yes |
| 18 | EB Broadway | West of Maine Avenue | 2 | 2020 | 1229 | 906 | 0.61 | 0.45 | Yes | Yes |
| 19 | NB Magnolia Avenue | North of Ocean Boulevard | 2 | 1680 | 328 | 428 | 0.20 | 0.25 | Yes | Yes |
| | SB Magnolia Avenue | North of Ocean Boulevard | 2 | 1680 | 478 | 652 | 0.28 | 0.39 | Yes | Yes |

## Table 2.5-6. Alternative 1 (No Build) Roadway Segment Analysis (2025)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | 2025 No Build Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 20 | EB Ocean Boulevard | East of Magnolia Avenue | 3 | 2530 | 801 | 1866 | 0.32 | 0.74 | Yes | Yes |
| | WB Ocean Boulevard | East of Magnolia Avenue | 3 | 2530 | 1873 | 1332 | 0.74 | 0.53 | Yes | Yes |
| 21 | EB Ocean Boulevard | West of Magnolia Avenue | 3 | 2530 | 817 | 1935 | 0.32 | 0.76 | Yes | Yes |
| | WB Ocean Boulevard | West of Magnolia Avenue | 4 | 3390 | 1940 | 1498 | 0.57 | 0.44 | Yes | Yes |
| 22 | NB Shoreline Drive | South of 3rd Street | 2 | 3950 | 591 | 1116 | 0.15 | 0.28 | Yes | Yes |
| 23 | NB Shoreline Drive | Off-Ramp to Ocean Boulevard | 1 | 840 | 76 | 80 | 0.09 | 0.10 | Yes | Yes |
| 24 | EB Ocean Boulevard | West of Golden Shore | 3 | 2530 | 1011 | 1945 | 0.40 | 0.77 | Yes | Yes |
| | WB Ocean Boulevard | West of Golden Shore | 3 | 2530 | 1427 | 1228 | 0.56 | 0.49 | Yes | Yes |
| 25 | NB Shoreline Drive | South of Ocean Boulevard | 3 | 2530 | 506 | 568 | 0.20 | 0.22 | Yes | Yes |
| 26 | SB Shoreline Drive | North of Ocean Boulevard | 2 | 3950 | 1119 | 788 | 0.28 | 0.20 | Yes | Yes |
| 27 | NB Shoreline Drive | On Shoemaker Bridge | 3 | 5920 | 3247 | 2451 | 0.55 | 0.41 | Yes | Yes |
| | SB Shoreline Drive | On Shoemaker Bridge | 3 | 5920 | 2907 | 2968 | 0.49 | 0.50 | Yes | Yes |

## Table 2.5-6. Alternative 1 (No Build) Roadway Segment Analysis (2025)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | 2025 No Build Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 28 | NB Golden Shore Street | b/w Ocean and Shoreline | 2 | 1310 | 226 | 725 | 0.17 | 0.55 | Yes | Yes |
| | SB Golden Shore Street | b/w Ocean and Shoreline | 2 | 1310 | 248 | 118 | 0.19 | 0.09 | Yes | Yes |
| 29 | NB Golden Shore Street | South of Shoreline Drive | 2 | 1310 | 68 | 322 | 0.05 | 0.25 | Yes | Yes |
| | SB Golden Shore Street | South of Shoreline Drive | 2 | 1310 | 335 | 406 | 0.26 | 0.31 | Yes | Yes |

Source: Caltrans 2019a

Notes:

EB=eastbound; ID=identification; LOS=level of service; NB=northbound; SB=southbound; V/C=volume to capacity; WB=westbound

## Table 2.5-7. Alternative 1 (No Build) Roadway Segment Analysis (2035)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | Existing (2017) Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 1 | EB Anaheim Street | West of Oregon Avenue | 3 | 2530 | 867 | 1943 | 0.34 | 0.77 | Yes | Yes |
| | WB Anaheim Street | West of Oregon Avenue | 3 | 2530 | 1382 | 1001 | 0.55 | 0.40 | Yes | Yes |
| 2 | WB 7th Street | East of Shoreline Drive | 2 | 2020 | 1267 | 680 | 0.63 | 0.34 | Yes | Yes |
| 3 | WB 7th Street | West of Daisy Avenue | 2 | 2020 | 1326 | 810 | 0.66 | 0.40 | Yes | Yes |
| 4 | WB 7th Street | West of Magnolia Avenue | 3 | 3040 | 1526 | 726 | 0.50 | 0.24 | Yes | Yes |
| 5 | EB 6th Street | West of Magnolia Avenue | 3 | 3040 | 853 | 1521 | 0.28 | 0.50 | Yes | Yes |
| 6 | EB 6th Street | West of Daisy Avenue | 2 | 2020 | 990 | 1582 | 0.49 | 0.78 | Yes | Yes |
| 7 | EB 6th Street | East of Shoreline Drive | 2 | 2020 | 718 | 1498 | 0.36 | 0.74 | Yes | Yes |
| 8 | SB Shoreline Drive | North of Broadway | 2 | 3950 | 2454 | 1764 | 0.62 | 0.45 | Yes | Yes |
| 9 | NB Shoreline Drive | North of 3rd Street | 2 | 3950 | 2279 | 2075 | 0.58 | 0.53 | Yes | Yes |
| 10 | NB Golden Avenue | South of 6th Street | 1 | 620 | 39 | 43 | 0.06 | 0.07 | Yes | Yes |
| | SB Golden Avenue | South of 6th Street | 1 | 620 | 17 | 20 | 0.03 | 0.03 | Yes | Yes |
| 11 | NB Maine Avenue | South of 6th Street | 1 | 620 | 52 | 52 | 0.08 | 0.08 | Yes | Yes |
| | SB Maine Avenue | South of 6th Street | 1 | 620 | 19 | 24 | 0.03 | 0.04 | Yes | Yes |

## Table 2.5-7. Alternative 1 (No Build) Roadway Segment Analysis (2035)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | Existing (2017) Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 12 | NB Daisy Avenue | South of 6th Street | 1 | 620 | 68 | 129 | 0.11 | 0.21 | Yes | Yes |
| | SB Daisy Avenue | South of 6th Street | 1 | 620 | 103 | 135 | 0.17 | 0.22 | Yes | Yes |
| 13 | NB Magnolia Avenue | South of 6th Street | 1 | 840 | 213 | 560 | 0.25 | 0.67 | Yes | Yes |
| | SB Magnolia Avenue | South of 6th Street | 1 | 840 | 511 | 323 | 0.61 | 0.38 | Yes | Yes |
| 14 | WB 3rd Street | East of Maine Avenue | 2 | 2020 | 949 | 573 | 0.47 | 0.28 | Yes | Yes |
| 15 | WB 3rd Street | West of Maine Avenue | 2 | 2020 | 912 | 555 | 0.45 | 0.27 | Yes | Yes |
| 16 | WB 3rd Street | West of Golden Avenue | 2 | 2020 | 1218 | 573 | 0.60 | 0.28 | Yes | Yes |
| 17 | EB Broadway | East of Shoreline Drive | 2 | 2020 | 1216 | 900 | 0.60 | 0.45 | Yes | Yes |
| 18 | EB Broadway | West of Golden Avenue | 2 | 2020 | 1259 | 928 | 0.62 | 0.46 | Yes | Yes |
| 19 | NB Magnolia Avenue | North of Ocean Boulevard | 2 | 1680 | 333 | 434 | 0.20 | 0.26 | Yes | Yes |
| | SB Magnolia Avenue | North of Ocean Boulevard | 2 | 1680 | 485 | 661 | 0.29 | 0.39 | Yes | Yes |
| 20 | EB Ocean Boulevard | East of Magnolia Avenue | 3 | 2530 | 835 | 1946 | 0.33 | 0.77 | Yes | Yes |
| | WB Ocean Boulevard | East of Magnolia Avenue | 3 | 2530 | 1953 | 1389 | 0.77 | 0.55 | Yes | Yes |

**Table 2.5-7. Alternative 1 (No Build) Roadway Segment Analysis (2035)**

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | Existing (2017) Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 21 | EB Ocean Boulevard | West of Magnolia Avenue | 3 | 2530 | 859 | 2036 | 0.34 | 0.80 | Yes | Yes |
| | WB Ocean Boulevard | West of Magnolia Avenue | 4 | 3390 | 2041 | 1576 | 0.60 | 0.46 | Yes | Yes |
| 22 | NB Shoreline Drive | South of 3rd Street | 2 | 3950 | 608 | 1148 | 0.15 | 0.29 | Yes | Yes |
| 23 | NB Shoreline Drive | Off-Ramp to Ocean Boulevard | 1 | 840 | 78 | 82 | 0.09 | 0.10 | Yes | Yes |
| 24 | EB Ocean Boulevard | West of Golden Shore | 3 | 2530 | 1054 | 2028 | 0.42 | 0.80 | Yes | Yes |
| | WB Ocean Boulevard | West of Golden Shore | 3 | 2530 | 1488 | 1281 | 0.59 | 0.51 | Yes | Yes |
| 25 | NB Shoreline Drive | South of Ocean Boulevard | 3 | 2530 | 572 | 642 | 0.23 | 0.25 | Yes | Yes |
| 26 | SB Shoreline Drive | North of Ocean Boulevard | 2 | 3950 | 1247 | 878 | 0.32 | 0.22 | Yes | Yes |
| 27 | NB Shoreline Drive | On Shoemaker Bridge | 3 | 5920 | 3310 | 2499 | 0.56 | 0.42 | Yes | Yes |
| | SB Shoreline Drive | On Shoemaker Bridge | 3 | 5920 | 2964 | 3026 | 0.50 | 0.51 | Yes | Yes |
| 28 | NB Golden Shore Street | b/w Ocean and Shoreline | 2 | 1310 | 231 | 742 | 0.18 | 0.57 | Yes | Yes |
| | SB Golden Shore Street | b/w Ocean and Shoreline | 2 | 1310 | 254 | 121 | 0.19 | 0.09 | Yes | Yes |

## Table 2.5-7. Alternative 1 (No Build) Roadway Segment Analysis (2035)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | Existing (2017) Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 29 | NB Golden Shore Street | South of Shoreline Drive | 2 | 1310 | 69 | 330 | 0.05 | 0.25 | Yes | Yes |
| | SB Golden Shore Street | South of Shoreline Drive | 2 | 1310 | 343 | 416 | 0.26 | 0.32 | Yes | Yes |

Source: Caltrans 2019a

Notes:

EB=eastbound; ID=identification; LOS=level of service; NB=northbound; No.=number; SB=southbound; V/C=volume to capacity; WB=westbound

### Alternative 1 (No Build) Intersection Analysis (2025 and 2035)

Table 2.5-8 displays intersection LOS and average vehicle delay results for traffic study area intersections under 2025 No Build Condition. All study intersections are expected to operate at LOS D or better; except for the intersection of Pier B Street/Pico Avenue at SR-710 Ramps/9th Street, which continues to operate at LOS F during the AM peak hour.

**Table 2.5-8. Alternative 1 (No Build) Intersection Analysis (2025)**

| ID | North-South Street | East-West Street | Control | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | | | DELAY | LOS | DELAY | LOS |
| 1 | Harbor Avenue | Anaheim Street | Signalized | 9.1 | A | 12.4 | B |
| 2 | Santa Fe Avenue | Anaheim Street | Signalized | 27.6 | C | 31.7 | C |
| 3 | Santa Fe Avenue | 9th Street | Signalized | 12.0 | B | 43.5 | D |
| 4 | Pier B Street / Pico Avenue | SR-710 Ramps/9th Street | Signalized | >100 | **F** | 24.1 | C |
| 5 | Pico Avenue | Ocean Boulevard Ramps | Signalized | 20.6 | C | 26.4 | C |
| 6 | Golden Shore Street | Ocean Boulevard | Signalized | 24.0 | C | 25.8 | C |
| 7 | Magnolia Avenue/Queens Way | Ocean Boulevard | Signalized | 18.1 | B | 14.6 | B |
| 8 | Magnolia Avenue | Broadway | Signalized | 20.0 | B | 20.2 | C |
| 9 | Maine Avenue | Broadway | Signalized | 3.0 | A | 6.1 | A |
| 10 | Golden Avenue | 3rd Street | Signalized | 16.1 | B | 12.3 | B |
| 11 | Maine Avenue | 3rd Street | Signalized | 13.2 | B | 13.0 | B |
| 12 | Magnolia Avenue | 3rd Street | Signalized | 17.0 | B | 17.0 | B |
| 13 | Magnolia Avenue | 6th Street | Signalized | 17.2 | B | 29.0 | C |
| 14 | Daisy Avenue | 6th Street | Signalized | 6.5 | A | 5.8 | A |
| 15 | Daisy Avenue | 7th Street | Signalized | 16.0 | B | 13.8 | B |
| 16 | Magnolia Avenue | 7th Street | Signalized | 17.9 | B | 19.1 | B |
| 17 | Magnolia Avenue | 10th Street | Signalized | 13.3 | B | 14.0 | B |
| 18 | Pacific Avenue | Anaheim Street | Signalized | 16.7 | B | 13.1 | B |
| 19 | Magnolia Avenue | Anaheim Street | Signalized | 19.8 | B | 15.1 | B |

**Table 2.5-8. Alternative 1 (No Build) Intersection Analysis (2025)**

| ID | North-South Street | East-West Street | Control | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | | | DELAY | LOS | DELAY | LOS |
| 20 | Oregon Avenue | Anaheim Street | Signalized | 4.2 | A | 14.6 | B |
| 21 | Cedar Avenue | Anaheim Street | Signalized | 12.4 | B | 6.7 | A |
| 22 | Pacific Avenue | 7th Street | Signalized | 28.2 | C | 15.3 | B |
| 23 | Pacific Avenue | 6th Street | Signalized | 16.9 | B | 23.4 | C |
| 24 | Pacific Avenue | 3rd Street | Signalized | 22.9 | C | 12.4 | B |
| 25 | Pacific Avenue | Broadway | Signalized | 18.4 | B | 18.4 | B |
| 26 | Pacific Avenue | Ocean Boulevard | Signalized | 26.4 | C | 11.4 | B |
| 27 | Atlantic Avenue | Anaheim Street | Signalized | 25.2 | C | 28.3 | C |
| 28 | Atlantic Avenue | 7th Street | Signalized | 21.2 | C | 16.4 | B |
| 29 | Atlantic Avenue | 6th Street | Signalized | 18.5 | B | 23.6 | C |
| 30 | Atlantic Avenue | 3rd Street | Signalized | 11.9 | B | 20.2 | C |

Source: Caltrans 2019a

Notes:

**Bold**: Indicates LOS E or F

ID=identification; LOS=level of service; SR-710=State Route 710

Table 2.5-9 displays intersection LOS and average vehicle delay results for traffic study area intersections under 2035 No Build Condition. All study intersections are expected to operate at LOS D or better; except for the intersection of Pier B Street/Pico Avenue at SR-710 Ramps/9th Street, which continues to operate at LOS F during the AM peak hour.

**Table 2.5-9. Alternative 1 (No Build) Intersection Analysis (2035)**

| ID | North-South Street | East-West Street | Control | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | | | DELAY | LOS | DELAY | LOS |
| 1 | Harbor Avenue | Anaheim Street | Signalized | 9.2 | A | 12.5 | B |
| 2 | Santa Fe Avenue | Anaheim Street | Signalized | 30.8 | C | 40.6 | D |
| 3 | Santa Fe Avenue | 9th Street | Signalized | 12.0 | B | 47.6 | D |

## Table 2.5-9. Alternative 1 (No Build) Intersection Analysis (2035)

| ID | North-South Street | East-West Street | Control | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | | | DELAY | LOS | DELAY | LOS |
| 4 | Pier B Street / Pico Avenue | SR-710 Ramps/9th Street | Signalized | >100 | **F** | 30.0 | C |
| 5 | Pico Avenue | Ocean Boulevard Ramps | Signalized | 28.9 | C | 44.7 | D |
| 6 | Golden Shore Street | Ocean Boulevard | Signalized | 24.2 | C | 26.2 | C |
| 7 | Magnolia Avenue/Queens Way | Ocean Boulevard | Signalized | 18.3 | B | 15.1 | B |
| 8 | Magnolia Avenue | Broadway | Signalized | 20.0 | B | 20.3 | C |
| 9 | Maine Avenue | Broadway | Signalized | 3.0 | A | 6.1 | A |
| 10 | Golden Avenue | 3rd Street | Signalized | 16.1 | B | 13.4 | B |
| 11 | Maine Avenue | 3rd Street | Signalized | 13.4 | B | 13.2 | B |
| 12 | Magnolia Avenue | 3rd Street | Signalized | 17.2 | B | 17.2 | B |
| 13 | Magnolia Avenue | 6th Street | Signalized | 17.8 | B | 29.6 | C |
| 14 | Daisy Avenue | 6th Street | Signalized | 6.5 | A | 5.9 | A |
| 15 | Daisy Avenue | 7th Street | Signalized | 16.2 | B | 14.8 | B |
| 16 | Magnolia Avenue | 7th Street | Signalized | 18.3 | B | 19.4 | B |
| 17 | Magnolia Avenue | 10th Street | Signalized | 13.4 | B | 14.0 | B |
| 18 | Pacific Avenue | Anaheim Street | Signalized | 16.9 | B | 13.4 | B |
| 19 | Magnolia Avenue | Anaheim Street | Signalized | 20.0 | B | 15.8 | B |
| 20 | Oregon Avenue | Anaheim Street | Signalized | 4.3 | A | 15.9 | B |
| 21 | Cedar Avenue | Anaheim Street | Signalized | 12.4 | B | 6.8 | A |
| 22 | Pacific Avenue | 7th Street | Signalized | 28.7 | C | 15.4 | B |
| 23 | Pacific Avenue | 6th Street | Signalized | 17.0 | B | 23.7 | C |
| 24 | Pacific Avenue | 3rd Street | Signalized | 23.0 | C | 12.4 | B |
| 25 | Pacific Avenue | Broadway | Signalized | 18.5 | B | 18.5 | B |

**Table 2.5-9. Alternative 1 (No Build) Intersection Analysis (2035)**

| ID | North-South Street | East-West Street | Control | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | | | DELAY | LOS | DELAY | LOS |
| 26 | Pacific Avenue | Ocean Boulevard | Signalized | 28.3 | C | 11.4 | B |
| 27 | Atlantic Avenue | Anaheim Street | Signalized | 25.4 | C | 34.3 | C |
| 28 | Atlantic Avenue | 7th Street | Signalized | 21.3 | C | 16.8 | B |
| 29 | Atlantic Avenue | 6th Street | Signalized | 18.4 | B | 24.5 | C |
| 30 | Atlantic Avenue | 3rd Street | Signalized | 12.1 | B | 20.2 | C |

Source: Caltrans 2019a

Notes:

**Bold**: Indicates LOS E or F

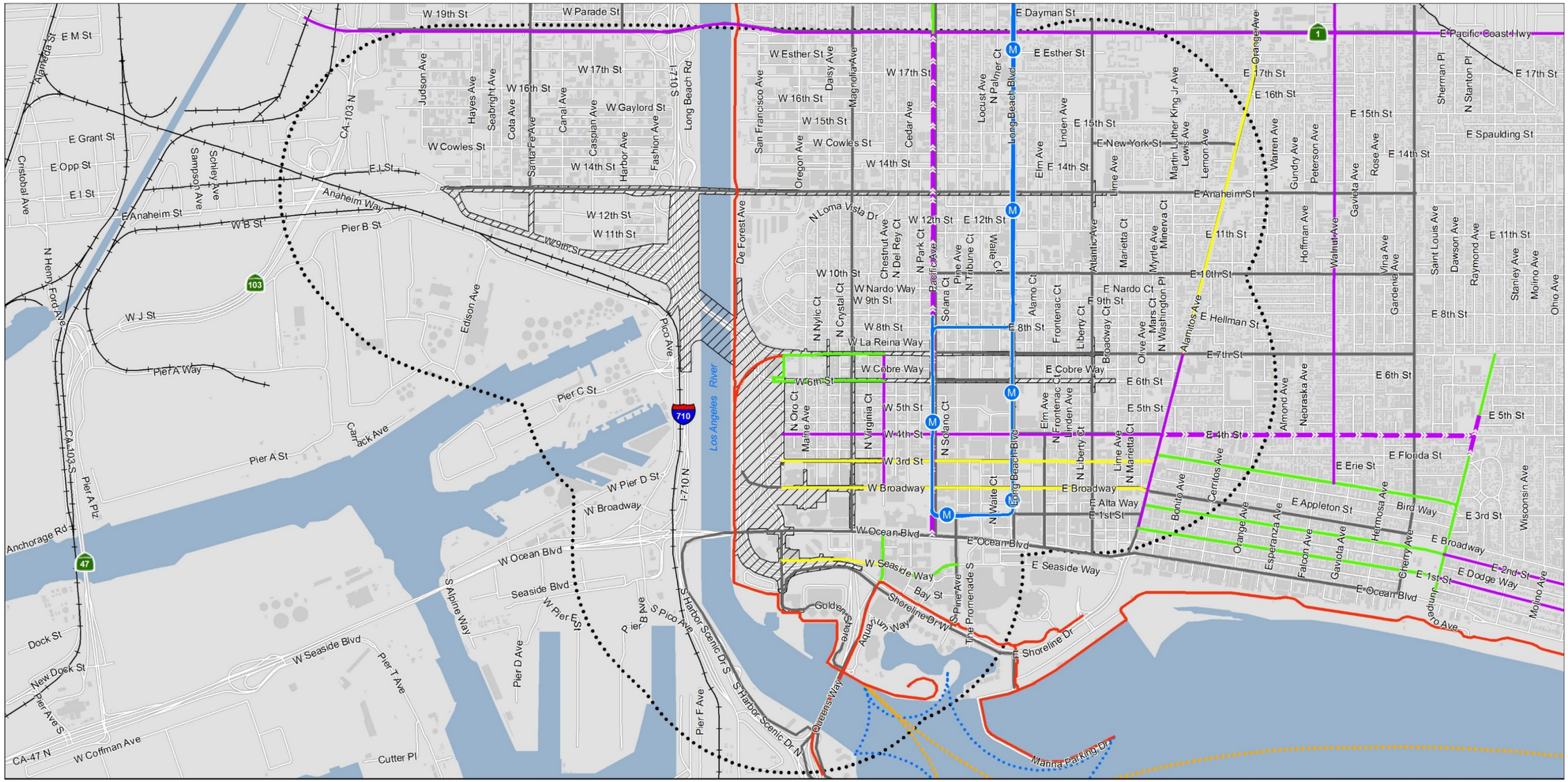
ID=identification; LOS=level of service; SR-710=State Route 710

### 2.5.2.3 Vehicle Miles Traveled/Vehicle Hours Traveled

To determine the overall amount of traffic congestion in the traffic study area, VMT and vehicle hours traveled (VHT) were calculated for the existing condition. It was determined that on an annual basis, vehicles in the traffic study area collectively traveled 51,256 miles over 3,107 hours at an average speed of 16.50 miles per hour.

### 2.5.2.4 Public Transportation

As referenced in Section 2.5.2, the existing public transportation facilities within the Project limits and its vicinity were assessed using the CIA (Caltrans 2018c). The CIA (Caltrans 2018c) identified a Community Facilities Study Area, which is defined as the area within 0.5 mile of the Project limits. The transportation facilities identified within the Community Facilities Study Area may be impacted either directly or indirectly during the construction of the proposed Project, as shown on Figure 2.5-3.




**LEGEND**

- Project Limits
- Community Facilities Project Study Area (Project Limit 0.5 Mile Buffer)
- Metro Station
- Metro Blue Line
- Class I Bikeway
- Class II Bikeway
- Class III Bikeway
- Class III Bikeway with Sharrows
- Class IV
- AquaBus
- AquaLink
- Bus Route

0 Feet 1,500

07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.5-3. Existing Transportation**

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Within the City, public transportation is provided by Long Beach Transit (LBT), the City, and Metro. LBT is the principal provider of public transportation in the City and provides transportation via bus, shuttle, and water taxi. The following are descriptions of each service provided by LBT:

- LBT currently operates 34 bus routes, and nearly 2,000 bus stops. LBT bus routes offer connections to local rail service and to the neighboring cities of Carson, Compton, Paramount, Bellflower, Artesia, Cerritos, Hawaiian Gardens, and Norwalk.
- The Passport Shuttle is a free local bus service that serves various neighborhoods in Long Beach, including California State University, Long Beach (CSULB), downtown Long Beach, and Pine Avenue.
- The AquaLink water taxi has four stops and ferries up to 75 passengers to the most popular Long Beach Harbor and Alamitos Bay Landing attractions. The AquaLink operates daily from May 21 to September 5 and on weekends September 9 to October 30.
- The AquaBus water taxi, which ferries up to 49 passengers to the most popular attractions on the Long Beach Waterfront, stops at five locations, including the Aquarium of the Pacific and the Queen Mary. The AquaBus operates daily from May 21 to September 5 and on weekends September 9 to October 30.

In addition to services provided by LBT, the City administers a Dial-A-Lift service, which offers a curb-to-curb, shared-ride transit service exclusively for the mobility-impaired residing in and traveling throughout the cities of Long Beach, Lakewood, and Signal Hill.

Metro operates the Blue Line light rail in the City, and there are eight Blue Line stations located in the City As shown on Figure 2.5-3, Downtown Long Beach Station, 1st Street Station, 5th Street Station, and Pacific Avenue Station are located within the neighborhoods adjacent to the proposed Project.

#### 2.5.2.5 Pedestrian and Bicycle Facilities

Within the Project limits, sidewalks are provided on local streets east of Shoreline Drive/Shoemaker Bridge. The remaining portion of the Project limits consists of ramps, connectors, and Shoemaker Bridge, and no pedestrian facilities are provided. There are several bikeways within or adjacent to the Project limits (Figure 2.5-3). As shown on Figure 2.5-3, portions of the LARIO Trail (a Class 1 Bikeway) are located within and adjacent to the proposed Project limits. Access points to the LARIO Trail are located throughout the City; however, as shown on Figure 2.5-3, access to the LARIO Trail within the Project limits is located on the roadway that accommodates both bicycle and motor vehicle traffic along eastbound (EB) 7th street.

In addition, other Class I, II, and III Bikeways are located throughout the City and the neighborhoods adjacent to the proposed Project limits. Class 1 Bikeways are located along Shoreline Drive, Broadway, and 3rd Street. Class 2 Bikeways are located along 6th Street and 7th Street. Class 3 Bikeways are located along Pacific Avenue and Chestnut Avenue (Figure 2.5-3).

## 2.5.3 Environmental Consequences

### 2.5.3.1 Temporary Impacts

#### Alternative 1 (No Build)

*Access, Circulation, and Parking*

Alternative 1 (No Build) would not involve the replacement of the Shoemaker Bridge and improvements along local streets. Therefore, no temporary substantial adverse effects associated with access, circulation, and parking are anticipated under Alternative 1 (No Build).

*Public Transportation*

Alternative 1 (No Build) would not involve the replacement of the Shoemaker Bridge and improvements along local streets. Therefore, no temporary substantial adverse effects on public transportation are anticipated under Alternative 1 (No Build).

*Pedestrian and Bicycle Facilities*

Alternative 1 (No Build) would not include improvements to pedestrian and bicycle facilities. Therefore, no temporary substantial adverse effects on pedestrian and bicycle facilities are anticipated under Alternative 1 (No Build).

#### Alternatives 2 and 3 (Design Options A and B)

*Access, Circulation, and Parking*

Temporary traffic delays would occur during realignment of the local roadways and construction of the new Shoemaker Bridge. Sidewalk closures on 3rd Street, 6th Street, 7th Street, Broadway, and Ocean Boulevard, as well as roadwork, would temporarily impact local access and circulation. Alternative routes would be provided to maintain access and connectivity through a TMP, which is included as a Project Feature PF-3, identified in Table 1-5 of Chapter 1, and listed below. Because the Shoemaker Bridge would be constructed on a new alignment, the new bridge would be constructed while maintaining traffic flow on the existing bridge. This would keep bridge closures to a maximum of 2 days on the weekends. Similarly, access to the east side of the bridge from local streets would be maintained (i.e., while some street connections would be closed, others would remain open). No extended ramp closures and no full local road closures are anticipated.

**PF-3** The TMP will include, but is not limited to, the following measures:

- An MOT Plan will be established that provides at least one lane of traffic in each direction on roads during construction.
- Local access will be maintained to businesses and residential properties at all times.
- Pedestrian access points to businesses, parks, schools within the construction area will be maintained throughout the construction period, where feasible. If usual access points are lost, provisions for alternative access to the affected parcels will be made. Appropriate signage will be placed to inform pedestrians and bicyclists of the alternative access to local businesses. Disabled access will be maintained during construction where feasible.

- During construction, appropriate signage and advanced warning will be developed and displayed to direct both pedestrian, bicycle, and vehicular traffic alternate routes.
- During construction, the City will establish an information field office near the construction site. The field office will serve the following purposes:
    - Provide information pertaining to construction and lane closures;
    - Notify property owners, residences, and businesses of major construction activities (e.g., utility relocation/disruption, rerouting of delivery trucks);
    - Provide information via the City website.

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in a temporary loss of available parking spaces in the parking lot along Broadway (as discussed further in Section 2.3, Community Impacts), as well as available parking along 6th and 7th Streets during construction. However, once construction is complete, these parking spaces would be restored. These construction impacts would not result in temporary substantial adverse impacts on access, circulation, and parking during construction.

Implementation of the proposed minimization measures and Project features would reduce temporary impacts on traffic and circulation. Therefore, Alternatives 2 and 3 (Design Options A and B) would not result in substantial temporary indirect or direct adverse impacts.

*Public Transportation*

During construction, the Project may face increased service times for the LBT bus, Passport Shuttle, and/or Dial-A-Lift services. In addition, bus stops in the vicinity of the proposed improvements along Anaheim Street, 3rd Street, 6th Street, 7th Street, Pacific Avenue, Long Beach Boulevard, Atlantic Avenue, and Broadway from Cesar E. Chavez Park to Magnolia Avenue may face increased service times. Bus stops in the vicinity of the proposed improvements along Ocean Boulevard and 6th Street may be temporarily relocated during construction. Implementation of PF-3 would provide advance warning to public transit users thereby minimizing the inconvenience of increased service times. Therefore, the temporary impacts on public transportation services would not result in substantial temporary indirect or direct adverse impacts.

The Metro Blue Line light-rail service would not be impacted as a result of the proposed Project under Alternatives 2 and 3 (Design Options A and B), and while the Transit Mall Station and Pacific Station are located within the neighborhoods adjacent to the proposed Project improvements, the proposed Project would not result in direct or indirect impacts on these facilities.

*Pedestrian and Bicycle Facilities*

Temporary traffic delays would occur during realignment of the local roadways and construction of the new Shoemaker Bridge. Sidewalk closures on 3rd Street, 6th Street, 7th Street, Broadway, and Ocean Boulevard, as well as roadwork, would temporarily impact pedestrian and bicycle access. Stage construction plans would temporarily include provisions for maintaining pedestrian access in these areas during construction.

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in temporary impacts on the use of the LARIO Trail and other City bikeways along local streets during construction within the Project limits. Temporary closures of the LARIO trail, existing bikeways, or access points to

these resources would be addressed through PF-3 with alternative routes to maintain access and connectivity throughout construction activities. Additionally, Minimization Measures LU-1, and PR-11 through PR-16 (Section 2.1, Land Use) would be implemented to minimize impacts from the temporary closures affecting access and circulation.

### 2.5.3.2 Permanent Impacts

This section discusses traffic impacts of the Project in the Project opening year (2025) and the Project design year (2035) were evaluated for Alternative 1 (No Build) and Alternatives 2 and 3 (Design Options A and B).

#### Alternative 1 (No Build)

*Access, Circulation, and Parking*

Alternative 1 (No Build) would not provide any mobility improvements within the traffic study area. As a result, traffic congestion would continue to increase within the traffic study area and LOS would modestly deteriorate due to forecast increases in traffic volumes between existing (2017) and Design Year (2035) conditions. Additionally, improved connection between west Long Beach and Downtown Long Beach would not occur under the Alternative 1 (No Build), and the Project would remain inconsistent with the EAP of I-710 Corridor Project, the 2016 RTP/SCS, and 2019 FTIP.

Alternative 1 (No Build) would not include any improvements to Shoemaker Bridge or the local connectors. In the opening year (2025), Alternative 1 (No Build) does not include the I-710 Corridor Project. In the design year (2035), Alternative 1 (No Build) includes the I-710 Project, as it is included in the 2016 RTP and anticipated to be operational by 2035.

Traffic is anticipated to increase in the design year (2035) when compared to existing conditions (2017). This is due to ambient traffic growth in the traffic study area and in the region, including both autos and trucks. As a result, traffic congestion would increase on SR-710, Shoemaker Bridge, and the arterial system in the design year under Alternative 1 (No Build).

Under 2035 No Build conditions, basic freeway segments, weaving segments, and ramp junction areas along SR-710 and Shoemaker Bridge are expected to operate at LOS D or better in the peak hours except for the following roadway segments and ramps in the vicinity of Anaheim Street and PCH interchanges, which are expected to operate at LOS E during the AM and/or PM peak hours in 2035:

- NB SR-710 - WB Anaheim Street On-Ramp to SB PCH Off-Ramp during AM peak hour
- SB SR-710 - North of WB Anaheim Street Off-Ramp during AM peak hour
- NB Shoemaker Bridge - 7th Street On-Ramp/10th Street Off-Ramp during AM peak hour

The following intersection within the traffic study area is the only intersection expected to operate at LOS F during the morning peak hour.

- Pier B Street/Pico Avenue at SR-710 Ramps (north/south)

*Vehicle Miles Traveled/Vehicle Hours Traveled*

For Alternative 1 (No Build) in 2025, opening year, vehicles in the traffic study area are forecasted to collectively travel 53,454 miles over 3,713 hours at an average speed of 14.40 miles per hour. This represents an increase in VMT and VHT and a reduction in speed when compared to the existing condition.

For Alternative 1 (No Build) in 2035 design year, vehicles in the traffic study area are forecasted to collectively travel 56,202 miles over 4,470 hours at an average speed of 12.57 miles per hour. This represents a substantial reduction in average speed when compared to the existing condition and the 2025 opening year No Build Condition and is a result of ambient growth in the area. Therefore, under this alternative, there would be a permanent adverse impact on VMT and VHT.

*Public Transportation*

Alternative 1 (No Build) would not involve the replacement of the Shoemaker Bridge and improvements along local streets. Therefore, no permanent impacts on public transportation are anticipated under Alternative 1 (No Build).

*Pedestrian and Bicycle Facilities*

Alternative 1 (No Build) would not improve pedestrian and bicycle facilities. Therefore, no permanent adverse impacts on public transportation are anticipated under Alternative 1 (No Build).

**Alternatives 2 and 3 (Design Options A and B)**

*Access, Circulation, and Parking*

The new Shoemaker Bridge would be located south of the existing bridge to accommodate both mainline and downtown roadway improvements. The existing 9th Street and 10th Street ramp connections to downtown Long Beach located in the northern portion of the traffic study area, on the west side of the LA River, would be eliminated under Alternatives 2 and 3 (Design Options A and B), consistent with the I-710 Corridor Project. As stated previously, the proposed Project is an EAP of the I-710 Corridor Project; and therefore, would be responsible for the closure of 9th and 10th Street ramps as part of the larger I-710 Corridor Project.

In the downtown area, the existing NB Shoreline Drive would be closed and incorporated into Cesar E. Chavez Park. The existing SB Shoreline Drive would be reconfigured to allow both NB and SB directions. The existing curved portion of 3rd Street between Golden Avenue and West Shoreline Drive would be eliminated, landscaped, and included as additional park space within Cesar E. Chavez Park. The northern portion of Golden Shore Avenue currently directs traffic south of Broadway; however, this portion would be reconfigured to allow two-way traffic flow (NB and SB) from Broadway. The southern portion of Golden Shore Avenue that crosses over West Shoreline Drive would be removed and replaced with an at-grade intersection.

As discussed further in Section 2.3, Community Impacts, due to roadway improvements, the proposed Project would result in a permanent loss of 58 street parking spaces along 6th Street and 7th Street (between Nylic Court and Lime Avenue), and Magnolia Avenue (between Ocean Boulevard and West Broadway). The Project would also implement AM and PM peak hour restrictions on 173 street parking spaces along 7th Street, as identified in Minimization Measure TR-1. During non-peak hours, 7th Street would maintain two through lanes of traffic, thereby maintaining street parking during non-peak hours. Furthermore, adjacent uses such as commercial and residential developments, have their own dedicated parking spaces, lots, or nearby public parking facilities within walking distance. Although there would be a loss in available street parking, improvements along these streets would improve safety particularly along 6th and 7th Street by slowing down traffic and providing new connections to recreational resources throughout the Project limits. With the implementation of Minimization Measure TR-1, it is not anticipated that the permanent loss of street parking would result in substantial adverse effects to parking within the Project limits.

Peak-hour volumes for Alternatives 2 and 3 (Design Options A and B) in 2025 and 2035 reflect the change in local traffic patterns attributable to the proposed Project. The main effect to traffic in the traffic study area would be due to the proposed elimination of the local connection between Shoemaker Bridge and 9th and 10th Streets on the west side of the LA River Flood Channel. The elimination of these ramp connections would be consistent with the I-710 Corridor Project. As stated previously, this Project is an EAP of the I-710 Corridor Project; and therefore, would result in the closure of 9th and 10th Street ramps as part of the larger I-710 Corridor Project.

Removal would result in additional vehicles using Ocean Boulevard and Anaheim Street to travel between downtown Long Beach, located on the east side of LA River, and destinations located on the west side of the LA River. Accordingly, the traffic that would have used Shoemaker Bridge to and from 9th and 10th Streets would be redistributed to the appropriate roadways within the traffic study area, including Ocean Boulevard and Anaheim Street. Traffic redistribution with removal of the ramps is based on professional judgment. The redistribution of traffic due to the elimination of the ramps from Shoreline Drive to 9th Street and 10th Street is consistent with the methodology of redistribution assumed in the 2012 Traffic Study (Caltrans 2019a). A majority of these redistributed local trips would use Anaheim Street (about 75 percent) as compared to Ocean Boulevard (approximately 25 percent). As no additional capacity is proposed for Shoemaker Bridge under Alternatives 2 and 3 (Design Options A and B), regional trip volumes (those vehicles seeking access to SR-710) would not be expected to change appreciably.

Although the removal of the 9th and 10th Street connections to the existing Shoemaker Bridge are expected to affect peak hour LOS of the intersections along Anaheim Street and Ocean Boulevard, the following intersections are expected to operate at satisfactory LOS. All impacted intersections are listed below.

- Anaheim Street/Santa Fe Avenue
- Anaheim Street/Magnolia Avenue
- Anaheim Street/Pacific Avenue
- Anaheim Street/Magnolia Avenue
- Anaheim Street/Oregon Avenue
- Anaheim Street/Cedar Avenue
- Ocean Boulevard/Golden Shore
- Ocean Boulevard/Magnolia Avenue

Additionally, the connection between 6th Street and West Shoreline Drive is proposed to be eliminated. EB traffic from the Shoemaker Bridge was redistributed to 7th Street, which would be reconfigured to two-way between Shoreline Drive and Atlantic Avenue. Additionally, 6th Street would become a two-way street between Golden Avenue and Atlantic Avenue. With the two-way conversion of 6th and 7th Streets and the proposed improvements, the four intersections below primarily affected by the redistribution of traffic are forecast to operate at satisfactory LOS.

- 7th Street/Daisy Avenue
- 7th Street/Magnolia Avenue

- 6th Street/Daisy Avenue
- 6th Street/Magnolia Avenue

A new intersection is proposed at West Shoreline Drive and Broadway. This new intersection is a signalized intersection. Additionally, Broadway from West Shoreline Drive to Magnolia Avenue is proposed to be a two-way arterial compared to a one-way arterial under the existing conditions. The reconfiguration is expected to impact peak hour service levels at the following four intersections.

- Broadway/Maine Avenue
- Broadway/Magnolia Avenue
- Ocean Boulevard/Golden Shore Street
- Ocean Boulevard/ Magnolia Avenue

With the proposed improvements, all four intersections are expected to operate at satisfactory LOS.

### Alternatives 2 and 3 (Design Options A and B) Freeway Operations Analysis (2025 and 2035)

Under the year 2025 build conditions, physical configuration along SR-710 mainline stay same as that under the no build conditions. On Shoemaker Bridge, traffic operations are influenced by physical changes that would occur under the proposed project compared with the No Build condition. Due to the removal of connectors between 9th/10th Streets and Shoreline Drive, a portion of the traffic is anticipated to use SR-710 and Anaheim Street.

Shoreline Drive at Shoemaker Bridge connects SR-710 and 7th Street. The NB SR-710 On-Ramp from Shoreline Drive is a major merge and no analysis is applicable for this type of junction area. The SB SR-710 Off-Ramp to Shoreline Drive/7th Street is a major diverge. As shown in Table 2.5-10, all basic freeway segments, weaving segments, and ramp junction areas operate with LOS D or better except for SB SR-710 mainline segment north of westbound Anaheim Street off-ramp under the year 2025 build conditions.

**Table 2.5-10. Alternatives 2 and 3 (Design Options A and B) Freeway Operations Results (2025)**

| Location Description | Type | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Density[1] | LOS | Density[1] | LOS |
| ***SR-710 NB*** | | | | | |
| WB Anaheim Street On-Ramp to SB PCH Off-Ramp | Weave | 30.9 | D | 26.2 | C |
| WB Anaheim St Off-Ramp to WB Anaheim St On-Ramp | Basic | 21.6 | C | 18.9 | C |
| EB Anaheim St On-Ramp to WB Anaheim St Off-Ramp | Weave | 28.1 | D | 25.2 | C |

## Table 2.5-10. Alternatives 2 and 3 (Design Options A and B) Freeway Operations Results (2025)

| Location Description | Type | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Density[1] | LOS | Density[1] | LOS |
| Shoreline Dr On-Ramp to EB Anaheim St On-Ramp | Basic | 24.5 | C | 20.7 | C |
| EB Anaheim St Off-Ramp to Shoreline Dr On-Ramp | Basic | 12.1 | B | 12.0 | B |
| 9th & Pier B & Pico St On-Ramp to EB Anaheim St Off-Ramp | Weave | 10.6 | B | 12.8 | B |
| ***Shoemaker Bridge/Shoreline Drive NB*** | | | | | |
| SR-710 on from Shoreline Dr & 7th Street | Major Merge | No analysis applicable for major merge junction area | | | |
| ***SR-710 SB*** | | | | | |
| North of WB Anaheim St Off-Ramp | Basic | 35.3 | **E** | 30.9 | D |
| WB Anaheim St Off-Ramp | Off | 33.0 | D | 29.9 | D |
| WB Anaheim St Off-Ramp to WB Anaheim St On-Ramp | Basic | 31.4 | D | 28.0 | D |
| WB Anaheim St On-Ramp to EB Anaheim St Off-Ramp | Weave | 23.7 | C | 20.9 | C |
| EB Anaheim St Off-Ramp to Shoreline Dr Off-Ramp | Basic | 17.6 | B | 15.3 | B |
| Shoreline Dr Major Off-Ramp to EB Anaheim St On-Ramp | Basic | 11.9 | B | 8.5 | A |
| EB Anaheim St On-Ramp | On | 15.7 | B | 12.7 | B |
| South of EB Anaheim St On-Ramp | Basic | 13.9 | B | 10.1 | A |
| ***Shoemaker Bridge/Shoreline Drive SB*** | | | | | |
| SR-710 off to Shoreline Dr & 7th St | Major Diverge | 17.9 | B | 15.6 | B |

Source: Caltrans 2019a

Notes:

[1] Density = passenger car/mile/lane

**Bold**: Indicates LOS E or F

SR-710=State Route 710; LOS=level of service; SB=southbound; NB=northbound

As shown in Table 2.5-11, all basic freeway segments, weaving segments, and ramp junction areas are expected to operate at LOS D or better except for the following two mainline segments under the year 2035 build conditions. The two mainline segments as shown below are expected to operate at same level of service as under the no build conditions, LOS E during the morning peak hour.

- NB SR-710 - Westbound Anaheim Street On-Ramp and SB Pacific Highway Off-Ramp
- SB SR-710 - North of westbound Anaheim Street Off-Ramp

**Table 2.5-11. Alternatives 2 and 3 (Design Options A and B) Freeway Operations Results (2035)**

| Location Description | Type | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Density[1] | LOS | Density[1] | LOS |
| ***SR-710 NB*** | | | | | |
| WB Anaheim Street On-Ramp to SB PCH Off-Ramp | Weave | 35.4 | **E** | 28.5 | D |
| WB Anaheim St Off-Ramp to WB Anaheim St On-Ramp | Basic | 24.5 | C | 20.5 | C |
| EB Anaheim St On-Ramp to WB Anaheim St Off-Ramp | Weave | 32.4 | D | 27.4 | C |
| Shoreline Dr On-Ramp to EB Anaheim St On-Ramp | Basic | 27.6 | D | 21.9 | C |
| EB Anaheim St Off-Ramp to Shoreline Dr On-Ramp | Basic | 17.5 | B | 13.3 | B |
| 9th & Pier B & Pico St On-Ramp to EB Anaheim St Off-Ramp | Weave | 15.2 | B | 14.0 | B |
| ***Shoemaker Bridge/Shoreline Drive NB*** | | | | | |
| SR-710 on from Shoreline Dr & 7th St | Major Merge | No analysis applicable for major merge junction area | | | |
| ***SR-710 SB*** | | | | | |
| North of WB Anaheim St Off-Ramp | Basic | 39.5 | **E** | 31.3 | D |
| WB Anaheim St Off-Ramp | Off | 35.0 | D | 30.2 | D |
| WB Anaheim St Off-Ramp to WB Anaheim St On-Ramp | Basic | 33.8 | D | 28.3 | D |
| WB Anaheim St On-Ramp to EB Anaheim St Off-Ramp | Weave | 26.1 | C | 21.4 | C |
| EB Anaheim St Off-Ramp to Shoreline Dr Off-Ramp | Basic | 19.2 | C | 15.4 | B |

### Table 2.5-11. Alternatives 2 and 3 (Design Options A and B) Freeway Operations Results (2035)

| Location Description | Type | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Density[1] | LOS | Density[1] | LOS |
| Shoreline Dr Major Off-Ramp to EB Anaheim St On-Ramp | Basic | 14.5 | B | 9.9 | A |
| EB Anaheim St On-Ramp | On | 17.9 | B | 13.5 | B |
| South of EB Anaheim St On-Ramp | Basic | 16.8 | B | 11.3 | B |
| ***Shoemaker Bridge/Shoreline Drive SB*** | | | | | |
| SR-710 off to Shoreline Dr & 7th St | Major Diverge | 19.1 | B | 15.3 | B |

Source: Caltrans 2019a

Notes:

[1] Density = passenger car/mile/lane

**Bold**: Indicates LOS E or F

SR-710=State Route 710; LOS=level of service; SB=southbound; NB=northbound

### Alternatives 2 and 3 (Design Options A and B) Roadway Segment Analysis (2025 and 2035)

Table 2.5-12 displays analysis results for roadway segment analysis under 2025 Build Conditions. As shown in Table 2.5-12, all traffic study area roadway segments operate at LOS E or better, except the following, which operate at LOS F:

- SB Shoreline Drive north of Broadway during AM peak hour

Table 2.5-13 provides results for roadway segment analysis under 2035 Build Conditions. As shown in Table 2.5-13, all traffic study area roadway segments operate at LOS E or better, except the following which operate at LOS F:

- WB 7th Street west of Magnolia Avenue during AM peak hour
- SB Shoreline Drive north of Broadway during AM peak hour

## Table 2.5-12. Alternatives 2 and 3 (Design Options A and B) Roadway Segment Analysis (2025)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | 2025 Build Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 1 | EB Anaheim Street | West of Oregon Avenue | 3 | 2530 | 998 | 2389 | 0.39 | 0.94 | Yes | Yes |
| | WB Anaheim Street | West of Oregon Avenue | 3 | 2530 | 1778 | 1228 | 0.70 | 0.49 | Yes | Yes |
| 2 | WB 7th Street | East of Shoreline Drive | 2 | 1680 | 1558 | 634 | 0.93 | 0.38 | Yes | Yes |
| 3 | WB 7th Street | West of Daisy Avenue | 2 | 1680 | 1558 | 634 | 0.93 | 0.38 | Yes | Yes |
| 4 | WB 7th Street | West of Magnolia Avenue | 2 | 1680 | 1669 | 571 | 0.99 | 0.34 | Yes | Yes |
| 5 | EB 6th Street | West of Magnolia Avenue | 1 | 620 | 47 | 112 | 0.08 | 0.18 | Yes | Yes |
| 6 | EB 6th Street | West of Daisy Avenue | 1 | 620 | 25 | 58 | 0.04 | 0.09 | Yes | Yes |
| 7 | EB 6th Street | East of Shoreline Drive | 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 8 | SB Shoreline Drive | North of Broadway | 2 | 2200 | 2254 | 1622 | **1.02** | 0.74 | **No** | Yes |
| 9 | NB Shoreline Drive | North of 3rd Street | 2 | 2200 | 1710 | 1976 | 0.78 | 0.90 | Yes | Yes |
| 10 | NB Golden Avenue | South of 6th Street | 1 | 620 | 39 | 24 | 0.06 | 0.04 | Yes | Yes |
| | SB Golden Avenue | South of 6th Street | 1 | 620 | 38 | 2 | 0.06 | 0.00 | Yes | Yes |
| 11 | NB Maine Avenue | South of 6th Street | 1 | 620 | 71 | 96 | 0.11 | 0.15 | Yes | Yes |
| | SB Maine Avenue | South of 6th Street | 1 | 620 | 126 | 70 | 0.20 | 0.11 | Yes | Yes |

## Table 2.5-12. Alternatives 2 and 3 (Design Options A and B) Roadway Segment Analysis (2025)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | 2025 Build Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 12 | NB Daisy Avenue | South of 6th Street | 1 | 620 | 90 | 90 | 0.15 | 0.14 | Yes | Yes |
| | SB Daisy Avenue | South of 6th Street | 1 | 620 | 76 | 150 | 0.12 | 0.24 | Yes | Yes |
| 13 | NB Magnolia Avenue | South of 6th Street | 1 | 840 | 633 | 713 | 0.75 | 0.85 | Yes | Yes |
| | SB Magnolia Avenue | South of 6th Street | 1 | 840 | 611 | 546 | 0.73 | 0.65 | Yes | Yes |
| 14 | WB 3rd Street | East of Maine Avenue | 2 | 2020 | 384 | 308 | 0.19 | 0.15 | Yes | Yes |
| 15 | WB 3rd Street | West of Maine Avenue | 2 | 2020 | 63 | 37 | 0.03 | 0.02 | Yes | Yes |
| 16 | WB 3rd Street | West of Golden Avenue | 3 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 17 | EB Broadway | East of Shoreline Drive | 2 | 1680 | 1141 | 906 | 0.68 | 0.54 | Yes | Yes |
| 18 | EB Broadway | West of Golden Avenue | 2 | 1680 | 1209 | 1014 | 0.72 | 0.60 | Yes | Yes |
| 19 | NB Magnolia Avenue | North of Ocean Boulevard | 2 | 1680 | 928 | 1189 | 0.55 | 0.71 | Yes | Yes |
| | SB Magnolia Avenue | North of Ocean Boulevard | 2 | 1680 | 603 | 724 | 0.36 | 0.43 | Yes | Yes |
| 20 | EB Ocean Boulevard | East of Magnolia Avenue | 3 | 2530 | 851 | 2031 | 0.34 | 0.80 | Yes | Yes |
| | WB Ocean Boulevard | East of Magnolia Avenue | 3 | 2530 | 2389 | 1789 | 0.94 | 0.71 | Yes | Yes |

## Table 2.5-12. Alternatives 2 and 3 (Design Options A and B) Roadway Segment Analysis (2025)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | 2025 Build Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 21 | EB Ocean Boulevard | West of Magnolia Avenue | 3 | 2530 | 896 | 2209 | 0.35 | 0.87 | Yes | Yes |
| | WB Ocean Boulevard | West of Magnolia Avenue | 4 | 3390 | 1978 | 1541 | 0.58 | 0.45 | Yes | Yes |
| 22 | NB Shoreline Drive | South of 3rd Street | 2 | 2200 | 1710 | 1976 | 0.78 | 0.90 | Yes | Yes |
| 23 | NB Shoreline Drive | Off-Ramp to Ocean Boulevard | 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 24 | EB Ocean Boulevard | West of Golden Shore | 3 | 2530 | 1019 | 2067 | 0.40 | 0.82 | Yes | Yes |
| | WB Ocean Boulevard | West of Golden Shore | 3 | 2530 | 1380 | 1324 | 0.55 | 0.52 | Yes | Yes |
| 25 | NB Shoreline Drive | South of Ocean Boulevard | 2 | 2200 | 647 | 945 | 0.29 | 0.43 | Yes | Yes |
| 26 | SB Shoreline Drive | North of Ocean Boulevard | 2 | 2200 | 1180 | 788 | 0.54 | 0.36 | Yes | Yes |
| 27 | NB Shoreline Drive | On Shoemaker Bridge | 2 | 3950 | 3086 | 2420 | 0.78 | 0.61 | Yes | Yes |
| | SB Shoreline Drive | On Shoemaker Bridge | 2 | 3950 | 2882 | 2976 | 0.73 | 0.75 | Yes | Yes |
| 28 | NB Golden Shore Street | between Ocean and Shoreline | 2 | 1310 | 268 | 486 | 0.20 | 0.37 | Yes | Yes |
| | SB Golden Shore Street | between Ocean and Shoreline | 2 | 1310 | 270 | 170 | 0.21 | 0.13 | Yes | Yes |

## Table 2.5-12. Alternatives 2 and 3 (Design Options A and B) Roadway Segment Analysis (2025)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | 2025 Build Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 29 | NB Golden Shore Street | South of Shoreline Drive | 2 | 1310 | 103 | 492 | 0.08 | 0.38 | Yes | Yes |
| | SB Golden Shore Street | South of Shoreline Drive | 2 | 1310 | 484 | 158 | 0.37 | 0.12 | Yes | Yes |

Source: Caltrans 2019a

Notes:

**Bold**: V/C Ratio Exceeds 1.00

EB=eastbound; ID=identification; LOS=level of service; NB=northbound; SB=southbound; V/C=volume to capacity; WB=westbound

## Table 2.5-13. Alternatives 2 and 3 (Design Options A and B) Roadway Segment Analysis (2035)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | 2035 Build Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 1 | EB Anaheim Street | West of Oregon Avenue | 3 | 2530 | 1058 | 2501 | 0.42 | 0.99 | Yes | Yes |
| | WB Anaheim Street | West of Oregon Avenue | 3 | 2530 | 1828 | 1271 | 0.72 | 0.50 | Yes | Yes |
| 2 | WB 7th Street | East of Shoreline Drive | 2 | 1680 | 1597 | 657 | 0.95 | 0.39 | Yes | Yes |
| 3 | WB 7th Street | West of Daisy Avenue | 2 | 1680 | 1597 | 657 | 0.95 | 0.39 | Yes | Yes |
| 4 | WB 7th Street | West of Magnolia Avenue | 2 | 1680 | 1698 | 589 | **1.01** | 0.35 | **No** | Yes |
| 5 | EB 6th Street | West of Magnolia Avenue | 1 | 620 | 51 | 113 | 0.08 | 0.18 | Yes | Yes |
| 6 | EB 6th Street | West of Daisy Avenue | 1 | 620 | 25 | 60 | 0.04 | 0.10 | Yes | Yes |
| 7 | EB 6th Street | East of Shoreline Drive | 2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 8 | SB Shoreline Drive | North of Broadway | 2 | 2200 | 2400 | 1720 | **1.09** | 0.78 | **No** | Yes |
| 9 | NB Shoreline Drive | North of 3rd Street | 2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 10 | NB Golden Avenue | South of 6th Street | 1 | 620 | 38 | 25 | 0.06 | 0.04 | Yes | Yes |
| | SB Golden Avenue | South of 6th Street | 1 | 620 | 38 | 2 | 0.06 | 0.00 | Yes | Yes |

## Table 2.5-13. Alternatives 2 and 3 (Design Options A and B) Roadway Segment Analysis (2035)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | 2035 Build Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 11 | NB Maine Avenue | South of 6th Street | 1 | 620 | 74 | 98 | 0.12 | 0.16 | Yes | Yes |
| | SB Maine Avenue | South of 6th Street | 1 | 620 | 128 | 91 | 0.21 | 0.15 | Yes | Yes |
| 12 | NB Daisy Avenue | South of 6th Street | 1 | 620 | 91 | 94 | 0.15 | 0.15 | Yes | Yes |
| | SB Daisy Avenue | South of 6th Street | 1 | 620 | 76 | 152 | 0.12 | 0.25 | Yes | Yes |
| 13 | NB Magnolia Avenue | South of 6th Street | 1 | 840 | 640 | 733 | 0.76 | 0.87 | Yes | Yes |
| | SB Magnolia Avenue | South of 6th Street | 1 | 840 | 645 | 592 | 0.77 | 0.70 | Yes | Yes |
| 14 | WB 3rd Street | East of Maine Avenue | 2 | 2020 | 397 | 324 | 0.20 | 0.16 | Yes | Yes |
| 15 | WB 3rd Street | West of Maine Avenue | 2 | 2020 | 75 | 53 | 0.04 | 0.03 | Yes | Yes |
| 16 | WB 3rd Street | West of Golden Avenue | 2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 17 | EB Broadway | East of Shoreline Drive | 2 | 1680 | 1215 | 940 | 0.72 | 0.56 | Yes | Yes |
| 18 | EB Broadway | West of Golden Avenue | 2 | 1680 | 1228 | 1051 | 0.73 | 0.63 | Yes | Yes |
| 19 | NB Magnolia Avenue | North of Ocean Boulevard | 2 | 1680 | 943 | 1231 | 0.56 | 0.73 | Yes | Yes |

## Table 2.5-13. Alternatives 2 and 3 (Design Options A and B) Roadway Segment Analysis (2035)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | 2035 Build Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| | SB Magnolia Avenue | North of Ocean Boulevard | 2 | 1680 | 616 | 769 | 0.37 | 0.46 | Yes | Yes |
| 20 | EB Ocean Boulevard | East of Magnolia Avenue | 3 | 2530 | 868 | 2229 | 0.34 | 0.88 | Yes | Yes |
| | WB Ocean Boulevard | East of Magnolia Avenue | 3 | 2530 | 2466 | 1826 | 0.97 | 0.72 | Yes | Yes |
| 21 | EB Ocean Boulevard | West of Magnolia Avenue | 3 | 2530 | 912 | 2407 | 0.36 | 0.95 | Yes | Yes |
| | WB Ocean Boulevard | West of Magnolia Avenue | 4 | 3390 | 2047 | 1578 | 0.60 | 0.47 | Yes | Yes |
| 22 | NB Shoreline Drive | South of 3rd Street | 2 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 23 | NB Shoreline Drive | Off-Ramp to Ocean Boulevard | 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 24 | EB Ocean Boulevard | West of Golden Shore | 3 | 2530 | 1043 | 2188 | 0.41 | 0.86 | Yes | Yes |
| | WB Ocean Boulevard | West of Golden Shore | 3 | 2530 | 1435 | 1357 | 0.57 | 0.54 | Yes | Yes |
| 25 | NB Shoreline Drive | South of Ocean Boulevard | 2 | 2200 | 793 | 1016 | 0.36 | 0.46 | Yes | Yes |
| 26 | SB Shoreline Drive | North of Ocean Boulevard | 2 | 2200 | 1257 | 857 | 0.57 | 0.39 | Yes | Yes |

## Table 2.5-13. Alternatives 2 and 3 (Design Options A and B) Roadway Segment Analysis (2035)

| ID | Segment | Description | No. of Lanes | LOS E Hourly Capacity | 2035 Build Hourly Volumes | | V/C Ratios | | LOS E or Better? | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 27 | NB Shoreline Drive | On Shoemaker Bridge | 2 | 3950 | 3272 | 2531 | 0.83 | 0.64 | Yes | Yes |
| | SB Shoreline Drive | On Shoemaker Bridge | 2 | 3950 | 3026 | 3069 | 0.77 | 0.78 | Yes | Yes |
| 28 | NB Golden Shore Street | between Ocean and Shoreline | 2 | 1310 | 269 | 494 | 0.21 | 0.38 | Yes | Yes |
| | SB Golden Shore Street | between Ocean and Shoreline | 2 | 1310 | 277 | 171 | 0.21 | 0.13 | Yes | Yes |
| 29 | NB Golden Shore Street | South of Shoreline Drive | 2 | 1310 | 103 | 500 | 0.08 | 0.38 | Yes | Yes |
| | SB Golden Shore Street | South of Shoreline Drive | 2 | 1310 | 499 | 159 | 0.38 | 0.12 | Yes | Yes |

Source: Caltrans 2019a

Notes:

**Bold**: V/C Ratio Exceeds 1.00

EB=eastbound; ID=identification; LOS=level of service; NB=northbound; SB=southbound; V/C=volume to capacity; WB=westbound

### Alternatives 2 and 3 (Design Options A and B) Intersection Analysis (2025 and 2035)

Table 2.5-14 shows Alternatives 2 and 3 (Design Options A and B) intersection LOS and delay results for the traffic study area intersections in 2025. All of the traffic study area intersections are expected to operate at LOS D or better in 2025 with the exception of the following intersections:

- Pier B Street / Pico Avenue at SR-710 Ramps/9th Street during AM peak hour
- Shoreline Drive / 7th Street (Design Option B) during PM peak hour

**Table 2.5-14. Alternative 2 and 3 Peak Hour Intersection Level of Service Results (2025)**

| ID | North-South Street | East-West Street | Control | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | | | DELAY | LOS | DELAY | LOS |
| 1 | Harbor Avenue | Anaheim Street | Signalized | 22.2 | C | 12.2 | B |
| 2 | Santa Fe Avenue | Anaheim Street | Signalized | 44.2 | D | 42.5 | D |
| 3 | Santa Fe Avenue | 9th Street | Signalized | 31.7 | C | 22.7 | C |
| 4 | Pier B Street / Pico Avenue | SR-710 Ramps/9th Street | Signalized | >100 | **F** | 24.1 | C |
| 5 | Pico Avenue | Ocean Boulevard Ramps | Signalized | 20.6 | C | 26.3 | C |
| 6 | Golden Shore Street | Ocean Boulevard | Signalized | 22.3 | C | 19.9 | B |
| 7 | Magnolia Avenue/Queens Way | Ocean Boulevard | Signalized | 47.5 | D | 36.4 | D |
| 8 | Magnolia Avenue | Broadway | Signalized | 33.0 | C | 35.3 | D |
| 9 | Maine Avenue | Broadway | Signalized | 25.0 | C | 18.9 | B |
| 10 | Golden Avenue | 3rd Street | Signalized | 9.2 | A | 8.7 | A |
| 11 | Maine Avenue | 3rd Street | Signalized | 17.3 | B | 16.2 | B |
| 12 | Magnolia Avenue | 3rd Street | Signalized | 27.8 | C | 20.8 | C |
| 13 | Magnolia Avenue | 6th Street | Signalized | 28.8 | C | 33.2 | C |
| 14 | Daisy Avenue | 6th Street | Signalized | 20.0 | B | 18.2 | B |
| 15 | Daisy Avenue | 7th Street | Signalized | 6.0 | A | 6.1 | A |
| 16 | Magnolia Avenue | 7th Street | Signalized | 46.7 | D | 29.7 | C |
| 17 | Magnolia Avenue | 10th Street | Signalized | 12.1 | B | 13.8 | B |
| 18 | Pacific Avenue | Anaheim Street | Signalized | 24.4 | C | 20.9 | C |

## Table 2.5-14. Alternative 2 and 3 Peak Hour Intersection Level of Service Results (2025)

| ID | North-South Street | East-West Street | Control | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | | | DELAY | LOS | DELAY | LOS |
| 19 | Magnolia Avenue | Anaheim Street | Signalized | 18.0 | B | 27.1 | C |
| 20 | Oregon Avenue | Anaheim Street | Signalized | 4.9 | A | 15.5 | B |
| 21 | Cedar Avenue | Anaheim Street | Signalized | 9.5 | A | 16.0 | B |
| 22 | Pacific Avenue | 7th Street | Signalized | 40.7 | D | 35.7 | D |
| 23 | Pacific Avenue | 6th Street | Signalized | 12.0 | B | 19.9 | B |
| 24 | Pacific Avenue | 3rd Street | Signalized | 16.7 | B | 13.8 | B |
| 25 | Pacific Avenue | Broadway | Signalized | 15.3 | B | 15.4 | B |
| 26 | Pacific Avenue | Ocean Boulevard | Signalized | 24.1 | C | 15.7 | B |
| 27 | Atlantic Avenue | Anaheim Street | Signalized | 21.5 | C | 23.6 | C |
| 28 | Atlantic Avenue | 7th Street | Signalized | 29.4 | C | 25.2 | C |
| 29 | Atlantic Avenue | 6th Street | Signalized | 10.3 | B | 23.7 | C |
| 30 | Atlantic Avenue | 3rd Street | Signalized | 10.2 | B | 15.2 | B |
| 31 | Golden Shore | Broadway Avenue | Stop Sign | 14.8 | B | 14.1 | B |
| 32 | Shoreline Drive | Broadway | Signalized | 10.8 | B | 25.7 | C |
| 33 | Shoreline Drive | 7th Street (Design Option A) | Roundabout | 16.8 | B | 26.8 | C |
| 33 | Shoreline Drive | 7th Street (Design Option B) | Signalized | 54.8 | D | 57.6 | **E** |
| 34 | Golden Shore Street | Shoreline Drive | Signalized | 27.7 | C | 18.1 | B |
| 35 | Seaside Connector | Shoreline Drive | Stop Sign | 11.2 | B | 12.9 | B |

Source: Caltrans 2019a

Notes:

**Bold:** Indicates LOS E or F

ID=identification; LOS=level of service; SR-710=State Route 710

Table 2.5-15 shows the 2035 Alternatives 2 and 3 (Design Options A and B) intersection LOS for AM peak hour and PM peak hour. All of the traffic study area intersections are expected to operate at LOS D or better in 2035 with the exception of the following intersections:

- Pier B Street / Pico Avenue at SR-710 Ramps/9th Street during AM peak hour
- Shoreline Drive / 7th Street (Design Option B) during AM and PM peak hours

**Table 2.5-15. Alternative 2 and 3 Peak Hour Intersection Level of Service Results (2035)**

| ID | North-South Street | East-West Street | Control | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | | | DELAY | LOS | DELAY | LOS |
| 1 | Harbor Avenue | Anaheim Street | Signalized | 22.3 | C | 12.5 | B |
| 2 | Santa Fe Avenue | Anaheim Street | Signalized | 46.1 | D | 52.6 | D |
| 3 | Santa Fe Avenue | 9th Street | Signalized | 33.8 | C | 25.9 | C |
| 4 | Pier B Street / Pico Avenue | SR-710 Ramps/9th Street | Signalized | >100 | **F** | 30.0 | C |
| 5 | Pico Avenue | Ocean Boulevard Ramps | Signalized | 28.9 | C | 34.3 | C |
| 6 | Golden Shore | Ocean Boulevard | Signalized | 22.7 | C | 21.0 | C |
| 7 | Magnolia Avenue/Queens Way | Ocean Boulevard | Signalized | 51.4 | D | 38.6 | D |
| 8 | Magnolia Avenue | Broadway Avenue | Signalized | 34.7 | C | 38.5 | D |
| 9 | Maine Avenue | Broadway Avenue | Signalized | 25.4 | C | 21.5 | C |
| 10 | Golden Avenue | 3rd Street | Stop Sign | 9.2 | A | 8.7 | A |
| 11 | Maine Avenue | 3rd Street | Signalized | 17.6 | B | 16.7 | B |
| 12 | Magnolia Avenue | 3rd Street | Signalized | 28.4 | C | 21.1 | C |
| 13 | Magnolia Avenue | 6th Street | Signalized | 33.1 | C | 34.1 | C |
| 14 | Daisy Avenue | 6th Street | Signalized | 20.0 | B | 18.2 | B |
| 15 | Daisy Avenue | 7th Street | Signalized | 6.2 | A | 6.8 | A |
| 16 | Magnolia Avenue | 7th Street | Signalized | 51.7 | D | 31.4 | C |
| 17 | Magnolia Avenue | 10th Street | Signalized | 12.3 | B | 14.2 | B |
| 18 | Pacific Avenue | Anaheim Street | Signalized | 25.1 | C | 21.6 | C |
| 19 | Magnolia Avenue | Anaheim Street | Signalized | 19.6 | B | 33.5 | C |

**Table 2.5-15. Alternative 2 and 3 Peak Hour Intersection Level of Service Results (2035)**

| ID | North-South Street | East-West Street | Control | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | | | DELAY | LOS | DELAY | LOS |
| 20 | Oregon Avenue | Anaheim Street | Signalized | 5.1 | A | 16.2 | B |
| 21 | Cedar Avenue | Anaheim Street | Signalized | 9.6 | A | 18.3 | B |
| 22 | Pacific Avenue | 7th Street | Signalized | 41.4 | D | 38.7 | D |
| 23 | Pacific Avenue | 6th Street | Signalized | 13.6 | B | 20.3 | C |
| 24 | Pacific Avenue | 3rd Street | Signalized | 16.7 | B | 15.2 | B |
| 25 | Pacific Avenue | Broadway Avenue | Signalized | 15.4 | B | 15.5 | B |
| 26 | Pacific Avenue | Ocean Boulevard | Signalized | 25.6 | C | 16.3 | B |
| 27 | Atlantic Avenue | Anaheim Street | Signalized | 22.2 | C | 26.1 | C |
| 28 | Atlantic Avenue | 7th Street | Signalized | 30.4 | C | 25.4 | C |
| 29 | Atlantic Avenue | 6th Street | Signalized | 10.4 | B | 23.7 | C |
| 30 | Atlantic Avenue | 3rd Street | Signalized | 10.4 | B | 15.2 | B |
| 31 | Golden Shore | Broadway Avenue | Stop Sign | 15.7 | C | 14.5 | B |
| 32 | Shoreline Drive | Broadway Avenue | Signalized | 16.4 | B | 25.7 | C |
| 33 | Shoreline Drive | 7th Street (Design Option A) | Roundabout | 5.7 | A | 15.8 | B |
| 33 | Shoreline Drive | 7th Street (Design Option B) | Signalized | 68.8 | **E** | 64.4 | **E** |
| 34 | Golden Shore Street | Shoreline Drive | Signalized | 28.8 | C | 18.2 | B |
| 35 | Seaside Connector | Shoreline Drive | Stop Sign | 12.0 | B | 13.5 | B |

Source: Caltrans 2019a

Notes:

**Bold:** Indicates LOS E or F

ID=identification; LOS=level of service; SR-710=State Route-710

Intersection of Pier B Street/Pico Avenue at SR-710 Ramps/9th Street intersection would operate at LOS F during the AM peak hour under the Shoemaker Bridge Replacement Project build conditions. However, based on the Final EIR for the Pier B Project, certified January 22, 2018, the improvements a part of the 12th Street Alternative (or the selected Pier B Project Alternative) would include the

closure of the east leg of 9th Street, which is the Pier B Street/Pico Avenue and SR-710 Ramps/9th Street Intersection. Per the Pier B Project, the intersection is expected to operate at LOS D or better with the T-intersection lane configuration under all the future build conditions.

The following reconfigurations and improvements would be recommended to be implemented as part of the Project under Alternatives 2 and 3 (Design Options A and B).

*Golden Shore Street/Ocean Boulevard*

- Stripe a shared through/right-turn lane and a left-turn lane on the SB approach of Golden Shore Street.

*Magnolia Avenue/Broadway*

- Add dual left-turns to the NB approach of Magnolia Avenue
- Reconfigure the EB approach of Broadway into three lanes. Stripe a shared through/left-turn lane, a through lane, and a right-turn lane.
- Restripe the right outer lane of the SB approach of Magnolia Avenue as a shared through/right-turn lane.

*Maine Avenue/ Broadway*

- Reconfigure the EB approach of Broadway into two lanes and stripe a shared through/left-turn lane and a shared through/right-turn lane
- Stripe a right-turn lane and a shared through/left-turn lane on the SB approach of Maine Avenue
- Reconfigure the WB approach of Broadway into two lanes and stripe a through lane and a shared through/right turn-lane. Restrict left-turns into Maine Avenue on the WB approach of Broadway.

*Golden Avenue/3rd Street*

- Remove the EB approach of the 3rd Street and create a T intersection.
- Reconfigure SB approach on Golden Avenue into a single shared through/left-turn lane.
- Reconfigure NB approach on Golden Avenue into a single shared through/right-turn lane.
- Stripe an exclusive left-turn lane and an exclusive right-turn lane on the WB approach of 3rd Street.

*Maine Avenue/3rd Street*

- Stripe a left-turn lane and a shared through/right-turn lane on the EB and WB approaches of 3rd Street.
- Stripe a shared left-turn/through/right-turn lane on the NB and SB approaches of Maine Avenue.

*Magnolia Avenue/3rd Street*

- Stripe a left-turn lane and a right-turn lane on the EB approach of 3rd Street.
- Stripe a left-turn lane, a through lane, and a right-turn lane on the WB approach of 3rd Street.

*Magnolia Avenue/6th Street*

- Stripe a left-turn lane and a shared through/right-turn lane on the EB and WB approaches of 6th street.
- On the NB approach of Magnolia Avenue, stripe a left-turn lane and shared through/right-turn lane.

*Daisy Avenue/6th Street*

- Stripe a left-turn lane and a shared through/right-turn lane on the EB and WB approaches of 6th Street.
- Stripe a shared left-turn/through/right-turn lane on the NB and SB approaches of Daisy Avenue.

*Pacific Avenue/6th Street*

- Stripe a left-turn lane and shared through/right-turn lane on the EB and WB approaches of 6th Street.
- Stripe a shared through/left-turn and a shared through/right-turn lane on the NB approach of Pacific Avenue.

*Atlantic Avenue/6th Street*

- Stripe a left-turn lane and shared through/right-turn lane on the EB approach of 6th Street.
- Stripe a left-turn lane, a through lane, and a right-turn lane on the WB approach of 6th Street.
- Stripe a shared through/left-turn and a shared through/right-turn lane on the NB approach of Pacific Avenue.

*Daisy Avenue/7th Street*

- Reconfigure the EB approach of 7th Street into two lanes. Stripe a shared through/left-turn lane and a shared through/right-turn lane.
- On the SB approach of Daisy Avenue, stripe a right-turn lane and a shared through/left-turn lane
- Reconfigure the WB approach of 7th Street into two lanes. Stripe a shared through/left-turn lane and a shared through/right-turn lane.

*Magnolia Avenue/7th Street*

- Reconfigure the EB approach on 7th Street into two lanes and stripe a shared through/left-turn lane and a shared through/right-turn lane.
- Stripe a left-turn lane, a through lane, and a shared through/right-turn lane on the WB approach of 7th Street.
- Stripe left-turn lane and a shared through/right-turn on the SB approach of Magnolia Avenue.

*Pacific Avenue/7th Street*

- Reconfigure the EB and WB approaches of 7th Street into two lanes and stripe a shared through/left-turn lane and a shared through/right-turn lane in each direction.

- Stripe a shared through/right-turn lane and a shared through/left-turn lane on the SB approach of Pacific Avenue.

*Atlantic Avenue/7th Street*

- Reconfigure the EB approach of 7th Street into two lanes and stripe a shared through/left-turn lane and a shared through/right-turn lane.
- Reconfigure the WB approach of 7th Street into three lanes and stripe a left-turn lane, a through lane, and a shared through/right-turn lane.

Shoreline Drive/7th Street

- Propose a new intersection at the location with two different design options (Design Option A and Design Option B).
- Install a roundabout intersection with Design Option A.
- Construct a "Y" intersection with Design Option B.

*Golden Shore Street/Broadway Avenue*

- Create a new stop-controlled T intersection.
- Stripe a right-turn lane on the NB approach of the Golden Shore Street.
- Stripe dual through lanes and a right-turn lane on the EB approach of Broadway Avenue.
- Reconfigure the WB approach of Broadway Avenue into dual through lanes.

*Shoreline Drive/Broadway Create a New Signal-controlled T intersection*

- Stripe a through and a shared through/right-turn lane on the NB approach of Shoreline Drive.
- Stripe dual left-turn lanes and dual through lanes on the SB approach of the Shoreline Drive.
- Stripe dual right-turn lanes and a left-turn lane on the WB approach of Broadway.

*Golden Shore Street/Shoreline Drive*

- Create a new signal-controlled intersection.
- Stripe a left-turn lane, a through lane, and a shared through/right-turn lane on the NB approach of Golden Shore Street.
- Stripe a left-turn lane, dual through lanes, and a right-turn lane on the EB approach of the Shoreline Drive.
- Stripe a left-turn lane, dual through lanes, and a right-turn lane on the WB approach of Shoreline Drive.
- Stripe a left-turn lane, a through lane, and a right-turn lane on the SB approach of Golden Shore Street.

*Seaside Connector/Shoreline Drive*

- Create a new stop-controlled T-intersection.
- Stripe dual right-turn lanes on the SB approach of Seaside Connector. Prohibit Left turns.

- Stripe a left-turn lane and dual through lanes on the EB approach of Shoreline Drive.
- Stripe a right-turn lane and dual through lanes on the WB approach of Shoreline Drive.

Table 2.5-16 shows a comparison of VMT/VHT between the existing condition, Alternative 1 (No Build), and Alternatives 2 and 3 (Design Options A and B). In the 2025 scenario, implementation of Alternatives 2 or 3 (Design Options A and B) would result in an increase in VMT when compared to the 2025 No Build condition. However, implementation of Alternatives 2 or 3 (Design Options A and B) would result in a reduction in VHT and an increase in average speed, which indicates a reduction in traffic congestion when compared to the 2025 No Build condition.

In the 2035 scenario, implementation of Alternatives 2 or 3 (Design Options A and B) would result in an increase in VMT when compared to the 2035 No Build condition. However, implementation of Alternatives 2 or 3 (Design Options A and B) would result in a reduction in VHT and an increase in average speed, which indicates a reduction in traffic congestion when compared to the 2035 No Build condition.

**Table 2.5-16. Vehicle Miles Traveled, Vehicle Hours Traveled, and Average Speed Comparison**

| | | 2025 | | 2035 | |
|---|---|---|---|---|---|
| | Existing | No Build | Build | No Build | Build |
| VMT | 51,256 | 53,454 | 56,544 | 56,202 | 59,307 |
| VHT | 3,107 | 3,713 | 3,573 | 4,470 | 4,353 |
| Average Speed (miles per hour) | 16.50 | 14.40 | 15.83 | 12.57 | 13.62 |

Source: Caltrans 2019a

Notes:

VHT= vehicle hours traveled; VMT=vehicle miles traveled

*Public Transportation*

Alternatives 2 and 3 (Design Options A and B) do not propose any improvements to public transportation facilities. Therefore, no permanent adverse impacts on public transportation are anticipated under Alternatives 2 and 3 (Design Options A and B).

*Pedestrian and Bicycle Facilities*

The proposed Project under Alternatives 2 and 3 (Design Options A and B), would provide new sidewalks along Broadway and Golden Shore. Sidewalks would also be replaced along Ocean Boulevard adjacent to both the WB and EB lanes within the Project limits, and would join existing sidewalks outside the Project limits. The sidewalk design would comply with ADA standards. In addition, Alternatives 2 and 3 (Design Options A and B) would accommodate the Drake-Chavez Greenbelt Expansion Project, which would include additional pedestrian and bicycle connections between the two parks and the LARIO Trail.

As shown in Figure 1-3, Chapter 1, Alternatives 2 and 3 (Design Options A and B) would also provide new Class 1 bike paths. As part of the Project, a new Class 1 bike path would be provided at the new 6th Street terminus, which would provide connections between Cesar E. Chavez Park, Drake Park, and the LARIO Trail. This connection would replace the roadway that accommodates both bicycle and motor vehicle traffic along EB 7th street, which would be removed as part of the lane reconfiguration and roadway removal proposed by the Project. The Project would also include a bicycle and pedestrian observation platform/vista point along the south side of the new Shoemaker Bridge, which would provide connections to the existing bike path on the eastside of the LA River and future connection to the bike trail on the west side of the LA River. Additionally, in conjunction with the LB MUST Facility Project, Alternatives 2 and 3 (Design Options A and B) would provide meandering pathways around the existing 6th Street Pump Station and the proposed LB MUST concrete containment basins. The Project would also provide grade-separated access to Cesar E. Chavez Park and the LARIO Trail from the new 3rd Street/Broadway bike route. Although permanent impacts would occur with the removal of the 7th street Off-Ramp, the Project would provide new and improved bike paths that are consistent with the City's planned projects (as discussed in Section 2.1, Land Use). No permanent adverse impacts would occur that would impair the use of the LARIO Trail. Therefore, the proposed Project improvements would provide an overall beneficial impact by improving existing connectivity within the Project limits and adjacent downtown Long Beach area.

## 2.5.4 Avoidance, Minimization, and/or Mitigation Measures

The following minimization measure is proposed to address direct permanent impacts on parking as a result of Alternatives 2 and 3 (Design Options A and B):

**TR-1** **Restricted Street Parking.** The City of Long Beach (City) will ensure that restricted parking be implemented along 7th Street as part of the Shoemaker Bridge Replacement Project (Project). The replacement parking will be restricted during AM and PM peak hours.

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# 2.6 Visual/Aesthetics

## 2.6.1 Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). To further emphasize this point, the Federal Highway Administration (FHWA), in its implementation of NEPA (23 USC 109[h]), directs that final decisions on projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of *aesthetic*, natural, scenic and historic environmental qualities" (CA Public Resources Code [PRC] Section 21001[b]).

California Streets and Highways Code Section 92.3 directs Caltrans to use drought resistant landscaping and recycled water when feasible, and incorporate native wildflowers and native and climate-appropriate vegetation into the planting design when appropriate.

## 2.6.2 Affected Environment

This section is based on the Shoemaker Bridge Replacement Project *Visual Impact Assessment* (VIA) (Caltrans 2018b) in accordance with the guidance outlined in the *Visual Impact Assessment for Highway Projects* (FHWA 1981).

### 2.6.2.1 Visual Environment

#### Visual Setting

The City of Long Beach is located in Los Angeles County, approximately 20 miles south of downtown Los Angeles and is the second largest city within the Los Angeles metropolitan area. The City is a maritime center with the POLB, which is located at the western edge of the City, serving as the second-busiest seaport in the U.S. and a key transportation hub in the global trade marketplace. The Shoemaker Bridge connects SR-710 to downtown Long Beach and spans the LA River.

The west portion of the proposed Project limits, bordered by West Anaheim Street to the north, includes SR-710 and existing connector ramps of 9th and 10th Streets. Cesar E. Chavez Park, bordered by 6th Street to the north, Golden Avenue to the east, 3rd Street to the south, and West Shoreline Drive to the west, contributes to the setting of the eastern portion of the Project limits. The World Trade Center and its surrounding business area anchor the south edge of the Project limits. The proposed Project is not within an officially designated state highway.

Existing features within the area of the Project limits contributing to the existing visual quality are adjacent residential and commercial developments, the existing Shoemaker Bridge, ramps and connectors, local streets, bike paths, the LA River, LA River embankments, Cesar E. Chavez Park, and designated open space. The proposed Project crosses through the Drake Park/Willmore City Historic District, a locally designated historic district in the City. There are no state or locally designated landmarks within the Project limits.

The southernmost portion of the Project limits, south of Ocean Boulevard, is located within the CCC jurisdiction. The City prepared a LCP, which was certified in 1980 by the CCC and has been amended

multiple times since to be consistent with the CCA. The City's adopted LCP designates the City as the primary authority to regulate development and issue CDPs for projects requiring discretionary approval within its jurisdiction consistent with the LCP. The City's LCP adopted these goals and policies, which aim to maximize public access to recreational opportunities along the coast, protect lower cost visitor and recreational facilities, housing, and increase recreational boating and other uses of coastal waters. The Project is located in the downtown shoreline sub-area of the LCP, which is characterized as mid- to high-rise office and residential buildings, as well as large scale public recreation and entertainment facilities. The LCP adopted goals and policies to ensure compliance with the CCA, including protection of visual and aesthetic coastal resources.

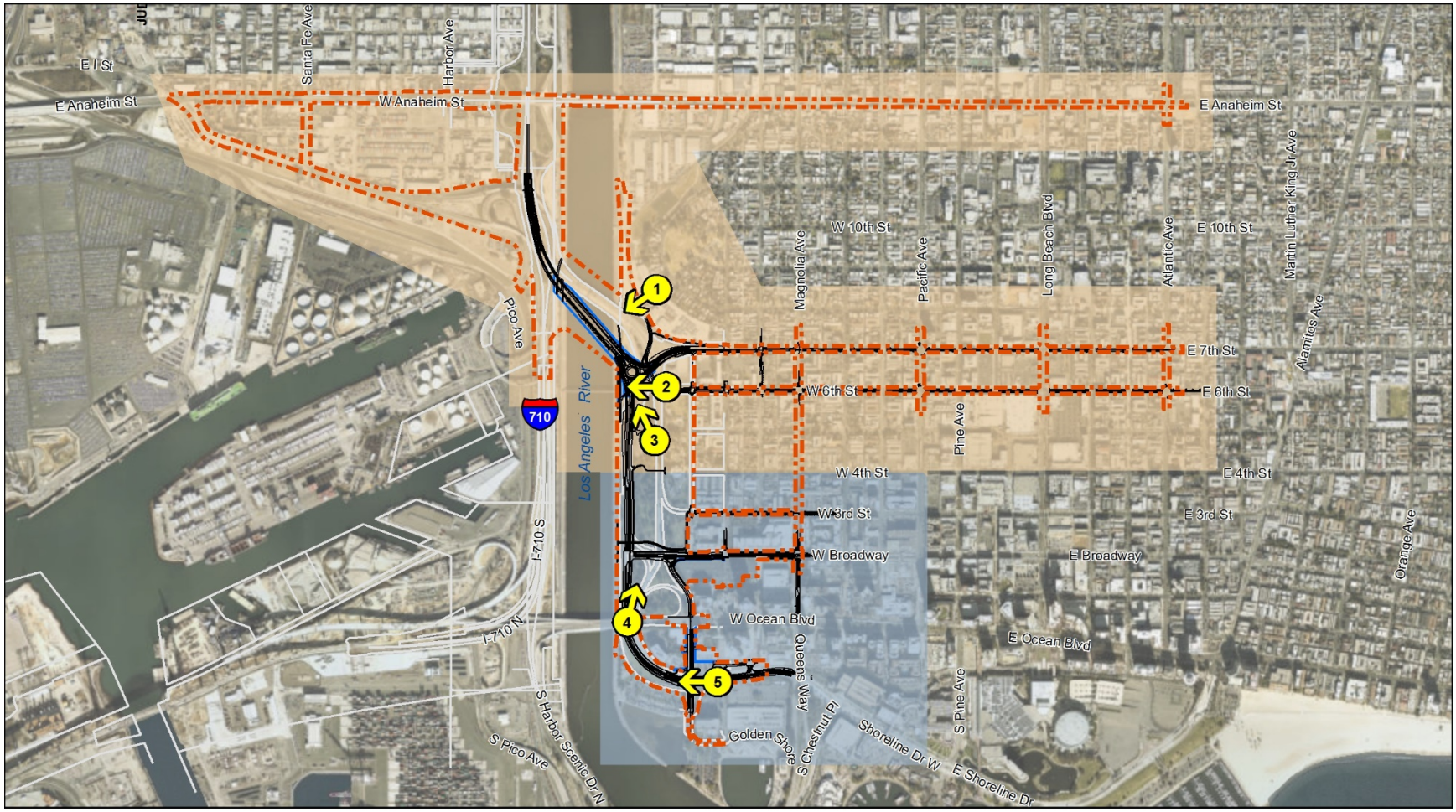
### 2.6.2.2 Visual Assessment Units

The area within the Project limits was divided into a series of outdoor rooms or visual assessment units (VAU). Each VAU has its own visual character and visual quality and is typically defined by the limits of a particular viewshed. For this Project, the following two VAUs have been identified:

- **VAU-1:** VAU-1 is located in the northern portion of the Project limits. VAU-1 is generally defined by areas of the Project limits north of 4th Street to the northern boundaries of the Project limits along West Anaheim Street. VAU-1 is generally flat and consists of the existing Shoemaker Bridge and its on- and off-ramps. Surrounding the existing Shoemaker Bridge are industrial uses to the north; the LA River and LARIO Trail (Class I bike path) to the west; residential developments, existing Shoemaker Bridge on- and off-ramps, and Drake Park to the east; and the northern portion of Cesar E. Chavez Park to the south. No prominent natural landforms are visible within VAU-1.
- **VAU-2:** VAU-2 is located in the southern portion of the Project limits. VAU-2 is generally defined by areas of the Project limits south of 4th Street to the southern boundaries of the Project limits along Golden Shore. VAU-2 is generally flat and includes Cesar E. Chavez Park and local streets. Surrounding development includes a combination of commercial and residential (including high-rise residential); a high-rise hotel along the eastern and southern portions of the VAU; the LA River and LARIO Trail (Class I bike path) to the west; and Cesar E. Chavez Park, Cesar Chavez Elementary School, and West Shoreline Drive within the northern portion of VAU-2. Uses within VAU-2 are primarily recreational, commercial, and residential containing some residential and commercial high-rise structures. No prominent natural landforms are visible within VAU-2.

#### Key Views

Key views are used to most clearly demonstrate the change in the Project's visual resources. Five key view locations have been identified to represent the visual and aesthetic character of the Project setting within the VAUs defined above and shown on Figure 2.6-1.




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.6-1. Visual Assessment Units and Key Views**

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The key views were selected to exhibit areas of the Project showing significant construction and/or operational impacts of the Project for Alternatives 2 and 3 and Design Option A (roundabout) and Design Option B ("Y" interchange). Photorealistic simulations have been prepared to help convey what would and would not be changed by the proposed Project under Alternatives 2 and 3 (Design Options A and B) in the visual environment.

*Visual Assessment Unit 1*

- Key View 1, from intersection of Fairbanks Avenue and West Chester Place looking southwest toward the existing Shoemaker Bridge
- Key View 2, from LARIO Trail looking north toward the existing Shoemaker Bridge
- Key View 3, from NB West Shoreline Drive within Cesar E. Chavez Park looking northwest toward Cesar E. Chavez park and the existing Shoemaker Bridge

*Visual Assessment Unit 2*

- Key View 4, from grade separation of Ocean Boulevard over West Shoreline Drive looking north toward SB West Shoreline Drive
- Key View 5, from SB West Shoreline Drive looking west toward the grade separation of Golden Shore and West Shoreline Drive

### 2.6.2.3 Visual Resources

Visual resources of the Project setting are defined and identified below by assessing visual character and visual quality in the Project corridor.

**Visual Character**

Visual character includes attributes such as form, line, color, and texture and is used to describe, not evaluate; these attributes are neither considered good nor bad. However, a change in visual character can be evaluated when it is compared with the viewer response to that change. Changes in visual character can be identified by how visually compatible a proposed project would be with the existing condition by using visual character attributes as an indicator.

For this Project, the following attributes were considered:

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

## Visual Quality

Visual quality is evaluated by identifying the vividness, intactness, and unity present in the Project corridor. Public attitudes validate the assessed level of quality and predict how changes to the Project corridor can affect these attitudes. This process helps identify specific methods for addressing each visual impact that may occur as a result of the Project. Visual quality is assessed by the three attributes on a five-point scale – low, moderately low, moderate, moderately high, and high. The three criteria for evaluating visual quality are defined below.

- **Vividness** is the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements. Vividness is rated on a five-point scale ranging from low (not memorable) to high (strikingly memorable).
- **Intactness** is the integrity of visual features in the landscape and the extent to which the existing landscape is free from non-typical visual intrusions. Intactness is rated on a five-point scale of low (much encroachment or degradation) to high (low encroachment or degradation).
- **Unity** is the extent to which all visual elements combine to form a coherent, harmonious visual pattern. Unity is rated on a five-point scale ranging from low (little or poor integration) to high (superlative integration).

## Viewer Groups

The population affected by the Project is composed of viewers. Viewers are people whose views of the landscape may be altered by the proposed Project either because the landscape has changed or their perception of the landscape has changed. There are two major types of viewer groups for highway projects: highway neighbors and highway users. Each viewer group has their own particular level of viewer exposure and viewer sensitivity, resulting in distinct and predictable visual concerns for each group, which help to predict their responses to visual changes.

### *Highway Neighbors (Views to the Road)*

Highway neighbors are people who have views to the roadway. They can be subdivided into different viewer groups by land use. For example, residential, commercial, industrial, retail, institutional, civic, educational, recreational, and agricultural land uses may generate highway neighbors or viewer groups with distinct reasons for being in the corridor with each group having distinct responses to changes in visual resources. For this Project, the following highway neighbors were considered:

- Residents
- Businesses operators
- Recreation users

*Highway Users (Views from the Road)*

Highway users are people who have views from the roadway. They can be subdivided into different viewer groups in two different ways: by mode of travel or by reason for travel. For example, subdividing highway users by mode of travel may yield pedestrians, bicyclists, transit riders, car drivers and passengers, and truck drivers. Dividing highway users or viewer groups by reason for travel creates categories like tourists, commuters, and haulers. It is also possible to use both mode and reason for travel simultaneously, creating a category like bicycling tourists, for example. For this Project, the following highway users were considered:

- Commuters
- Bicyclists

## 2.6.3 Environmental Consequences

Because it is not feasible to analyze all the views in which the proposed Project would be seen, it is necessary to select a number of key views that would most clearly demonstrate the change in the Project's visual resources. Key views also represent the viewer groups that have the highest potential to be affected by the Project, considering exposure and sensitivity. In addition, these key views will be analyzed for each proposed alternative.

### 2.6.3.1 Visual Assessment Unit 1

#### Key View 1

Key View 1 focuses attention on the existing Shoemaker Bridge. Visual character within this key view is dominated by horizontal and vertical lines. From Key View 1, multiple horizontal lines are apparent from the existing Shoemaker Bridge, bridge columns, the LA River, LARIO Trail (Class I bike path), West Chester Place, local streets and highway signage, and maintenance access roads from West Chester Place and Fairbanks Avenue. There is substantial color contrast between the green of the landscaped grade supporting the south end of the existing Shoemaker Bridge and the grays of the roadway, the existing Shoemaker Bridge, and other built elements within the built environment. Visual unity is low because of the existing local roadways, maintenance access roads, non-vegetated open space, and the encroachment of the existing Shoemaker Bridge, creating little continuity. The intactness of the view is moderately low for the industrial setting with roadways and signage dominating the viewshed with some vegetation. The diversity of elements within the view decreases the continuity and overall visual intactness. Vividness of the view is moderately low because of the existing Shoemaker Bridge creating an edge of the industrial setting next to the LA River. Therefore, the visual quality is considered moderately low. The existing condition for Key View 1 is illustrated on Figure 2.6-2.

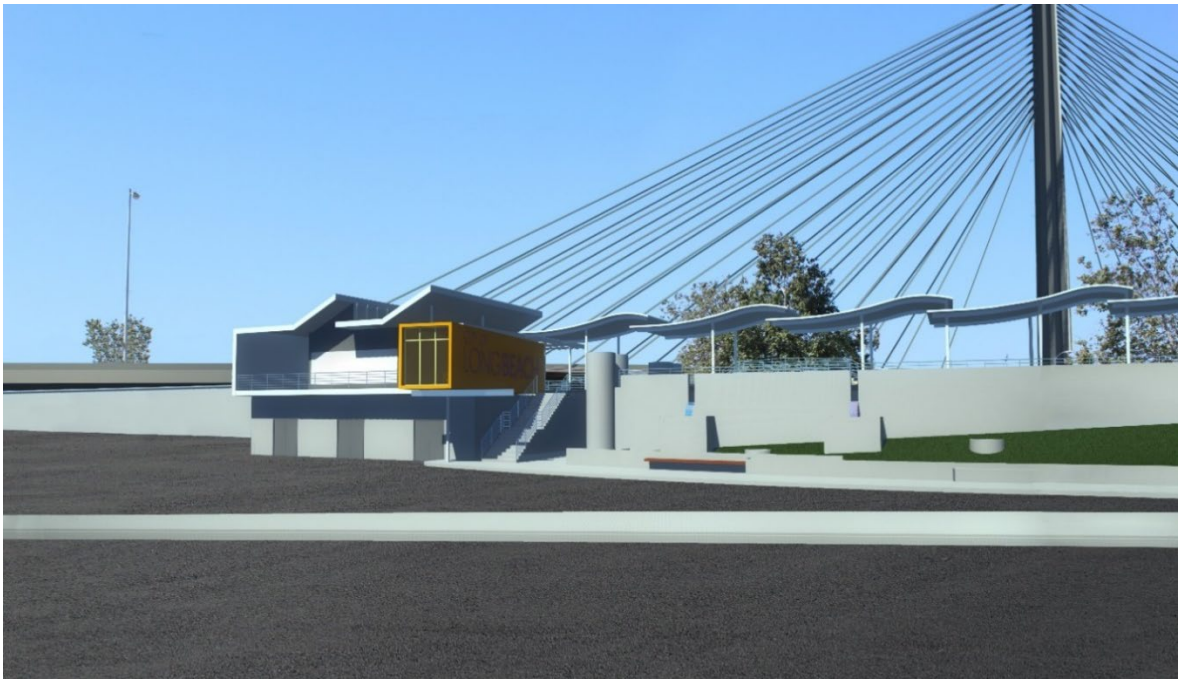
The proposed view for Key View 1 under Alternative 2 (Design Options A and B) is shown on Figure 2.6-3, and the proposed view for Key View 1 under Alternative 3 (Design Options A and B) is shown on Figure 2.6-4.

**Figure 2.6-2. Key View 1 – Existing Condition**

**Figure 2.6-3. Key View 1 Photorealistic Simulation – Alternative 2 (Design Options A and B)**

Disclaimer: Aesthetic features in above photorealistic simulation are subject to change during the design phase.

**Figure 2.6-4. Key View 1 Photorealistic Simulation – Alternative 3 (Design Options A and B)**



Disclaimer: Aesthetic features in above photorealistic simulation are subject to change during the design phase.

*Resource Change*

The proposed changes under Alternative 2 (Design Options A and B) would repurpose a portion of the existing NB Shoemaker Bridge for non-motorized transportation and recreational uses. Alternative 3 (Design Options A and B) would remove the existing Shoemaker Bridge. In addition, the LB MUST main building facility, to be completed separately from this Project, would be visible within this view. Proposed Project changes under both alternatives (Design Options A and B) would include the removal of existing traffic signals, billboards, utility poles, and wires. Under both alternatives (Design Options A and B), the visual quality of the existing corridor would not be altered by the proposed Project improvements. The new Shoemaker Bridge may introduce a vertical structure element (single pylon) that would be visible in the background. If the cable stayed (single pylon) bridge is selected, visual vividness of the viewshed would be a moderately low change. Built environment elements of the proposed Project would increase visual unity, which would have a positive moderately low change. There would be no change in visual intactness with implementation of either alternative. Based on the resource changes described above, the resource change for Key View 1 would be considered moderately low.

*Viewer Response*

Construction and operation of the new Shoemaker Bridge would be the primary visual change associated with the proposed Project. Viewer sensitivity would be moderately low because of the industrial nature of the existing visual setting and because of views would be mostly obscured by the planned LB MUST facility. Alternative 2 would repurpose the existing Shoemaker Bridge; however, visibility of the existing Shoemaker Bridge would be limited to highway neighbors because of the planned LB MUST facility. Similarly, highway neighbors would have a limited view of the new

Shoemaker Bridge due to the planned LB MUST facility obscuring most of the bridge view. Alternative 3 would remove the existing Shoemaker Bridge; however, as found in Alternative 2, highway neighbors would have a limited view of the new Shoemaker Bridge because of the LB MUST facility. Therefore, the overall viewer response is expected to be moderate for Key View 1.

### Key View 2

The existing setting for Key View 2 is shown in Figure 2.6-5. Key View 2 focuses on the existing Shoemaker Bridge and the West Shoreline Drive connector. Visual character within this key view is dominated by existing roadways, the existing Shoemaker Bridge, and the undeveloped and vacant space located below the existing Shoemaker Bridge and adjacent to the LARIO Trail. Horizontal and vertical lines are formed by the roadways, fencing, supporting bridge structures, and the LARIO Trail. The scale of the existing Shoemaker Bridge is reduced when combined with the surrounding roadways and bike paths in the viewshed. Color contrast can be seen among the tan dirt and vegetation found within the vacant space, the purple color of the 6th Street Pump Station, and the gray and white color from the existing bike paths and roadways. There is little visual continuity within this view and diverse forms and textures. The vividness of the view is moderately low with large amounts of vacant land, roadway, and bridge hardscape structures. Visual unity within this view is low because of the lack of coherence between the features present in the key view. The intactness scores moderately low with encroachment of the transportation uses in the form of roadways and bridge structure interspersed between vacant land. Therefore, visual quality within Key View 2 is considered moderately low.

**Figure 2.6-5. Key View 2 – Existing Condition**

Four photorealistic simulations have been prepared for Key View 2. Two simulations show Design Option A (roundabout) with Alternatives 2 and 3 (Figure 2.6-6 and Figure 2.6-7, respectively), and two simulations show Design Option B ("Y" intersection) with Alternatives 2 and 3 (Figure 2.6-8 and Figure 2.6-9, respectively).

*Resource Change*

Visual resource change associated with the proposed Project under Alternatives 2 and 3 (Design Options A and B) would be compatible with the existing visual character. Alternative 3 (Design Options A and B) would result in similar resource changes as Alternative 2 (Design Options A and B); however, Alternative 3 would involve the demolition of the existing Shoemaker Bridge. Vividness of the view would be moderately high because features within the view provide a contrast of colors and textures. The supporting bridge piers of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would primarily be in the water coupled with the proposed bridge structure, adding visual unity of transportation elements to the view.

The proposed view has a diversity of transportation features and natural features, providing improved continuity and creating a high rating of intactness. In addition, Project Features would be consistent with the transportation elements within the view (e.g. construction of a new bridge adjacent to an existing bridge within the built transportation environment). Although portions of the new Shoemaker Bridge would extend over the planned LB MUST facility and associated recreational features, implementation of the proposed Project under either Alternative would remove the existing ramps toward existing Shoemaker Bridge. The removal of these existing ramps would lessen the area shaded within the planned LB MUST facility by construction of the new Shoemaker Bridge. Therefore, the intactness of the view would be high. Based on the changes described above, the resource change of the proposed view under Alternative 2 and 3 (Design Options A and B) would be considered moderately high for Key View 2.

**Figure 2.6-6. Key View 2 Photorealistic Simulation – Alternative 2 (Design Option A)**

Disclaimer: Aesthetic features in above photorealistic simulation are subject to change during the design phase.

**Figure 2.6-7. Key View 2 Photorealistic Simulation – Alternative 3 (Design Option A)**

Disclaimer: Aesthetic features in above photorealistic simulation are subject to change during the design phase.

**Figure 2.6-8. Key View 2 Photorealistic Simulation – Alternative 2 (Design Option B)**

Disclaimer: Aesthetic features in above photorealistic simulation are subject to change during the design phase.

**Figure 2.6-9. Key View 2 Photorealistic Simulation – Alternative 3 (Design Option B)**

Disclaimer: Aesthetic features in above photorealistic simulation are subject to change during the design phase.

Alternative 3 (Design Options A and B) would result in similar resource changes as Alternative 2 (Design Options A and B); however, Alternative 3 would involve the demolition of the existing Shoemaker Bridge. The resource changes under Alternative 3 (Design Options A and B) are consistent with the transportation elements, including construction a new bridge and removal of the existing Shoemaker Bridge, within the view and the resource changes identified under Alternative 2. Therefore, the resource change for Alternative 3 would be considered moderately high.

*Viewer Response*

Viewer response for bicyclists and pedestrians would be moderately low because change to existing bicycle or pedestrian facilities would not impact the use of the bike path or obstruct their view of the LA River under proposed Project operations. During construction, temporary impacts to the LARIO Trail may occur as the LARIO Trail will need to be realigned to maintain height clearances under the proposed Shoemaker Bridge. New transportation elements would be visible in the middle and foreground; however, these new transportation elements are consistent with the current transportation and built environment of the view. Viewer sensitivity would be moderately low because of the new balance of transportation and natural elements now visible. Therefore, the viewer response for this key view is expected to be moderately low for Key View 2.

**Key View 3**

Key View 3 focuses on Cesar E. Chavez Park, NB Shoreline Drive, and the 6th Street off-ramp. The horizontal lines and form of the existing NB West Shoreline Drive, Cesar E. Chavez Park, and 6th Street off-ramp dominate this key view. The scale of NB Shoreline Drive is comparable to the scale of the visible portion of Cesar E. Chavez Park. Although there is a lack of visual diversity within this view, the natural textures and colors associated with the ornamental vegetation and roadway elements would enhance the visual continuity and create a moderate visual vividness within the viewshed. The scale and color of the vegetation present on either side of the roadway provides a moderate unity to the view. Visual intactness is moderately high because of the flanking portions of the park on either side of the roadway. Based on the observations above, the visual quality of Key View 3 is moderate. Figure 2.6-10 shows the existing Key View 3.

*Resource Change*

Proposed changes would remove NB Shoreline Drive and incorporate that space into Cesar E. Chavez Park, connecting the sections of park on either side of existing NB Shoreline Drive. SB Shoreline Drive would be improved to accommodate two-way traffic. The proposed Project under Alternatives 2 and 3 (Design Options A and B) would also remove the 6th Street off-ramp and NB West Shoreline Drive ramp onto existing Shoemaker Bridge. Vividness, unity, and intactness would all improve to a rating of moderately high with the incorporation of the vacant space left by the roadway into parkland. Based on the resource changes described above, the resource change for Key View 3 would be considered moderately high.

**Figure 2.6-10. Key View 3 – Existing Condition**

*Viewer Response*

With implementation of the proposed Project, highway users would have a continuous view of Cesar E. Chavez Park with the removal of NB West Shoreline Drive. Viewer exposure of highway neighbors would be limited because of the location of newly aligned West Shoreline Drive, which would no longer cut through Cesar E. Chavez Park in the existing NB location. Highway neighbors would then be limited to the views from proposed Shoemaker Bridge and SB Shoreline drive, under Alternatives 2 and 3 (Design Options A and B). Therefore, the viewer exposure and sensitivity for highway users would be moderately low. Viewer response for highway neighbors would be moderately high with new views of the Cesar E. Chavez Park. Highway neighbors would have moderately high exposure to the natural environment and moderately high sensitivity to the new park space within Cesar E. Chavez Park. Although highway neighbors would have high sensitivity and exposure to the new park space within Cesar E. Chavez Park, the new park space would be very similar to the existing park space. Therefore, the viewer response from this key view is expected to be moderately low.

### Summary of Impacts on Visual Assessment Unit 1

VAU-1 is centered on the visual character and resources relating to the existing Shoemaker Bridge and the improvements adjacent to the bridge. As discussed in Key Views 1 through 3, the resource change would range from moderately low to moderately high; however, the moderately high resource changes are identified as positive impacts on the Project limits, and the viewer response would be moderately low. The visual impact would range from moderately low to moderate. Therefore, the overall visual impact is considered to be moderate within VAU-1.

### 2.6.3.2 Visual Assessment Unit 2

#### Key View 4

Key View 4 focuses on SB Shoreline Drive, Cesar E. Chavez Park, and a portion of NB Shoreline Drive. The visual character of the view is comprised by a diversity of textures including vegetation and roadway surfaces, as well as horizontal lines extending from the foreground into the background along SB West Shoreline Drive. The existing roadway creates a form that dominates the view. The scale of the park space and vegetated areas, as well as the green color, provides visual continuity within Key View 4.

The roadway and vegetation colors are typical within the Project limits, and the surrounding area does not make the scene unique or memorable. As a result, the vividness of the view is considered moderate. Mature trees obscure the view of the LA River and create a limited view of the natural environment. The scale of natural features on either side of SB Shoreline Drive adds to the unity and intactness of the view. A partial view of NB West Shoreline Drive is visible to the right of Key View 4. Therefore, the unity and intactness of the view is moderately low. Based on the discussion above, the visual quality of Key View 4 is moderate. Figure 2.6-11 shows the existing Key View 4.

**Figure 2.6-11. Key View 4 – Existing Condition**

*Resource Change*

The proposed Project would remove NB West Shoreline Drive and realign SB West Shoreline Drive to accommodate two-way traffic. The proposed Project would slightly modify the roadway and vegetation ratios compared with the existing condition and would not incorporate new visual elements, providing a more memorable or unique features. Therefore, the vividness of the view would remain moderate. With the removal of NB West Shoreline Drive and realignment of SB West Shoreline Drive, visual unity within this key view would remain moderately low with the same forms comprising the view. SB West Shoreline Drive, which would become West Shoreline Drive with the proposed Project, changes under Alternatives 2 and 3 (Design Options A and B). It would still bisect the existing natural park environment; however, NB West Shoreline Drive would be removed and incorporated into Cesar E. Chavez Park. As a result, the intactness of the view would be considered moderate. Based on the information above, the resource change for Key View 4 would be considered moderately low.

*Viewer Response*

Proposed changes, as stated above, would be very similar to the existing setting shown in Figure 2.6-11. The viewer exposure for highway neighbors and highway users would be similar to the existing view; however, as a result of the proposed Project under Alternatives 2 and 3 (Design Options A and B) existing SB Shoreline Drive would be realigned and slightly widened to accommodate two-way traffic in approximately the same location as the existing roadway. All proposed changes would occur below the highway user's view, and highway users would not likely see the changes. Highway neighbors, who have the option to extend their exposure within this key view, may notice the change more than highway users. Therefore, viewer response is considered low.

**Key View 5**

Key View 5 focuses on the grade separation over Golden Shore and West Shoreline Drive. The visual character of Key View 5 is dominated by the form created by the roadway and horizontal lines within the roadway, the grade separation at Golden Shore and West Shoreline Drive, existing fencing, and other roadway elements. The scale of the SB West Shoreline Drive dominates the view. Smooth texture and gray colors of the roadway versus the rough texture and vivid green color formed by the adjacent ornamental vegetation help to create visual diversity within the view. Visual continuity is present as a result of the various existing transportation uses and features found within the view.

The vividness of the view is moderately low because of the scale of the roadways and transportation elements. The unity of the view is low because of the poor integration of roadways and vegetation within the view. West Shoreline Drive bisects the landscape and creates a large transportation form within the middle-ground, creating a moderately low intactness. Based on the factors evaluated above, visual quality is moderately low. Figure 2.6-12 presents the existing Key View 5. A photorealistic simulation for Key View 5 has been prepared (Figure 2.6-13).

*Resource Change*

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would remove the grade separation at Golden Avenue and West Shoreline Drive and realign Golden Avenue to form an at-grade intersection. The visual character of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would be compatible with the existing visual character of the corridor. Vividness would be moderate for the proposed Project with the increased view of vegetated areas surrounding the roadway. Modifications associated with this area of the Project (Ocean Boulevard to the southern

extent of the Project limits) are subject to CCC jurisdiction; design features would ensure visual and aesthetic compliance with the City's LCP to meet CCC standards.

**Figure 2.6-12. Key View 5 – Existing Condition**

**Figure 2.6-13. Key View 5 – Photorealistic Simulation (Alternatives 2 and 3 Design Options A and B)**

Disclaimer: Aesthetic features in above photorealistic simulation are subject to change during the design phase.

The new at-grade intersection would remove some of the horizontal lines formed by the grade separation at Golden Shore to create a moderate unity within the proposed view. Intactness of the view would become moderately high with the removal of the existing grade separation at Golden Shore and West Shoreline Drive; the view would show more vegetation and open space and focus less on the form created by the existing grade separation structure at Golden Shore and West Shoreline Drive. The visual quality of the proposed view would become moderately high and benefit the view. Based on the changes examined above, the resource change for Key View 5 would be considered moderate.

*Viewer Response*

The viewer exposure would be moderately high due to the location of the intersection, as well as the potential increase in duration of the view caused by the new traffic signal controlled intersection of West Shoreline Drive and Golden Shore. Both highway users and neighbors would equally be exposed to the changes within the view. Additional areas of vegetation and open space would result in a positive visual change within the view and a moderately high viewer sensitivity. As a result, viewer response would be moderately high for this key view.

**Summary of Impacts on Visual Assessment Unit 2**

VAU-2 is centered on the visual character and resources relating to the local roadway improvements within the southern portion of the Project limits. As discussed in Key Views 4 and 5, the resource change would be moderate, and the viewer response would range from low to moderately high. The visual impact within VAU-2 would range from moderately low to moderately high. Changes in alternatives do not affect Project changes within VAU-2 because all improvements within the key views identified in VAU-2 do not reflect the areas of the improvements that would show differences between the two alternatives and design options. Therefore, the overall visual impact is considered moderate within VAU-1.

### 2.6.3.3 Visual Impact

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. These impacts can be beneficial or detrimental. Cumulative impacts and temporary impacts because of the contractor's operations are also considered. A generalized VIA process is illustrated in the following diagram (Figure 2.6-14)

**Figure 2.6-14. Visual Impact Assessment Process**

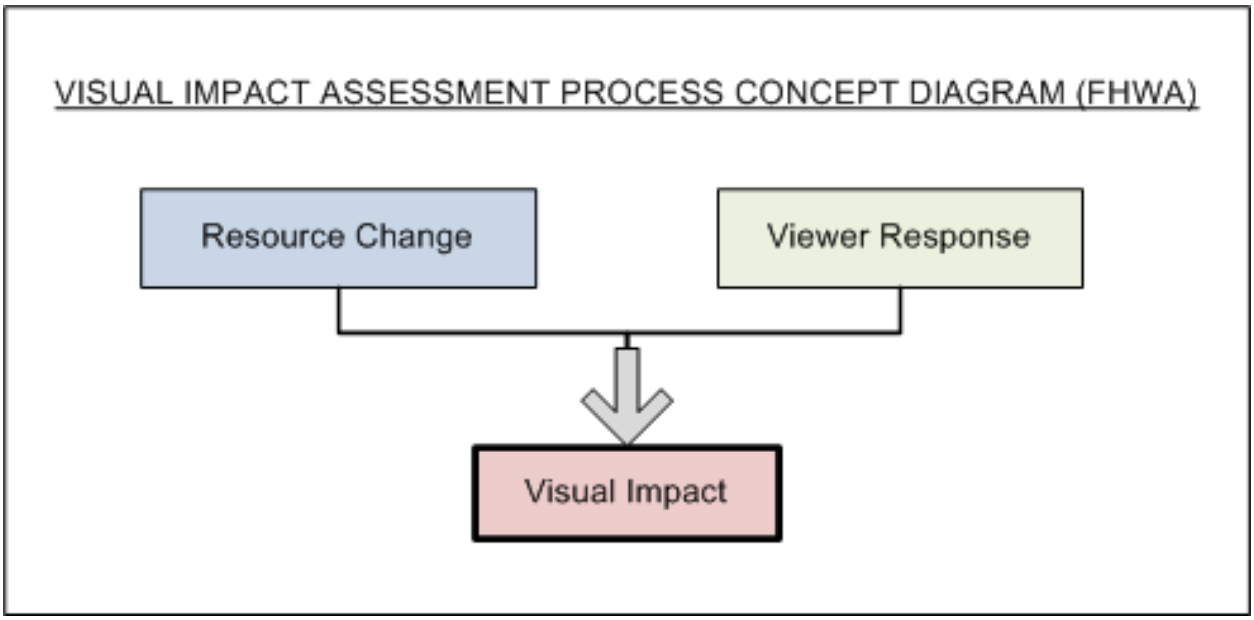



Table 2.6-1 provides a reference for determining levels of visual impact by combining the resource change viewer response. Table 2.6-2 summarizes the visual impact rating by VAU and key view.

**Table 2.6-1. Visual Impact Ratings Using Viewer Response and Resource Change**

| | | Viewer Response | | | | |
|---|---|---|---|---|---|---|
| Resource Change | | Low | Moderate-Low | Moderate | Moderate-High | High |
| | Low | L | ML | ML | M | M |
| | Moderate-Low | ML | ML | M | M | MH |
| | Moderate | ML | M | M | MH | MH |
| | Moderate-High | M | M | MH | MH | H |
| | High | M | MH | MH | H | H |

Notes:
H=high; L=low; M=moderate; ML=moderate-low; MH=moderate-high

**Table 2.6-2. Summary of Key View Narrative Ratings**

| VAU | KEY VIEW | ALTERNATIVES 2 and 3 (Design Options A and B) | | |
|---|---|---|---|---|
| | | Resource Change | Viewer Response | Visual Impact |
| VAU-1 | 1 | ML | M | ML |
| | 2 | MH | ML | M |
| | 3 | MH | M | MH |
| VAU-2 | 4 | ML | L | ML |
| | 5 | M | MH | MH |

Notes:
L=low; M=moderate; ML=moderate-low; MH=moderate-high; VAU=visual assessment unit

### Temporary Impacts

*Alternative 1 (No Build)*

Under Alternative 1 (No Build), the proposed Project would not result in any construction activities associated with Alternatives 2 and 3 (Design Options A and B). Therefore, no temporary impacts on the existing and future visual quality within the Project area are anticipated under Alternative 1 (No Build).

*Alternatives 2 and 3 (Design Options A and B)*

Temporary visual impacts would occur during the construction of Alternative 2 and 3 (Design Options A and B) and include activities such as siting of construction materials and staging, development of temporary roadside barriers, truck hauling, excavation, removal of existing mature plantings, and construction and detour signage. Project construction is anticipated to last 36 months, with an overall area of approximately 62 acres to be temporarily disturbed. As a result of construction, mature trees would be removed with replacement landscaping to be provided prior to the implementation of the proposed park improvements planned by the City. Minimization Measures VIS-1 and VIS-2, as defined in Section 2.6.4, would reduce potential impacts on landscaping and tree removal, respectively. With the implementation of Minimization Measures VIS-1 and VIS-2, no temporary substantial adverse impacts are anticipated.

### Permanent Impacts

*Alternative 1 (No Build)*

Under Alternative 1 (No Build), the proposed Project would not result in any construction activities associated with Alternatives 2 and 3 (Design Options A and B). Because the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not occur, no permanent impacts on existing and future visual quality within the Project area are anticipated. A separate planned capital improvement project, LB MUST, would be constructed regardless of the proposed Project. Visual impacts, as a result of the LB MUST facility, would be addressed by the environmental document prepared for that project. As such, no impacts on visual resources are anticipated under Alternative 1 (No Build).

*Alternatives 2 and 3 (Design Options A and B)*

Long-term impacts for the proposed Project under Alternatives 2 (Design Options A and B) would include views of the new Shoemaker Bridge, the structures comprising of either Design Option A (roundabout) or Design Option B (“Y” interchange), and additional useable park space in Cesar E. Chavez Park. Specifically, under Alternative 2, the existing Shoemaker Bridge would be repurposed for open space/park use. This provides an additional benefit to the viewers utilizing roadways within the Project limits, LARIO Trail users, and highway neighbors utilizing the parks spaces within the area of the Project limits.

Resource changes would result in additional permanent hardscape elements, including bridge and ramp piers, roadways, and the new Shoemaker Bridge. Minimization Measure VIS-3, as defined in Section 2.6.4, would reduce potential impacts related to hardscape elements as a result of the proposed Project, and no substantial adverse impacts are anticipated.

There is no major land form feature within the viewshed of the Project limits because of the low elevation at the mouth of the LA River to the Pacific Ocean. There are no outstanding scenic vistas and/or visual features that would potentially be impacted by the proposed Project.

The portions of Alternatives 2 and 3 (Design Options A and B) south of Ocean Boulevard and east of the LA River are located within CCC jurisdiction. Minimization Measure LU-2, identified in Section 2.1, Land Use, and Minimization Measure VIS-1 would reduce visual impacts within Project areas under CCC jurisdiction. Construction of the proposed Project would require removal of trees and other vegetation in the ROW. Tree and vegetation removal on public lands would comply with City and Caltrans landscaping policies, as detailed in Minimization Measures VIS-1 and VIS-2. Therefore, no permanent substantial adverse impacts are anticipated.

The area within the proposed Project under Alternatives 2 and 3 (Design Options A and B) receives light at night from traffic, street lighting, and the new Shoemaker Bridge; signalization at the intersections; freeway on- and off- ramps; the surrounding commercial uses; and limited light sources from nearby residential developments. Additional shadows would result as a part of the Project; however, the additional shadows created by these features are considered minimal based on the established transportation uses that already exist within the surrounding area. Existing lighting on the streets and along the ramps would be modified or relocated as a part of the proposed Project in those areas where improvements are proposed. Minimization Measure VIS-4, as defined in Section 2.6.4, would reduce potential impacts related to light and glare; therefore, no permanent substantial adverse impacts are anticipated.

Alternative 3 (Design Options A and B) would be similar to the impacts of Alternative 2 (Design Options A and B), with the exception that Alternative 3 (Design Options A and B) would remove existing the Shoemaker Bridge. Because the only difference in visual features would be the removal of Shoemaker Bridge, as seen in Key Views 1 and 2, the same impacts identified in Alternative 2 (Design Options A and B) would be addressed by Minimization Measures VIS-1 through VIS-4, and no permanent substantial adverse impacts under Alternative 3 (Design Options A and B) are anticipated.

## 2.6.4 Avoidance, Minimization, and/or Mitigation Measures

Caltrans and FHWA mandate that a qualitative/aesthetic approach should be taken to address visual quality loss in a project area. The approach fulfills FHWA requirements because it addresses the actual cumulative loss of visual quality due to a project. The approach also results in avoidance, minimization, and/or mitigation measures that can lessen or compensate for a loss in visual quality. The inclusion of aesthetic features in the Project design, discussed in the Project description, can help generate public acceptance. Furthermore, the inclusion of aesthetic features in the Project design would be designed and implemented with concurrence of the District Landscape Architect.

This section describes additional avoidance and minimization measures to address specific visual impacts. No mitigation measures are required because there are no substantial adverse impacts as a result of the proposed Project.

In addition to LU-2 from Section 2.1, Land Use, the following minimization measures are designed to avoid and reduce the potential adverse visual impacts associated with the implementation of the proposed Project under Alternatives 2 and 3 (Design Options A and B):

**VIS-1** **Landscape Plan.** During the plans, specifications, and estimate (PS&E) PHASE, the City of Long Beach (City) will prepare a highway landscape plan that identifies all opportunities to use areas within the state right-of-way (ROW) for full landscaping consistent with the Caltrans *Highway Design Manual* (HDM). This will include landscaping for graded areas with plant species consistent with adjacent vegetation and enhancement of new Shoemaker Bridge Replacement Project (Project) structures, such as ramps and tunnels,

to the extent feasible. This plan will incorporate all applicable procedures and requirements detailed in the Caltrans HDM, Section 902.1, Planting Guidelines (July 1, 2015), and policies of the City's General Plan, as applicable. Selected vegetation and irrigation will utilize drought resistant landscaping and recycled water, when feasible, and incorporate native and climate appropriate vegetation, when appropriate, as outlined in California Streets and Highways Code Section 92.3 within the state ROW.

The City will incorporate the final design of the proposed Project into the landscape plans for the Cesar E. Chavez Park and Drake/Chavez Park greenbelt. The landscape plans will comply with the goals/objectives and policies of the Open Space and Recreation Element of the City General Plan. As applicable, the landscape plans will also comply with the goals/objectives and the policies of the City's Local Coastal Program (LCP).

**VIS-2** **Tree Removal**. During preparation of plans, specifications, and estimate (PS&E) phase, the City of Long Beach (City) will verify that the design minimizes removal of existing mature trees. If removal of mature trees cannot be avoided, additional landscape improvements will be incorporated into the final design for these areas. The replacement ratio of any trees removed will be determined by the City per Section 14.28 of the City's Municipal Code. Tree removal within the California Coastal Commission (CCC) jurisdiction will comply with the goals and policies outlined in the City's Local Coastal Program (LCP).

**VIS-3** **Hardscape Plan.** During the plans, specifications, and estimate (PS&E) phase, the City of Long Beach (City) will prepare a plan to implement attractive bridge, tunnel, medians, retaining walls, and other aesthetic hardscapes. This plan will be prepared consistent with the Interstate 710 (I-710) Corridor Project and applicable goals and policies in the City's General Plan. All designs are required to comply with California Department of Transportation's (Caltrans) standards for safety requirements and other pertinent standards. Special architectural details and aesthetic treatments that promote regional identity, in terms of material, color, texture, and pattern, are encouraged to be incorporated into the proposed Shoemaker Bridge Replacement Project (Project) and will be reviewed and approved by the City and the Caltrans District 7 Landscape Architect.

**VIS-4** **Lighting Plan**. During construction, the City of Long Beach's (City's) Resident Engineer, or designated contractor, will ensure that energy conserving light-emitting diode (LED) lighting fixtures be selected and installed to minimize glare on adjacent properties and into the night sky. Lighting will be shielded with nonglare hoods and focused within the Shoemaker Bridge Replacement Project (Project) right-of-way (ROW). The lighting plan will be reviewed and approved by the City and the California Department of Transportation (Caltrans) District 7 Landscape Architect prior to construction to ensure compliance with these criteria.

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# 2.7 Cultural Resources

## 2.7.1 Regulatory Setting

The term "cultural resources," as used in this document, refers to the "built environment" (e.g., structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including "historic properties," "historic sites," "historical resources," and "tribal cultural resources." Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on those undertakings, following regulations issued by the ACHP (36 Code of Federal Regulations [CFR] 800). On January 1, 2014, the First Amended Section 106 Programmatic Agreement (PA) among the Federal Highway Administration (FHWA), the ACHP, the California State Historic Preservation Officer (SHPO), and the Department went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the ACHP's regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to the Department. The FHWA's responsibilities under the PA have been assigned to the Department as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

Historic properties may also be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the "use" of land from historic properties (in Section 4(f) terminology—historic sites). See Appendix A for specific information about Section 4(f).

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as "unique" archaeological resources. California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources (CRHR) and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the CRHR and, therefore, a historical resource. Historical resources are defined in PRC Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term "tribal cultural resources" to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in PRC Section 21074(a), a tribal cultural resource is a CRHR or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in PRC Section 21083.2.

PRC Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the NRHP listing criteria. It further requires the Department to inventory state-owned structures in its rights-of-way.

## 2.7.2 Affected Environment

This section is based on the *Historic Property Survey Report* (HPSR) (Caltrans 2019d), the *Historical Resources Evaluation Report* (HRER) (Caltrans 2018f), *Archaeological Survey Report* (ASR) (Caltrans 2019e), and *Finding of No Adverse Effect with Standard Conditions* (Caltrans 2019k).

### 2.7.2.1 Area of Potential Effects

The Project Area of Potential Effects (APE) includes 189 acres, the majority of which is developed with built environment and has been disturbed by the construction of existing Shoemaker Bridge, river channelization and hydrologic events, SR-710, residential, commercial, and industrial properties, roads, and other infrastructure. The APE was delineated to include the limits of proposed construction and staging areas, as well as all properties and resources that could potentially be directly or indirectly affected by the Project. The areas of direct effects (Direct APE) include the areas where physical impacts would occur. These are generally limited to the proposed and existing ROW and include the horizontal and vertical areas (ranging from a maximum height of approximately 50 feet to a maximum depth of 150 feet) associated with ground-disturbing activities.

For the proposed new bridge abutments excavation would be approximately 15 feet below current surface and piles may extend to a depth of 150 feet. In the area between the LA River Flood Channel and Golden Avenue, excavation would be approximately zero to 5 feet below current surface except where existing elevated roadways are being re-profiled or removed (6th Street, 7th Street, and Shoreline Drive), where excavation would be up to 23 feet deep. Between Golden Avenue and Magnolia Avenue, excavation would be approximately zero to 3 feet below current surface except along portions of Broadway, 6th Street, and 7th Street, where excavation would be approximately 12 feet below current surface (street reprofiling). East of Magnolia Avenue, there would be spot locations within the streets with 1 to 3 feet of excavation below the current street surface. On Golden Shore, on each side of Shoreline Drive (where the grade separation is being removed), there would be up to 23 feet of excavation below the current surface. In the median of SR-710, where the new Shoemaker Bridge would join the freeway, there would be approximately 3 to 8 feet of excavation below the current surface.

The areas of indirect effects (Indirect APE) extend beyond those of the Direct APE and incorporate areas that may be indirectly affected by visual, noise, or other effects. The Indirect APE includes all properties adjacent to the proposed ROW unless they are undeveloped or if Project elements are minor and contained within the existing public ROW, including parcels where ROW acquisitions, staging or temporary construction easements would occur. The APE includes areas under the jurisdiction of the U.S. Army Corps of Engineers (USACE), specifically this includes the LA River Flood Channel. All direct permanent and temporary Project effects as well as potential indirect effects for all alternatives under consideration would occur within the boundaries delineated on the APE Map.

### 2.7.2.2 Records Search

A records search was conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton on April 6, April 13 and April 21, 2017. Supplemental records searches were conducted on February 28, 2018. The records search included a review of all recorded historic and prehistoric archaeological sites and historic-era built environment resources within 0.5-mile radius of the APE, as well as a review of known cultural resource surveys and excavation reports. Sources consulted included the NRHP, CRHR, the California Inventory of Historical Resources, the California Historical Landmarks list, the California Points of Historical Interest list, and

records from the Office of Historic Preservation. The records search identified four archaeological resources (two prehistoric and two historical) and 89 historic-era built environment historic resources within 0.5 mile of the Project APE.

### 2.7.2.3 Literature Review

A literature review of Caltrans files and the sources identified below was conducted to identify significant historical events, personages, development patterns, and architectural types and styles. Internet research was also conducted to verify information and to obtain historic newspaper articles. Materials collected included both primary and secondary sources, including the following:

- California Historical Resources Information System (CHRIS)
- State Historic Resources Commission
- Caltrans Historic Bridge Inventory
- Caltrans Cultural Resources Database
- City of Long Beach Development Services
- Long Beach Public Library
- Los Angeles Public Library
- Early maps and *Diseños*
- Historic USGS Maps and Historic Aerials
- Sanborn Fire Insurance Company Maps
- As-built plans and Schemata
- Geotechnical data
- Journal of California Division of Highways within the Department of Public Works
- I-710 Corridor Archeological Sensitivity Analysis
- Cultural Resources Study of the Wilmington Oil and Gas Field

### 2.7.2.4 Native American Consultation

The Native American Heritage Commission (NAHC) conducted a search of Sacred Lands File and provided a list of Native American groups and individuals on April 11, 2016 and March 16, 2018. While no cultural resources were identified in the Sacred Lands File, the NAHC recommended the City of Long Beach contact 10 Native American groups or individuals.

Per AB 52, the City of Long Beach sent letters to the 10 Native American groups or representatives on the NAHC recommended list via U.S. certified mail on April 11, 2016, December 20, 2016, and May 4, 2017. Follow up emails were sent on April 5, 2018 and April 23, 2018 and follow up phone calls were made to the Native American groups/representatives on April 23 and 26, 2018.

For purposes of Section 106, Caltrans initiated Native American consultation to the groups/representatives listed on the NAHC Section 106 list for the Long Beach area via U.S. certified mail on March 28, 2018. Caltrans followed up with emails and phone calls to the Native American groups/representatives on April 23 and April 26, 2018.

As of January 2019, five responses from the Native American groups/representatives during the AB 52 and Section 106 consultation process requested formal consultation with the City and Caltrans as well as the provision of a Native American monitor during Project construction. Copies of the ASR

were sent to the Native American groups/representatives in January 2019 and a Native American consultation summary letter sent in June 2019.

Letters were sent to historical organizations and other interested parties that were identified as having a potential interest in the Project on April 2, 2018. The purpose of the letters was to inform each group of the proposed undertaking and to solicit information on known historic properties near the Project area. Parties contacted include:

- California State University, Long Beach Library
- Historical Society of Long Beach
- Long Beach City College Library
- Long Beach Heritage
- Long Beach Police Historical Society
- Long Beach Public Library
- Willmore City Heritage Association

Follow up emails were sent on April 25, 2018. On April 26, 2018, a response from the Willmore Heritage Association was received in support for the Project as it would improve bike and pedestrian transportation in the area. In addition, Willmore Heritage Association requested that the Project include traffic calming measures, improved access to Cesar E. Chavez Park, and the greening of the existing Shoemaker Bridge. To date, no other responses have been received.

### 2.7.2.5 Field Survey

#### Built Environment Resources Survey

A pedestrian survey of the APE for the proposed Project was completed on April 21, 2017. The purpose of the pedestrian survey was to identify buildings and/or structures located within the APE that were more than 45 years of age or properties that have possibly achieved exceptional significance within the last 45 years and would require evaluation for historic significance.

#### Archaeological Resources Survey

An archaeological reconnaissance field survey of the Direct APE for the proposed Project was conducted on April 26, 2017 and July 25, 2018. The area covered during the survey includes the entire Direct APE. The section of the survey on the west side of SR-710 consists of commercial and industrial buildings. The area is a modern, built environment with surrounding paved roads and the Port of Los Angeles to the south. On the east side of the SR-710 is the LA River Flood Channel, beyond the LA River Flood Channel, there are commercial and residential buildings, as well as modern paved roads. Both sides of the state highway have multiple ramps for entering and exiting the highway. All areas of the Project consist of modern buildings, modern roads, and landscaped portions within the APE. The northeastern portion of the Direct APE consists of mostly small commercial buildings and residential neighborhoods. The midsection and southwestern sections of the Direct APE include Cesar E. Chavez Park and downtown Long Beach (commercial buildings, apartment buildings, industrial buildings, parking areas, and port facilities).

### 2.7.2.6 Built Environment Resources Identified within the Area of Potential Effects

There are 17 bridges in the Direct APE that are listed in the Caltrans Historic Bridge Inventory as Category 5, not eligible for listing in the NRHP. The determination of these 17 bridges as Category 5 bridges by Caltrans remains valid and a revaluation of that determination was not required for this Project analysis. Of those 17 bridges, 3 are state-owned bridges, and 14 are local agency bridges. The Shoemaker Bridge (53-C0932) is 1 of the 14 local agency bridge listed in the Caltrans Historic Bridge Inventory as Category 5. The state-owned bridges within the Direct APE are listed as follows:

- Pico Avenue On-ramp Overhead (No. 53-2785S)
- Pico Avenue On-ramp Overhead (No. 53-2786K)
- Harbor Scenic Drive Overhead (No. 53-2934)

The local agency bridges within the Direct APE are listed as follows:

- Shoemaker Bridge (No. 53-C0932)
- LA River/Deforest Avenue Bridge (No. 53-C0018)
- Golden Shore Boulevard Bridge (No. 53-C0817)
- 710 Freeway/Harbor Scenic Drive/10th Street/Fashion Avenue Bridge (No. 53-C0931)
- 10th Street Ramp/10th Street/Harbor Scenic Drive Bridge (No. 53-C0930)
- Long Beach Freeway Bridge (No. 53-C0885)
- RTD Parking Lot Undercrossing (No. 53-C0933)
- San Francisco and Golden Bridge (No. 53-C0934)
- Maine Avenue Overcrossing (No. 53-C0640)
- Main Avenue Overcrossing (No. 53-C0658)
- Broadway Overcrossing (No. 53-C0832)
- 7th Street Westbound On Ramp Undercrossing (No. 53-C0903)
- Seaside Way Bridge (No. 53-C1806)
- Shoreline Drive and Seaside Way (No. 53-C0892L)

Table 2.7-1 shows the five built environment properties within the APE that require formal evaluation for the NRHP and CRHR. Table 2.7-1 shows the year built and description of each structure. Table 2.7-2, summarizes the criterion determination made for each of the evaluated properties.

In addition to these five built environment properties, according to the HRER, the street improvements and traffic calming measures extend through the locally designated Drake Park/Willmore City Historic District. The work within the district would occur along 6th and 7th Streets between Magnolia Avenue and Park Court and would be limited in these areas to restriping the existing striped roadway and modifying existing signals. As identified in the HRER, the Drake Park/Willmore City Historic District was evaluated for the NRHP and CRHR as part of the Daisy Avenue Bicycle Boulevard Project in

2016. That evaluation determined that the district was not eligible for the NRHP or CRHR. Because the Drake Park/Willmore City Historic District has already been determined ineligible for the NRHP and CRHR, it was not re-evaluated as part of this project.

**Table 2.7-1. Evaluated Built Environment Resources**

| Name/Address | APN | Year Built | Description |
|---|---|---|---|
| 620 San Francisco Avenue<br>Long Beach, CA 90802 | 7271-024-902 | 1950 | One-story industrial warehouse |
| United States Postal Service<br>Parcel Post Annex<br>621 Golden Avenue<br>Long Beach, CA 90802 | 7271-024-003 | 1956 | One-story industrial warehouse |
| Union Bank Building<br>400 Oceangate<br>Long Beach, CA 90802 | 7178-003-034 | 1975 | Fourteen-story office building |
| SCE Seabright Substation<br>445 San Francisco Avenue<br>Long Beach, CA 90802 | 7278-013-801 | 1950-1951 | Electrical substation near the Long Beach Freeway at W 5th Street |
| LA River Flood Channel | — | 1938-1960 | Trapezoidal reinforced concrete channel |

Source: Caltrans 2018f
Notes:
APN=Assessor Parcel Number; LA River=Los Angeles River; SCE=Southern California Edison

## Table 2.7-2. Evaluated Built Environment Resources NRHP and CRHR Eligibility

| Built Environment Resource | NRHP and CRHR Eligibility Criterion | Criterion Determination Summary |
|---|---|---|
| 620 San Francisco Avenue Long Beach, CA 90802<br>(one-story industrial warehouse) | **Criterion A:** Is the resource associated with important events in local, state, or national history? | The property at 620 San Francisco Avenue is a utilitarian warehouse constructed in 1950. The warehouse does not appear to have an important association with development in this area of Long Beach in the postwar period and does not appear to be associated with other important events in local, state, or national history. |
| | **Criterion B:** Is the resource associated with lives of significant persons in our past? | Although the property is associated with James E. Casey (co-founder of UPS), this property would not be the best representation of Casey's historical contributions as there are other built resources with which he was directly associated. |
| | **Criterion C:** Does the resource embody the distinctive characteristics of a type, period, or method of construction? | The property is an example of a common type of industrial building built throughout the twentieth century and does not demonstrate any innovative, important, or outstanding design features. |
| | **Criterion D:** Has the resource yielded or may likely to yield, information important in history or prehistory? | Criterion D generally applies to archaeological resources. Since this property is considered a build environment resource, Criterion D was not considered part of the evaluation. |
| | The property at 620 San Francisco Avenue does not meet any of the four NRHP eligibility criteria. The four CRHR criteria are based on the NRHP criteria, and therefore, the property does not meet the criteria for listing in the CRHR based on the information summarized above and detailed in HRER (Caltrans 2018f). In a letter dated July 3, 2019, SHPO concurred with Caltrans' determination that the property is not eligible for the NRHP or CRHR. | |
| United States Postal Service Parcel Post Annex 621 Golden Avenue Long Beach, CA 90802<br>(one-story industrial warehouse) | **Criterion A:** Is the resource associated with important events in local, state, or national history? | The property at 621 Golden Avenue is a utilitarian warehouse constructed in 1956. The warehouse does not appear to have an important association with development in this area of Long Beach in the postwar period and does not appear to be associated with other important events in local, state, or national history. |
| | **Criterion B:** Is the resource associated with lives of significant persons in our past? | Although the property is associated with three USPS postmasters (from 1956 to 1974), it does not appear that these USPS postmasters were historically important and this property would not be the best representation of these individuals' lives. |
| | **Criterion C:** Does the resource embody the distinctive characteristics of a type, period, or method of construction? | The concrete construction and unornamented, functional design of the warehouse is a common type of industrial building built throughout the twentieth century and does not demonstrate any innovative, important, or outstanding design features. |

## Table 2.7-2. Evaluated Built Environment Resources NRHP and CRHR Eligibility

| Built Environment Resource | NRHP and CRHR Eligibility Criterion | Criterion Determination Summary |
|---|---|---|
| | **Criterion D:** Has the resource yielded or may likely to yield, information important in history or prehistory? | Criterion D generally applies to archaeological resources. Since this property is considered a build environment resource, Criterion D was not considered part of the evaluation. |
| | The property at 621 Golden Avenue does not meet any of the four NRHP eligibility criteria. The four CRHR criteria are based on the NRHP criteria, and therefore, the property does not meet the criteria for listing in the CRHR based on the information summarized above and detailed in HRER (Caltrans 2018f). In a letter dated July 3, 2019, SHPO concurred with Caltrans' determination that the property is not eligible for the NRHP or CRHR. | |
| Union Bank Building<br>400 Oceangate<br>Long Beach, CA 90802<br><br>(Fourteen-story office building) | **Criterion A:** Is the resource associated with important events in local, state, or national history? | The property at 400 Oceangate is an office building constructed in 1975. The office building does not appear to have an important association with development in this area of Long Beach in the postwar period and does not appear to be associated with other important events in local, state, or national history. |
| | **Criterion B:** Is the resource associated with lives of significant persons in our past? | The City of Long Beach, the Long Beach Redevelopment Agency, Gilbert Financial Corp., and Union Bank are all associated with the construction of the office building. People associated with the construction of the office building included Mayor Edwin Wade, Arthur Gilbert, and W.S. Pfeifle. While these people rose to prominent positions within their respective industries or organizations, it does not appear that they were historically important. |
| | **Criterion C:** Does the resource embody the distinctive characteristics of a type, period, or method of construction? | The office building was designed in the New Formalist style and possesses the distinctive characteristics of a New Formalist style building. However, the building does not stand out among its contemporaries as an important example of New Formalist design. |
| | **Criterion D:** Has the resource yielded or may likely to yield, information important in history or prehistory? | Criterion D generally applies to archaeological resources. Since this property is considered a build environment resource, Criterion D was not considered part of the evaluation. |
| | The property at 400 Oceangate does not meet any of the four NRHP eligibility criteria. The four CRHR criteria are based on the NRHP criteria, and therefore, the property does not meet the criteria for listing in the CRHR based on the information summarized above and detailed in HRER (Caltrans 2018f). While the building is not 45 years of age, the architectural historians evaluated it using Criteria Consideration G, and determined that does not meet the Criteria Consideration G. In a letter dated July 3, 2019, SHPO concurred with Caltrans' determination that the property is not eligible for the NRHP or CRHR. | |

## Table 2.7-2. Evaluated Built Environment Resources NRHP and CRHR Eligibility

| Built Environment Resource | NRHP and CRHR Eligibility Criterion | Criterion Determination Summary |
|---|---|---|
| SCE Seabright Substation<br>445 San Francisco Avenue<br>Long Beach, CA 90802<br><br>(electrical substation) | **Criterion A:** Is the resource associated with important events in local, state, or national history? | Post World War II, rapid suburban residential development in Long Beach resulted in the addition of 41,000 electric meters to the SCE system between 1945 and 1952. The rapid demand of electricity resulted in the rapid expansion of electrical infrastructure to fulfill the electricity needs of new suburban tract communities developed throughout the region. During the immediate postwar period, nine new distribution substations, including the Seabright Substation in the Long Beach area were constructed. While the property represents the continuation of an established trend of growth in the electrical infrastructure and electrical services, it is not eligible for listing in the NRHP under Criterion A. |
| | **Criterion B:** Is the resource associated with lives of significant persons in our past? | The property is not associated with the lives of significant persons in the past. Therefore, the property is not eligible for listing in the NRHP under Criterion B. |
| | **Criterion C:** Does the resource embody the distinctive characteristics of a type, period, or method of construction? | Given the property's utilitarian appearance, it is unlikely that it is representative of the work of a master or that it possesses high artistic value. There are no buildings or structures in the vicinity of the property that are from the same period or possess similar visual characteristics to form a historic district. The property does not represent a significant and distinguishable entity whose components may lack individual distinction. |
| | **Criterion D:** Has the resource yielded or may likely to yield, information important in history or prehistory? | Criterion D generally applies to archaeological resources. Since this property is considered a build environment resource, Criterion D was not considered part of the evaluation. |
| | The SCE Seabright property does not meet any of the four NRHP eligibility criteria. The four CRHR criteria are based on the NRHP criteria, and therefore, the property does not meet the criteria for listing in the CRHR based on the information summarized above and detailed in HRER (Caltrans 2018f). In a letter dated July 3, 2019, SHPO concurred with Caltrans' determination that the property is not eligible for the NRHP or CRHR. | |
| LA River Flood Channel | **Criterion A:** Is the resource associated with important events in local, state, or national history? | The LA River Flood Channel is a contributing feature to a potential district that include the larger 51-mile LA River Flood Channel. While the entire length of the LA River Flood Channel has not been recorded and evaluated, segments of the channel have been previously evaluated as contributing to a potential district that appears to be significant under Criterion A for its association with flood control in the region and its role in the development of river-adjacent areas in the greater Los Angeles area. |

## Table 2.7-2. Evaluated Built Environment Resources NRHP and CRHR Eligibility

| Built Environment Resource | NRHP and CRHR Eligibility Criterion | Criterion Determination Summary |
|---|---|---|
| | **Criterion B:** Is the resource associated with lives of significant persons in our past? | The LA River Flood Channel is not associated with the lives of significant persons. Therefore, it is not significant under Criterion B. |
| | **Criterion C:** Does the resource embody the distinctive characteristics of a type, period, or method of construction? | The engineered waterway provided flood control by establishing a consistent path for the river course and preventing water from overflowing the river banks, facilitating the further development of river-adjacent areas. Therefore, it is significant under Criterion C as it possesses the distinctive characteristics of a flood control channel from the period with its trapezoidal reinforced concrete channels, parapet paved berms, and periodic central trench at the bottom to guide water flow. |
| | **Criterion D:** Has the resource yielded or may likely to yield, information important in history or prehistory? | Criterion D generally applies to archaeological resources. Since this property is considered a build environment resource, Criterion D was not considered part of the evaluation. |
| | For purposes of this project only, the LA River Flood Channel is presumed to meet eligibility criteria A and C of the NRHP as a contributor to a potential district. As such, the LA River Flood Channel is also presumed to meet CRHR criteria A and C. In a letter dated July 3, 2019, SHPO concurred with Caltrans' determination that the LA River Flood Channel is eligible for the NRHP for purposes of the Project. However, it is outside the scope of this project for Caltrans to evaluate the entirety of the LA River Flood Channel resource. | |

Source: Caltrans 2018f
Notes:
APE=Area of Potential Effects; Caltrans=California Department of Transportation; CRHR=California Register of Historical Resources; HRER=Historical Resources Evaluation Report; Historical LA River=Los Angeles River; NRHP=National Register of Historic Places; SCE=Southern California Edison; SHPO=State Historic Preservation Officer; UPS=United Parcel Service; USPS=United States Postal Service

As shown in Table 2.7-2, one property within the Project's APE, the LA River Flood Channel, is presumed to be eligible for listing in the NRHP for the purposes of this undertaking; however, a full evaluation of the entire channel is precluded by the resource's large size and the limited potential for effects.

Presumption of eligibility was approved after consultation with Caltrans Cultural Studies Office on April 16, 2018, pursuant to Stipulation VIII.C.4 of the FHWA Section 106 PA. Based on consultation with Caltrans, the LA River Flood Channel is the only resource presumed historic for purposes of Section 106 compliance. The LA River Flood Channel also meets the criteria for listing in the CRHR under Criteria 1 and 3 identifying the channel as a contributing feature to a potential district. The other four resources evaluated were determined not eligible for listing in either the NRHP or CRHR. Section 2.7.3.4 provides additional information to SHPO concurrence with Caltrans' determinations of eligibility.

### 2.7.2.7 Archaeological Resources Identified within the Area of Potential Effects

The records search identified four archaeological resources (two prehistoric and two historical) within 0.5 mile of the APE. Of these four archaeological resources, one historical archaeological site is located outside of, but immediately adjacent to, the Direct APE. This site consists of three wood-lined privy features with associated refuse, one pipe trench with associated refuse, and four unlined refuse deposits. The location of this site is within the same street layout that has been in place since the 19$^{th}$ century; therefore, the boundaries are most likely confined to the property limits and would not be within the Direct APE. During the field survey, no archeological resources were identified as the majority of the Direct APE is covered by pavement or modern construction.

The archaeological sensitivity analysis was prepared as part of the ASR to assess the potential for buried prehistoric or historic-era archaeological resources within the Direct APE and make recommendations for additional steps to identify and treat buried archaeological resources, if necessary, to avoid inadvertent effects by Project-related activities. The archaeological sensitivity analysis was carried out using geological data, site records, historic maps and aerial imagery, historic development sources, and ethnographic data. Areas within the Direct APE were identified as to their potential sensitivity to contain undisturbed sediments that could potentially contain archaeological resources, both prehistoric and historic, in conjunction with the records search and Native American consultation. The archaeological sensitivity assessment has shown that the alluvial environment of the LA River is both conducive to burying archaeological sites and a source of destruction of archaeological sites during flood events. For the purposes of this Project, archaeological sensitivity has been divided into very low sensitivity, low sensitivity, moderate sensitivity, and high sensitivity. However, the results of the study have determined there are no areas of moderate or high sensitivity within the Direct APE for the Project; therefore, the following paragraphs discuss two types of archaeological sensitivity in the Direct APE: very low sensitivity and low sensitivity.

Very low sensitivity areas include the LA River Flood Channel, Port of Long Beach, and Long Beach Marina within the Direct APE. In general, there are two areas of very low sensitivity for archaeological resources (i.e., the area where existing Shoemaker Bridge crosses the LA River Flood Channel and the east side of the Port of Long Beach, as well as the Long Beach Marina [south of Ocean Avenue]).

Significant earthmoving projects related to these areas have drastically changed the landform in modern times. Historically, these areas were dredged from marshlands and salt flats. For example, during construction of the LA River Flood Channel, over 6 million cubic yards of flood alluvium was

dredged from the mouth of the river from 1943–1946. This dredging went to a depth of 25 to 45 feet below the mean lower low water (MLLW) level. Another 8.2 million cubic yards were dredged to a depth of 70 feet below the MLLW in 1950. Geologic maps show these areas as artificial fill and unconsolidated shelf sediment while the Natural Resources Conservation Service (NRCS) Soils Map shows these as urban land dredged fill. In addition, there are no recorded archaeological sites are within the Direct APE in similar environments. Therefore, these two reclaimed waterway areas have a very low sensitivity for prehistoric or historic-era archaeological resources.

Low sensitivity areas include the Cesar E. Chavez Park, streets, bridges, and freeways within the Direct APE. The majority of the Direct APE lies outside of the two dredged/reclaimed land areas above and include additional areas of reclaimed land, lower alluvial areas, and a marine terrace. Over the last 130 years, the west side of Long Beach, including the delta and flood plain of the LA River, and the western edge of the marine terrace on which downtown Long Beach was built has had dramatic and significant topographical, geographical, and cultural changes. Major construction projects have altered and obscured the landscape or setting of this area, including the multiple freeway and road projects on the east and west sides of the LA River Flood Channel, and many large-scale development projects in downtown Long Beach.

The majority of the streets in the Direct APE are either on the Pleistocene-age marine terrace to the east of the channelized river within street grids that were platted more than 100 years ago or on Holocene-era alluvial fan deposit to the west of the LA River. Much of the existing I- 710 is in land that was historically marshy. The neighborhoods along Ocean Park Avenue and on the south side of Ocean Boulevard were demolished to make room for I-710 and Shoreline Drive on- and off-ramps. The empty land between these two major roads became a park (i.e., Cesar E. Chavez Park) formed of reclaimed land and marine terrace that has been highly graded and contoured. The western half of this park is comprised of artificial fill. The edge of the terrace was pushed back to Golden Avenue. East of Golden Avenue, the terrace appears to be intact and subsequently historic sites like CA-LAN-4313H (19-004313) have been preserved under the remaining neighborhoods and districts. Conversely, north of 5th Street and along the bluff line and west to the LA River Flood Channel was historically marshlands. These areas were infilled with artificial fill or dredged material in the first half of the 20th century. Additional demolition and construction in the 1960s have also destroyed any historic features that may have been buried under the present ground surface on the north end of Cesar E. Chavez Park. Modern underground construction in downtown Long Beach has further compromised buried cultural resources on the terrace bluff.

Within a majority of the Direct APE, all areas (i.e., the streets, freeways, and bases of bridge construction) have had substantial ground disturbance that has affected the potential for buried cultural resources. For example, the as-built plan for the Los Angeles County Flood Control District, Seaside Storm Drain and Interceptor, shows how many trenches or underground borings were completed in one segment of 3rd Street in 1955. Therefore, the majority of the Direct APE has a low sensitivity for prehistoric or historic-era archaeological resources.

## 2.7.3 Environmental Consequences

### 2.7.3.1 Temporary Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) does not involve any construction activities or improvements; therefore, there would be no temporary impacts on built environment or archaeological resources.

### Alternatives 2 and 3 (Design Options A and B)

Construction of the Project under Alternatives 2 and 3 (Design Options A and B) would require ground disturbing construction work to replace the existing Shoemaker Bridge over the LA River Flood Channel with a new bridge located just south of the existing Shoemaker Bridge, as well as to construct associated ramp alterations, pedestrian and bicycle improvements, street reconfigurations, and street improvements in the area. Impacts on cultural resources are considered permanent, not temporary, as discussed in Section 2.7.3.2.

## 2.7.3.2 Permanent Impacts

### Alternative 1 (No Build)

Alternative 1 (No Build) does not include any improvements or construction of improvements in the Project area and would not result in ground disturbance or excavation. Therefore, Alternative 1 (No Build) would not permanently impact any cultural resources.

### Alternatives 2 and 3 (Design Options A and B)

The construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would require ground disturbance to replace the existing Shoemaker Bridge and to construct associated ramp alterations, pedestrian and bicycle improvements, street reconfigurations, and street improvements in the area.

As identified in Table 2.7-2, four of the evaluated built environment resources (the 1-story industrial warehouse at 620 San Francisco Avenue, the 1-story industrial warehouse at 621 Golden Avenue, the 14-story office building at 400 Oceangate, and the SCE Seabright Substation) do not meet NRHP or CRHR eligibility criteria. Therefore, these four evaluated built environment resources are not considered historic properties for the purposes of Section 106 or CEQA. Alternatives 2 and 3 (Design Options A and B) would not result in any alterations to the four evaluated built environment resources. Therefore, it is anticipated that implementation of Alternatives 2 or 3 (Design Options A and B) would not cause a substantial adverse change on these four evaluated built environment resources.

As previously identified, the LA River Flood Channel is assumed eligible under NRHP and CRHR Criterion A for its association with flood control in the region and its role in the development of river-adjacent areas in the greater Los Angeles area as well as under NRHP and CRHR Criterion C as representing a significant and distinguishable entity whose components may lack individual distinction. Therefore, the LA River Flood Channel is assumed to be eligible for listing in the NRHP for the purposes of the Project only and is assumed to be a historic property under Section 106 and is considered a historical resource for purposes of CEQA. Alternatives 2 and 3 (Design Options A and B) would result in grade-separated crossing improvements to the assumed eligible LA River Flood Channel, including an aerial easement for a bridge and the construction of a pier within the boundary of the LA River Flood Channel. There would be no permanent physical changes to the LA River Flood Channel's intact character-defining features and the new Shoemaker Bridge would not have a substantial effect on the LA River Flood Channel's physical design or setting. Therefore, it is anticipated that Alternatives 2 and 3 (Design Options A and B) would result in a Finding of No Adverse Effect (FNAE) with Standard Conditions with the implementation of the Secretary of the Interior's Standards (SOIS) Plan for the Treatment of Historic Properties (SOIS), as identified in Measure CR-1, below.

As previously identified, no archaeological resources were identified within the APE, and much of the APE is located on artificial fill or disturbed soils. Given the disturbed condition of the APE, the potential

for intact archaeological resources to be present is low. Although considered unlikely, there is the potential to encounter unknown buried cultural materials or human remains during construction of either Alternative 2 or 3. In the event that previously unknown buried cultural materials or human remains are encountered during construction, those materials and remains would be handled as described in Project Features PF-4 and PF-5.

**PF-4** If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

**PF-5** If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities will stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the NAHC, who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact the Caltrans District 7 Environmental Branch Chief and Caltrans District 7 Native American Coordinator so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

Incorporation of Project Features PF-4 and PF-5 would reduce potential impacts on previously unknown cultural resources or human remains. In addition, with the implementation of Measure CR-1, which requires the Project's compliance with the Secretary of the Interior's Standards (SOIS) Plan for the Treatment of Historic Properties (SOIS), effects to the LA River Channel would be avoided. Therefore, the overall Project finding for purposes of Section 106 is a Finding of No Adverse Effect with Standard Conditions with the implementation of the Secretary of the Interior's Standards (SOIS) Plan for the Treatment of Historic Properties (SOIS).

### 2.7.3.3 Section 4(f) Resources

Historic properties are protected under Section 4(f) of the USDOT Act, which regulates the "use" of land from historic properties by transportation facilities. The LA River Flood Channel within the Project area is assumed eligible for the NRHP for the purposes of this Project, pursuant to Stipulation VIII.C.4 of the PA only, and, therefore, protected under Section 4(f). Refer to Appendix A for the Section 4(f) discussion pertaining to cultural resources.

### 2.7.3.4 Consultation with the State Historic Preservation Officer

Consultation with the SHPO was conducted regarding the HPSR. Concurrence on the eligibility of cultural properties evaluated in the HPSR by the SHPO was provided in a letter dated July 3, 2019. A copy of that letter is provided in Appendix I. In that letter, SHPO indicated it had no objection to the following determinations and assumptions of eligibility:

- Pursuant to Stipulation VIII.C.6 of the PA and Stipulation VIII.C.6 of the Memorandum of Understanding (MOU), Caltrans determined that the following properties are not eligible for the NRHP:
    - 620 San Francisco Avenue, Long Beach, CA
    - 621 Golden Avenue, Long Beach, CA
    - 400 Oceangate, Long Beach, CA

  - SCE Seabright Substation, Long Beach, CA

- In accordance with Stipulation VIII.C.4 of the PA and Stipulation VIII.C.4 of the MOU, Caltrans is assuming that the Los Angeles River Flood Channel is eligible for the NRHP for the purposes of this Project. It is outside of the scope of this Project for Caltrans to evaluate the entirety of this resource.

### 2.7.4 Avoidance, Minimization, and/or Mitigation Measures

As previously discussed in this section, Alternatives 2 and 3 (Design Options A and B) would not adversely affect cultural resources with incorporation of PF-4, PF-5, and minimization measure CR-1 identified, below.

**CR-1** The City of Long Beach (City) will ensure that the Project complies with the standards of rehabilitation required in the Secretary of Interior's Standards (SOIS) Action Plan for the Los Angeles River Channel. The City will also ensure that all activities related to the LA River during preconstruction, construction, and post construction phases, identified in the SOIS Action Plan, will be implemented by the SOIS Action Plan's identified responsible parties.

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# Physical Environment

## 2.8 Hydrology and Floodplain

### 2.8.1 Regulatory Setting

Executive Order (EO) 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration (FHWA) requirements for compliance are outlined in 23 Code of Federal Regulations (CFR) 650 Subpart A.

To comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments.
- Risks of the action.
- Impacts on natural and beneficial floodplain values.
- Support of incompatible floodplain development.
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values affected by the Project.

The base floodplain is defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the base floodplain.”

### 2.8.2 Affected Environment

The potential for the Project to affect hydrology and floodplains is documented in the *Location Hydrologic Study* (Caltrans 2018h) and the *Water Quality Assessment Report* (Caltrans 2018i). The findings of those reports are discussed below.

#### 2.8.2.1 Local Hydrology

The LA River, which stretches approximately 51 miles long, originates in the San Fernando Valley, flows through the Project limits, and drains into San Pedro Bay. Approximately 21.7 miles of the LA River flow through six cities (Compton, Cudahy, Long Beach, Los Angeles, Paramount, and South Gate) and Los Angeles County Unincorporated Areas (Caltrans 2018h). Other surface waterbodies in the City of Long Beach include creeks and channels, such as the Back Channel, Compton Creek, and Los Cerritos Channel (Caltrans 2018h).

From the 1930s to 1960s, USACE channelized the LA River for flood protection. However, the portion of the LA River in the area of the Project limits has a natural bottom with concrete-lined sides and is managed by the USACE. Flows in the LA River vary throughout the year. During the dry season, the water flow in the river comes primarily from effluent discharges and groundwater inflow. During the wet season, runoff from storm events and snow melt contribute to water flow in the LA River. Normal annual precipitation along the coast in the City of Long Beach is 13.13 inches (Caltrans 2018h).

Other features within the Project limit include roadways on each side of the LA River, SR-710 west of the LA River, the SCE Seabright Substation, and Cesar E. Chavez Park east of the LA River. The area within the Project limits includes mostly paved surfaces, with the exception of Cesar E. Chavez Park, which is landscaped with ornamental trees and grass. Roadway drainage in the Project limits flows

into grated inlets, which lead to underground storm drain systems. The existing storm drain systems outlet to one of three pump stations, which empty into the LA River Estuary or Long Beach Inner Harbor.

The existing Shoemaker Bridge structure consists of a bridge supported by five concrete piers located in the LA River tidal zone. Each 130-foot-long pier wall has a width of 3 feet at the water surface. This results in a surface area projection of approximately 1,950 square feet.

The floodplain of the LA River within the Project limits is a trapezoidal channel with rock-lined side slopes and a natural bottom. The top width of the channel in the vicinity of the bridge is 575 feet. This portion of the LA River is tidally-influenced with a tidal surge of approximately 4 feet, leaving approximately 2 feet of room in this area before risk of channel overflow.

### 6th Street Pump Station

The 6th Street Pump Station is one of three pump stations servicing Basin 03 as identified by the *City of Long Beach Storm Water Management Program Manual* (City of Long Beach 2001). The 6th Street Pump Station is located adjacent to existing Shoemaker Bridge in the City and services a portion of Basin 03 containing approximately 61-acres of open land, most of which is recreational land use, such as Cesar E. Chavez Park and Golden Shore Park, both located off of West Shoreline Drive. The 6th Street Pump Station system outfall is to the LA River.

## 2.8.2.2 Natural and Beneficial Floodplain Values

Natural and beneficial floodplain values associated with uses within the Project limits include, but are not limited to, fish, wildlife, plants, natural beauty, outdoor recreation, natural moderation of floods, water quality maintenance, and groundwater recharge, and are further discussed below.

- **Fish:** The LA River contains deep water and drains into the Pacific Ocean, approximately 2 miles south of the Project area. Therefore, there is potential for fish passage in the LA River channel. The lower reaches of the LA River and the portion of the Project area in Queensway Bay are designated essential fish habitat (EFH) for Coastal Pelagic Species. EFH is defined as habitat that includes waters and substrate necessary for fish to spawn, breed, feed, or grow to maturity (Caltrans 2018h). The anchovy and Pacific sardine are the only two types of Coastal Pelagic Species in which the Project area is expected to support, of which the majority of these populations are located south of the Project area in Queensway and San Pedro Bays.
- **Wildlife:** Six special-status wildlife species have the potential to utilize the Project area: California least tern, western snowy plover, California sea lion, western mastiff bat, pocketed free-tailed bat, and big free-tailed bat. Of these species, only the California least tern and California sea lion utilize aquatic habitat.
- **Plants:** The southern tarplant is the only special-status plant species that was once found to have marginally suitable habitat within the Project limits but is now considered to be absent.
- **Natural Beauty:** In the Project area, the LA River channel has riprap sides. The hard substrate provides rocky intertidal habitat for macroinvertebrates and sessile marine animals and plants, which provide food sources for fishes and birds. The portion of the LA River channel in the Project area also has a natural bottom that shifts perennially because of tidal influences. The channel bottom consists of mud and silt and supports benthic invertebrate species. In addition, the Project area contains a small freshwater emergent marsh (0.01 acre) on the south side of the LA River, which is a wetland habitat that supports fish and wildlife species.

- **Outdoor Recreation:** Existing parks and recreational areas located in the Project area include Cesar E. Chavez Park, LA River, LARIO Trail, Golden Shore RV Park, and Santa Cruz Park. The LB MUST Facility, a planned stormwater treatment project that includes pedestrian and bicycle trails, is also located within the Project area. These park and recreational resources do not include aquatic habitat.
- **Natural Moderation of Floods:** A separate flood prevention project being proposed by the City is the LB MUST Facility, which would accommodate stormwater flows from the northern portion of the Project area above West Broadway. The LB MUST Facility includes facilities intended to improve water quality associated with urban runoff that ultimately flows into the LA River.
- **Water Quality Maintenance:** According to the Los Angeles Regional Water Quality Control Board (RWQCB) Basin Plan, the Project crosses LA River Reach 1 (Estuary to Carson Street). Other waterbodies adjacent to or near the Project area include Dominguez Channel Estuary (unlined portion below Vermont Avenue), LA River Estuary (Queensway Bay), Los Angeles/Long Beach Inner Harbor, Long Beach City Beach, San Pedro Bay Near/Off Shore Zones, Los Angeles Harbor – Consolidated Slip, and San Pedro Bay Near/Off Shore Zones. Beneficial uses for these waterbodies are listed in Table 2.8-1. All of these waterbodies are listed as impaired waterbodies in the Clean Water Act (CWA) 303(d) List/305(b) 2014/2016 Integrated Report (SWRCB 2016). Urban runoff and illegal dumping are the major contributors to impaired water quality in the LA River and tributaries. Impaired waterbodies are further discussed in Section 2.9, Water Quality and Storm Water Runoff.

### Table 2.8-1. Beneficial Uses for Waterbodies

| Surface Water Feature | Existing Beneficial Uses | Potential Beneficial Uses |
|---|---|---|
| Dominguez Channel Estuary (unlined portion below Vermont Avenue) | Commercial and Sport Fishing<br>Estuarine Habitat<br>Marine Habitat<br>Wildlife Habitat<br>Preservation of Rare and Endangered Species<br>Fish Migration<br>Fish Spawning | Navigation |

## Table 2.8-1. Beneficial Uses for Waterbodies

| Surface Water Feature | Existing Beneficial Uses | Potential Beneficial Uses |
|---|---|---|
| LA River Reach 1 (Estuary to Carson Street) | Groundwater Recharge<br>Warm Freshwater Habitat<br>Marine Habitat<br>Wildlife Habitat<br>Preservation of Rare and Endangered Species<br>Fish Migration<br>Fish Spawning<br>Shellfish Harvesting | Municipal and Domestic Supply<br>Industrial Service Supply<br>Industrial Process Supply |
| LA River Estuary (Queensway Bay) | Industrial Service Supply<br>Navigation<br>Commercial and Sport Fishing<br>Estuarine Habitat<br>Marine Habitat<br>Wildlife Habitat<br>Preservation of Rare and Endangered Species<br>Fish Migration<br>Fish Spawning | Shellfish Harvesting |
| Los Angeles/Long Beach Inner Harbor | Industrial Service Supply<br>Navigation<br>Commercial and Sport Fishing<br>Marine Habitat<br>Rare, Threatened, or Endangered Species<br>Wetlands | Shellfish Harvesting |
| Long Beach City Beach | Navigation<br>Commercial and Sport Fishing<br>Marine Habitat<br>Preservation of Rare and Endangered Species | Fish Spawning |

**Table 2.8-1. Beneficial Uses for Waterbodies**

| Surface Water Feature | Existing Beneficial Uses | Potential Beneficial Uses |
|---|---|---|
| San Pedro Bay Near/Off Shore Zones | No information provided in the Los Angeles RWQCB Basin Plan | |
| Los Angeles Harbor – Consolidated Slip | | |

Source: State of California Los Angeles RWQCB 2018
Notes:
LA River=Los Angeles River; RWQCB=Regional Water Quality Control Board

### Groundwater Recharge

The Project is located in the South Coast hydrologic region. There are 56 groundwater basins in the South Coast hydrologic region, and the area within the Project limits is located in the Coastal Plain of Los Angeles groundwater basin. The Coastal Plain of Los Angeles groundwater basin is further divided into subbasins, including the Central Subbasin and West Coast Subbasin, which supply groundwater to the City. Though the area within the Project limits is underlain by the West Coast Subbasin, the Central Subbasin supplements the groundwater supply in the West Coast Subbasin.

The West Coast Subbasin, bordered on the east by the Central Subbasin, encompasses approximately 140 square miles. Water recharge of the aquifers in the West Coast Subbasin comes from adjacent groundwater subbasins, including the Central Subbasin, as well as saltwater intrusion from the Pacific Ocean.

The Central Subbasin encompasses approximately 270 square miles. The Central Subbasin is divided into four divisions, which include the Los Angeles Forebay, Montebello Forebay, Whittier Area, and Pressure Area. The Los Angeles and Montebello Forebays are water table aquifers that allow surface water to seep into the deeper aquifers to replenish the subbasins. The Whittier Area and Pressure Area are confined aquifer systems that are primarily recharged from the up-gradient forebay areas and adjacent groundwater subbasins. The LA and San Gabriel Rivers flow over the Central Subbasin before emptying into the Pacific Ocean.

## Floodplains

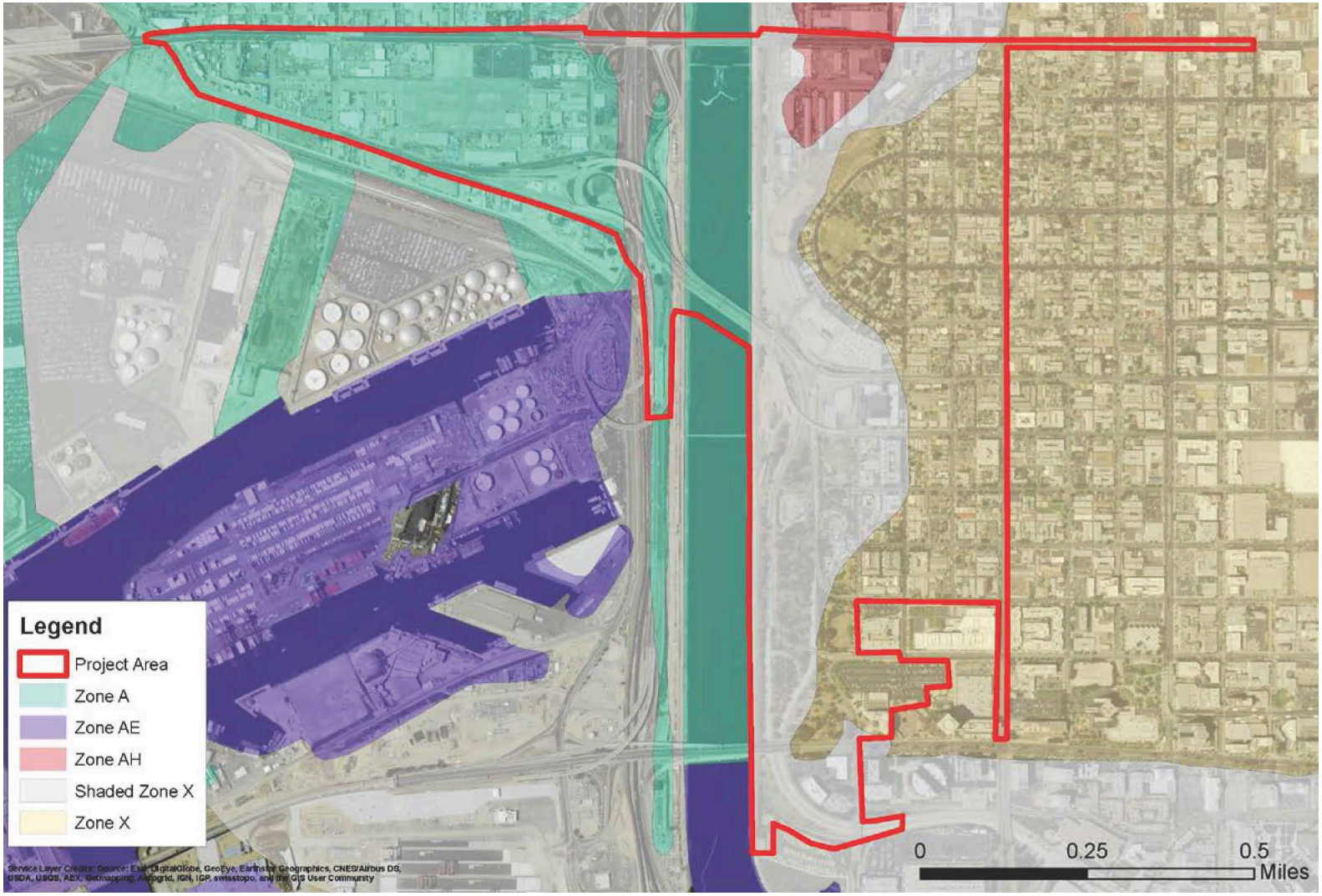
The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Los Angeles County (Map Numbers 06037C1964F, 06037C1962F, and 06037C1965F) indicates the Project limits is in the following flood zones (Figure 2.8-1) (Caltrans 2018h, 2018i):

- **Zone A:** This zone is defined as a special flood hazard area subject to inundation by the 1 percent annual chance flood, and no base flood elevations were determined. The portion of the Project limits that includes the bridge, the LA River, and the area west of the LA River is located in Zone A.
- **Zone AH:** This zone is defined as a special flood hazard area subject to inundation by the 1 percent annual chance flood and includes flood depths of 1 to 3 feet. Base flood elevations are determined. The northeastern portion of the Project limits along Anaheim Street east of the LA River is in Zone AH.

- **Shaded Zone X:** This zone is defined as an area of 0.2 percent annual chance flood, an area of 1 percent annual chance flood with average depths of less than 1 foot or with a drainage area less than 1 square mile, and an area protected by levees from 1 percent annual chance flood. The central portion of the Project limits directly east and west of the LA River is in Shaded Zone X.
- **Zone X:** This zone is defined as an area determined to be outside the 0.2 percent annual chance floodplain. The eastern portion of the Project limits is in Zone X.

In addition, as shown on Figure 2.8-1, although Zone AE is not located within the Project limits, it is located in close proximity to the Project limits. Zone AE is defined below.

- **Zone AE:** This zone is defined as a special flood hazard area subject to inundation by the 1 percent annual chance flood with a base flood elevation of 10 feet. Zone AE is located southwest of the bridge and within a portion of the LA River, south of Ocean Boulevard.




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.8-1. Flood Zones**

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## 2.8.3 Environmental Consequences

EO 11988 requires federal agencies to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.

A "significant encroachment," as defined in 23 CFR 650.105(q), is a highway encroachment that would result in (1) a significant potential for interruption or termination of a transportation facility that is needed for emergency vehicles or provides a community's only means of evacuation, (2) a significant risk, or (3) a significant adverse impact on natural and beneficial floodplain values.

As previously mentioned, natural and beneficial floodplain values associated with the Project include, but are not limited to, fish, wildlife, plants, natural beauty, outdoor recreation, natural moderation of floods, water quality maintenance, and groundwater recharge. However, Alternatives 2 and 3 (Design Options A and B) would not result in any temporary or permanent impacts on special-status plant species (southern tarplant), natural beauty (freshwater emergent marsh [wetland habitat]) or groundwater recharge, as discussed in Section 2.18, Plant Species, Section 2.16, Natural Communities, Section 2.17, Wetlands and Other Waters, and Section 2.9, Water Quality and Storm Water Runoff, respectively.

Temporary and/or permanent impacts on natural and beneficial floodplain values associated with fish, wildlife, outdoor recreation, and water quality maintenance are further discussed below.

### 2.8.3.1 Temporary Impacts

#### Alternative1 (No Build)

Under Alternative 1 (No Build), there would be no construction activities within the floodplain. Therefore, Alternative 1 (No Build) would not result in a significant floodplain encroachment and no significant adverse impacts on natural and beneficial floodplain values would occur.

#### Alternatives 2 and 3 (Design Options A and B)

Alternatives 2 and 3 (Design Options A and B) would result in temporary impacts on natural and beneficial floodplain values associated with fish, wildlife, outdoor recreation, and water quality maintenance.

**Fish.** Alternatives 2 and 3 (Design Options A and B) would result in temporary impacts on deepwater aquatic habitat during construction of the proposed new bridge. This deepwater aquatic habitat is under the jurisdiction of both the USACE and National Marine Fisheries Service (NMFS), is designated as EFH, and is suitable habitat for the northern anchovy. Consultation with the NMFS regarding impacts on EFH is necessary for potential impacts on species that may be present in the Biological Study Area (BSA) and downstream. With the inclusion of Project Features PF-16 through PF-23, PF-80 through PF-84, and Avoidance, Minimization, and Mitigation Measures NC-1 through NC-3 in Section 2.16, Natural Communities, temporary impacts on aquatic habitat would not be substantially adverse and no significant adverse impacts on natural and beneficial floodplain values would occur.

The following Project Features PF-16 through PF-23 (referenced in Section 2.9 Water Quality and Storm Water Runoff) and PF-80 through PF-84 (referenced in Table 1-5, Chapter 1 and identified below) are included as part of the Project and apply to sensitive natural communities within the Project limits.

**PF-80** During construction, the City of Long Beach (City) will ensure that a biologist approved by the Carlsbad Fish and Wildlife Office (CFWO) and National Marine Fisheries Service (NMFS) (Project Biologist) will be on site weekly during Project construction within 200 feet of Environmentally Sensitive Areas (ESAs) and habitat for listed species with the potential to occur in the area (i.e. western snowy plover and California least tern) in order to ensure compliance with all conservation measures. The Project Biologist will be familiar with the habitats, plants, and wildlife in the Project area and will maintain communications with the contractor to ensure that issues relating to biological resources are appropriately and lawfully managed. The Project Biologist will review final plans, designate areas that need temporary fencing (e.g. ESA fencing), and monitor construction. The biologist's name and contact information will be submitted to the CFWO prior to initiating project construction. The contract of the biologist will allow direct communication with the CFWO at any time regarding the proposed project. The Project Biologist will meet the qualifications defined under SSP 14 6.03D(1) Contractor Supplied Biologist.

**PF-81** After the completion of construction, the City of Long Beach (City) will ensure that the Project Biologist will submit a final report to the CFWO within 120 days of project completion, including photographs of impact areas and adjacent habitat, documentation that authorized impacts were not exceeded, and documentation that general compliance with all conservation measures was achieved. The report will specify numbers and locations of listed species (if observed); observed listed species behavior (especially in relation to project activities); and remedial measures employed to avoid and minimize impacts to listed species. Raw field notes will be provided upon request by the CFWO.

**PF-82** The City's Resident Engineer will ensure that prior to clearing or construction, highly visible barriers (such as orange construction fencing) will be installed around sensitive habitats adjacent to the Project footprint to designate ESAs to be preserved. No grading or fill activity of any type will be permitted within these ESAs. The requirement to install highly visible barriers to designate ESAs will be done in accordance with SSP 14-6.03D(2) Natural Resource Protection Plan.

**PF-83** The City's Resident Engineer will ensure that heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental damage to nearby preserved areas. All equipment maintenance, staging, and dispensing of fuel, oil, or any other, such activities will occur in developed or designated nonsensitive upland habitat areas. The designated upland areas will be located in such a manner as to prevent the runoff from any spills from entering waters of the U.S. Provisions to protect ESAs from heavy equipment, including motor vehicle access, will be done in accordance with SSP 14-6.03D(2) Natural Resource Protection Plan.

**PF-84** During construction, the City's Resident Engineer or designated contractor will ensure that turbidity curtains be used in lieu of silt curtains, which are less effective at trapping sediment in tidal channels.

**Wildlife.** During construction, Alternatives 2 and 3 (Design Options A and B) may result in temporary impacts on foraging California least terns, western snowy plover, California sea lions and bat species. As identified in the Project's *Natural Environment Study* (NES) (Caltrans 2019c), California least terns and western snowy plover may forage in the BSA from April to September. Construction activities associated with the demolition and/or construction of the existing and proposed bridge under Alternatives 2 and 3 (Design Options A and B) may limit foraging habitat for California least terns and western snowy plover during construction. However, these potential temporary impacts would cease upon the completion of construction activities. With the inclusion of Project Features PF-80 through PF-84, listed above, along with implementation of Avoidance and Minimization Measures TE-1 through TE-6 in Section 2.19, Threatened and Endangered Species, no substantial temporary direct or indirect adverse impacts on foraging California least terns or western snowy plover are anticipated and no significant adverse impacts on natural and beneficial floodplain values would occur.

Based on information contained in the Project's NES (Caltrans 2019c), the California sea lion is occasionally found in the lower reaches of the LA River, primarily south of Ocean Boulevard. In-water construction activities associated with Alternatives 2 and 3 (Design Option A and B) may indirectly impact potential foraging habitat for California sea lions passing through the Project area. With the inclusion of Project Features PF-80 through PF-84, listed above no substantial temporary direct or indirect adverse impacts on foraging California sea lions are anticipated and no significant adverse impacts on natural and beneficial floodplain values would occur.

As identified in the Project's NES (Caltrans 2019c), there is a low potential for special status bat species to be present and forage within the Project area. Construction activities associated with the demolition and/or construction of the existing and proposed bridge under Alternatives 2 and 3 (Design Options A and B) may result in the temporary loss of potential day and night roosting habitat for special status bat species. With the inclusion of Project Features PF-80 through PF-84, listed above, along with implementation of Avoidance and Minimization Measures AN-1 through AN-3 in Section 2.19, Animal Species, no substantial temporary direct or indirect adverse impacts on special status bat species are anticipated and no significant adverse impacts on natural and beneficial floodplain values would occur.

**Outdoor Recreation.** Within the Project limits, existing beneficial surface water uses include non-contact water recreation and contact water recreation. The non-contact recreation (REC-2) in the Project area includes the LARIO Trail along the LA River. During construction, the Project under Alternatives 2 and 3 (Design Options A and B) would result in temporary closures of the LARIO Trail and trail connections; however, a temporary detour would be provided.

Contact water recreation (REC-1) in the Project area includes activities such as seasonal boating, fishing, and kayaking in the LA River. The Project would require work over and within the LA River Channel that could result in temporary changes to contact water recreation. However, with the implementation of Minimization Measures PR-13 through and PR-18 in Section 2.1, Land Use, temporary impacts would be reduced. No substantial temporary adverse impacts are anticipated on outdoor recreational resources under Alternatives 2 and 3 (Design Options A and B) and no significant adverse impacts on natural and beneficial floodplain values would occur.

**Water Quality Maintenance.** Alternatives 2 and 3 (Design Options A and B) would require construction of a new Shoemaker Bridge over the LA River, and Alternative 3 would require demolition of the existing bridge structure. The Project would require heavy construction (e.g., excavation of the channel bottom for foundation columns and the positioning of equipment outriggers) and demolition

work that could result in the re-suspension and dispersal of fine-grained bottom sediments within the water column. In addition, construction sites adjacent to the LA River could disturb soil and promote erosion of the channel banks. The erosion of soils could result in the transport of solid materials in surface runoff into the channel. Therefore, soil disturbance in and adjacent to the LA River, and erosion of the channel banks and nearby areas, could result in increased turbidity and total suspended solids (TSS) during construction. In addition, oil, grease, and chemical pollutants from construction activities and vehicles could also enter the LA River from accidental spills or from stormwater runoff. With the inclusion of Project Features PF-12 through PF-14 and PF-19, along with implementation of Avoidance and Minimization Measure NC-5 in Section 2.16, Natural Communities, temporary impacts on water quality would not be substantially adverse and no significant adverse impacts on natural and beneficial floodplain values would occur.

**PF-12** During construction, the City's Resident Engineer or designated contractor will ensure compliance with the provisions of the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009-DWQ, NPDES No. CAS000002), and any subsequent amendments (Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ), as they relate to construction activities for the Project. This will include submission of the Permit Registration Documents, including an (NOI, risk assessment, site map, SWPPP, annual fee, and signed certification statement to the SWRCB via the SMARTS at least 7 days prior to the start of construction.

- Construction activities will not commence until a WDID number is received from the SMARTS. The SWPPP will be prepared by a QSD.
- The SWPPP will meet the requirements of the Construction General Permit and identify potential pollutant sources associated with construction activities; identify non-stormwater discharges; develop a water quality monitoring and sampling plan; and identify, implement, and maintain BMPs to reduce or eliminate pollutants associated with the construction site. BMPs will include, but not be limited to, good housekeeping, erosion control, and sediment control BMPs.
- The BMPs identified in the SWPPP will be implemented during Project construction. Caltrans and the City will comply with the Risk Level 1 sampling and reporting requirements of the Construction General Permit.
- A REAP will be prepared and implemented by a QSD within 48 hours prior to a rain event of 50 percent or greater probability of precipitation according to NOAA. A NOT will be submitted to the SWRCB within 90 days of completion of construction and stabilization of the site.

**PF-13** During construction, the City's Resident Engineer or designated contractor will ensure all construction site BMPs follow the latest edition of the Stormwater Quality Handbooks: Construction Site BMPs Manual (Caltrans 2017a) to control and reduce the impacts of construction related activities, material, and pollutants on the watershed. These include, but are not limited to, temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-stormwater BMPs identified in the following Non-Stormwater (NS) BMPs listed below:

- NS-2, related to dewatering operations

- NS-3, related to paving and grinding operations
- NS-4, related to temporary stream crossing
- NS-5, related to clear water diversion
- NS-6, related to illicit connection/discharge
- NS-7, related to potable water/irrigation
- NS-11, related to pile driving operation
- NS-12, related to concrete curing
- NS-13, related to concrete finishing
- NS-16, related to temporary batch plants

In addition, during construction, the City's Resident Engineer or designated contractor will ensure compliance with the following Materials Management BMPs:

- WM-3, related to stockpile management
- WM-5, related to solid waste management
- WM-9, related to sanitary-septic waste management
- WM-10, related to liquid waste management

**PF-14** During the Plans, Specifications, and Estimates phase the City's Resident Engineer will review the results of further geotechnical explorations to determine if dewatering is necessary during construction of deep foundations within the LA River.

**PF-19** During construction, the City's Resident Engineer or designated contractor will ensure that streambank stabilization (SS-12) be required to mitigate work involving the existing LA River banks.

**Natural Moderation of Floods.** According to the FEMA FIRM, the portion of the Project limits that includes the existing Shoemaker Bridge and the LA River, the area west of the LA River, and the area along Anaheim Street to the east of the LA River are in Zone A or Zone AH, which are defined as areas within the 100-year floodplain (Figure 2.8-1). During construction, temporary supports would be required in the LA River channel to construct the new Shoemaker Bridge under Alternatives 2 and 3 (Design Options A and B). However, the temporary supports would be minor structures that would not be expected to substantially impact flood control functions in the LA River and would be removed upon completion of construction.

### 6th Street Pump Station

As stated in Section 2.4, Utilities and Emergency Services, the existing 6th Street Pump Station would be relocated as a result of the proposed Project. The pump station is currently located directly below the proposed bridge support structure on the eastern end of the new Shoemaker Bridge. As a result, temporary impacts may occur in between the time the 6th Street Pump Station is taken offline and is relocated. Therefore, a temporary stormwater drainage plan, as identified in Avoidance and Minimization Measure U-2 in Section 2.4, Utilities and Emergency Services, would be implemented to ensure all stormwater can be accommodated during construction. With the implementation of Measure U-2, impacts would be reduced and no substantial temporary adverse impacts are anticipated.

### 2.8.3.2 Permanent Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not change the operation of the existing Shoemaker Bridge. Therefore, Alternative 1 (No Build) would not result in permanent adverse impacts related to natural and beneficial floodplains values.

#### Alternatives 2 and 3 (Design Options A and B)

According to the *Location Hydraulic Study* (Caltrans 2018h), a hydraulic analysis was conducted for the Project to calculate the level of risk at the LA River crossing using a 133-year flood event in accordance with the USACE's recommended design discharge. Based on the results of the hydraulic analysis, the new bridge, under Alternatives 2 and 3 (Design Options A and B), would have sufficient horizontal and vertical clearances to not cause any significant backwater upstream of the bridge. In addition, the new bridge, under Alternatives 2 and 3 (Design Options A and B), would result in a minimal impact on floodplains with a maximum increase in water surface elevation of 2 inches, which would not increase the floodplain extent beyond the existing levee capacity to contain all flows within the flood control channel.

The bottom of the new bridge would exceed the existing 43-foot mean high water level (MHWL), which would ensure that the new bridge would not interfere with flows within the channel. Therefore, Alternatives 2 and 3 (Design Options A and B) would not result in any adverse impacts on 100-year floodplains or floodways and would not support incompatible floodplain development. In addition, the minimal change in water surface elevation would not have any risk to life and property and no interruption or termination of emergency service or emergency. Based on the assessment of level of risk in the Location Hydraulics Study Forms provided in the *Location Hydraulic Study* (Caltrans 2018h), the Project is considered low risk.

Although the Project would not result in floodplain impacts, Alternatives 2 and 3 (Design Options A and B) would have the potential to result in permanent impacts on natural and beneficial floodplain values associated with fish and outdoor recreation.

**Fish.** The Project would result in permanent impacts on deepwater aquatic habitat through the placement of support structures for the proposed new bridge. As previously mentioned, this habitat is under the jurisdiction of both USACE and NMFS, is designated as EFH, and is suitable habitat for the northern anchovy. Consultation with the NMFS regarding impacts on EFH is necessary for potential impacts on species that may be present in the BSA and downstream. With the implementation of Mitigation Measure NC-4 in Section 2.16, Natural Communities, permanent impacts would be mitigated and not be considered adverse.

**Outdoor Recreation.** The Project would result in permanent impacts on Cesar E. Chavez Park, LARIO Trail, and trail connections related to the LB MUST Facility. These outdoor recreational facilities contribute to the non-contact water recreational activities (REC-2) identified by the Los Angeles RWQCB for the LA River and surrounding waterbodies. The implementation of M-11and M-18, identified in Section 2.1, Land Use, would minimize permanent impacts on non-contact outdoor recreational uses. Upon completion of construction, contact recreational activities (REC-1), such as seasonal boating and kayaking, would return to normal operations. Therefore, no adverse permanent impacts on contact outdoor recreational uses are anticipated.

**Floodplain Encroachment.** Alternatives 2 and 3 (Design Options A and B) would require encroachment within the 100-year floodplain in the LA River, but would not result in incompatible

floodplain development. According to the *Location Hydraulic Study* (Caltrans 2018h), Alternatives 2 and 3 (Design Options A and B) would not change the capacity of the LA River to carry water would not result in a measurable change to the 100-year floodplain elevation. The hydraulic analysis completed for the Project demonstrates that the proposed bridge replacement has sufficient horizontal and vertical clearances to not cause any significant backwater upstream of the bridge. The proposed bridge replacement will have a minimal impact on floodplains with a maximum increase in water surface elevation of 2 inches, which would not increase the floodplain extents since the existing levee walls are high enough to contain all flows within the flood control channel. As a result, the proposed Project encroachment would not result in any adverse impacts on the natural and beneficial floodplain values, would not result in a substantial change in flood risk or damage, and does not have substantial potential to cause interruption or termination of emergency services or emergency routes. Therefore, Alternatives 2 and 3 (Design Options A and B) do not constitute a significant floodplain encroachment as defined in 23 CFR 650.105(q).

### 2.8.4 Avoidance, Minimization, and/or Mitigation Measures

With the implementation of Avoidance, Minimization, and/or Mitigation Measures M-11, M-13, M-14, and M-18 in Section 2.1, Land Use, U-2 in Section 2.4, Utilities and Emergency Services, NC-1 through NC-5 in Section 2.16, Natural Communities, AN-1 through AN-3 in Section 2.19, Animal Species, TE-1 through TE-6 in Section 2.20, Threatened and Endangered Species, no adverse temporary or permanent impacts are anticipated.

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# 2.9 Water Quality and Storm Water Runoff

## 2.9.1 Regulatory Setting

### 2.9.1.1 Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source[1] unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCBs) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The goal of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of the USACE’s Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency’s (U.S. EPA) Section 404 (b)(1) Guidelines (40 Code of Federal Regulations [CFR] Part 230), and whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging

[1] A point source is any discrete conveyance such as a pipe or a man-made ditch.

practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent[2] standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in the Wetlands and Other Waters section.

### 2.9.1.2 State Requirements

#### Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the State include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined, and this definition is broader than the CWA definition of "pollutant." Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, RWQCBs designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect those uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of total maximum daily loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

#### State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB administers water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

[2] The U.S. EPA defines "effluent" as "wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall."

### *National Pollutant Discharge Elimination System (NPDES) Program*

#### *Municipal Separate Storm Sewer Systems (MS4)*

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water discharges, including Municipal Separate Storm Sewer Systems (MS4s). An MS4 is defined as "any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that is designed or used for collecting or conveying storm water." The SWRCB has identified Caltrans as an owner/operator of an MS4 under federal regulations. Caltrans's MS4 permit covers all Caltrans rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

Caltrans's MS4 Permit, Order No. 2012-0011-DWQ (adopted on September 19, 2012 and effective on July 1, 2013), as amended by Order No. 2014-0006-EXEC (effective January 17, 2014), Order No. 2014-0077-DWQ (effective May 20, 2014) and Order No. 2015-0036-EXEC (conformed and effective April 7, 2015) has three basic requirements:

1. Caltrans must comply with the requirements of the Construction General Permit (see below);
2. Caltrans must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and
3. Caltrans storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs), to the maximum extent practicable, and other measures as the SWRCB determines to be necessary to meet the water quality standards.

To comply with the permit, Caltrans developed the Statewide Storm Water Management Plan (SWMP) to address storm water pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The SWMP assigns responsibilities within Caltrans for implementing storm water management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices Caltrans uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of BMPs. The proposed Project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

#### *Construction General Permit*

Construction General Permit, Order No. 2009-0009-DWQ (adopted on September 2, 2009 and effective on July 1, 2010), as amended by Order No. 2010-0014-DWQ (effective February 14, 2011) and Order No. 2012-0006-DWQ (effective on July 17, 2012). The permit regulates storm water discharges from construction sites that result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation result in soil disturbance of at least one acre must comply with the provisions of the General Construction Permit. Construction activity that results in soil disturbances of less than one acre is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to

develop Storm Water Pollution Prevention Plans (SWPPPs); to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective SWPPP. In accordance with Caltrans's SWMP and Standard Specifications, a Water Pollution Control Program (WPCP) is necessary for projects with DSA less than one acre.

*Section 401 Permitting*

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the U.S. must obtain a 401 Certification, which certifies that the project will be in compliance with state water quality standards. The most common federal permits triggering 401 Certification are CWA Section 404 permits issued by the USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before the USACE issues a 404 permit.

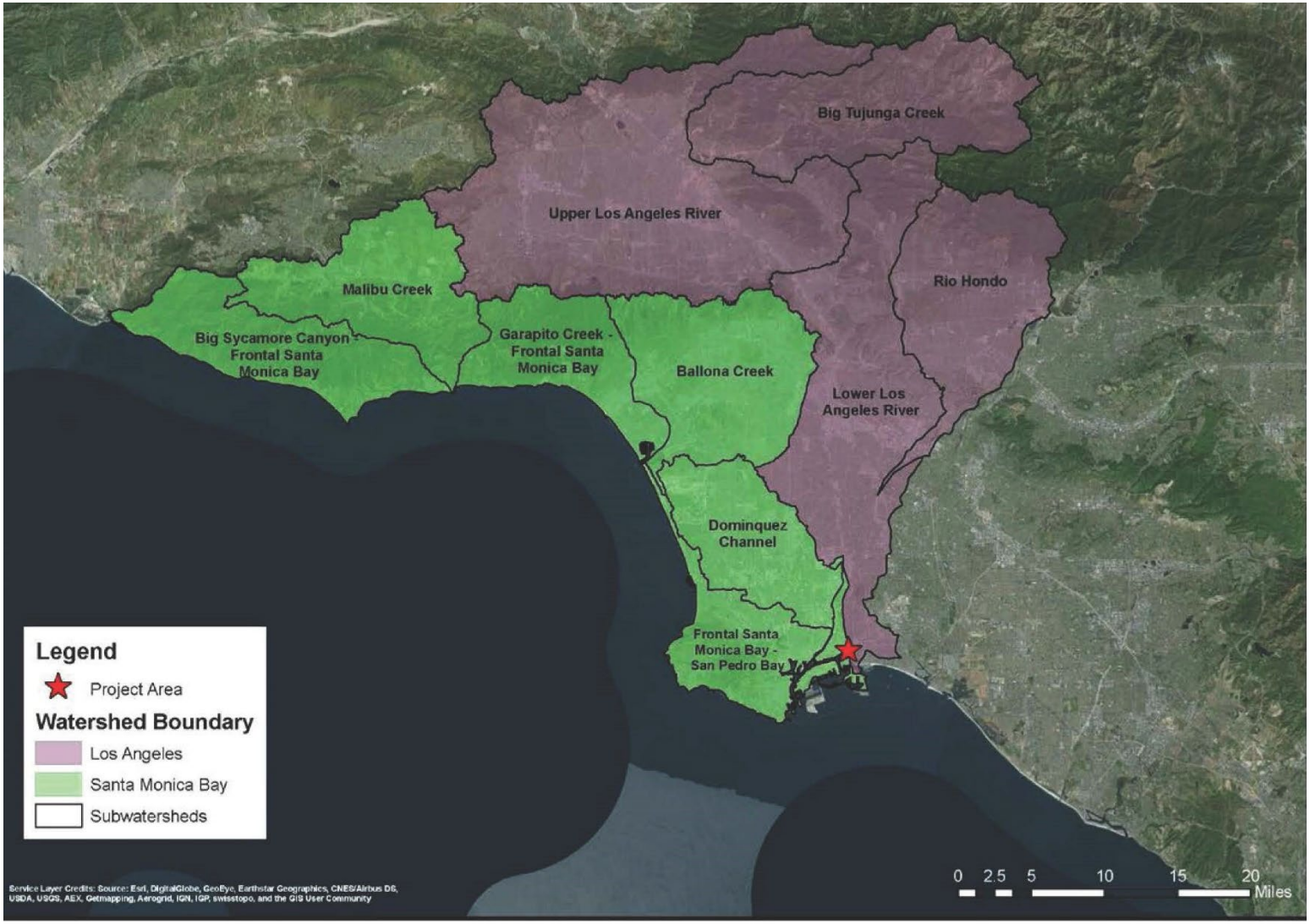
In some cases, the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as WDRs under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

## 2.9.2 Affected Environment

This section is based on the *Water Quality Assessment Report* (WQAR) (Caltrans 2018i) for the proposed Project.

### 2.9.2.1 Surface Water

The proposed Project is located within two watershed management areas: the LA River Watershed and the Dominguez Channel Watershed, as shown on Figure 2.9-1. Water quality within the LA River Watershed and the Dominguez Channel Watershed is under the jurisdiction of the Los Angeles RWQCB – Region 4.

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EA No. 27300

*Shoemaker Bridge Replacement Project*
**Figure 2.9-1. Watersheds**

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### Los Angeles River Watershed

The eastern portion of the Project area extends into the LA River watershed. The watershed comprises approximately 834 square miles of land that is bordered by the Santa Monica Mountains to the west and south, Simi Hills and Santa Susana Mountains to the north and west, and San Gabriel Mountains to the north and east (Los Angeles Department of Public Works n.d.a). The land use in the watershed is roughly 44 percent open space, which includes the area near the headwaters in the mountains.

The remaining 56 percent of the watershed is highly developed with residential, commercial, and industrial land uses. Urban runoff and illegal dumping are major contributors to impaired water quality in the watershed (Los Angeles Regional Water Quality Control Board 1994).

### Dominguez Channel Watershed

The Dominguez Channel Watershed comprises approximately 133 square miles of land and water in the southern portion of Los Angeles County (City of Los Angeles n.d.). Over 90 percent of the watershed's land area is developed with residential, industrial, commercial, and transportation uses, and over 60 percent of the watershed is covered with impervious surfaces. The Dominguez Channel Watershed includes the cities of Carson, Compton, El Segundo, Gardena, Hawthorne, Inglewood, Lawndale, Lomita, Long Beach, Los Angeles, Manhattan Beach, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, Torrance, Port of Long Beach, Port of Los Angeles, and parts of Los Angeles County (Los Angeles County n.d.b). The majority of the watershed drains into the Dominguez Channel, which stretches approximately 15.7 miles, and empties into the Los Angeles Harbor. Because of the high level of urbanization, water quality is impaired by a variety of pollutants (City of Los Angeles n.d.).

### Existing Water Quality

The Los Angeles RWQCB has established water quality objectives for its major region watersheds. These objectives are listed in Table 2.9-1. These objectives designated allowable limits of water quality constituents or characteristics that allow for the reasonable protection of the resource's beneficial uses and are discussed in Section 2.8, Hydrology and Floodplains.

**Table 2.9-1. Los Angeles Regional Water Quality Control Board Water Quality Objectives for Inland Surface Waters, Enclosed Bays, and Estuaries**

| Parameter | Water Quality Objective |
|---|---|
| Ammonia | Ammonia concentrations in receiving waters shall not exceed values listed in the Basin Plan. |
| Bacteria | In waters designated for noncontact water recreation (REC-2), the fecal coliform concentration shall not exceed 200/100 mL, based on a minimum of not fewer than four samples for any 30-day period, nor shall more than 10 percent of total samples during any 30-day period exceed 4000/10 mL. |
| Bioaccumulation | Toxic pollutants shall not be present at levels that would bioaccumulate in aquatic life to levels that are harmful to aquatic life or human health. |
| Biostimulatory substances | Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses. |

## Table 2.9-1. Los Angeles Regional Water Quality Control Board Water Quality Objectives for Inland Surface Waters, Enclosed Bays, and Estuaries

| Parameter | Water Quality Objective |
|---|---|
| BOD | Waters shall be free of substances that result in increases in BOD that adversely affect beneficial uses. |
| Chemical constituents | Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use. |
| Chlorine, total residual | Chlorine residual shall not be present in surface water discharges at concentrations that exceed 0.1 mg/L and shall not persist in receiving waters at a concentration that causes impairment of beneficial uses. |
| Color | Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses. |
| Exotic vegetation | Exotic vegetation shall not be introduced around stream courses to the extent that such growth causes nuisance or adversely affects beneficial uses. |
| Floating material | Waters shall be free of floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses. |
| Dissolved oxygen | At a minimum, the mean annual dissolved oxygen concentration of all waters shall be greater than 7 mg/L, and no single determination shall be less than 5.0 mg/L, except when natural conditions cause lesser concentrations. Dissolved oxygen content of surface waters designated as WARM shall not be depressed below 5 mg/L as a result of waste discharge. Los Angeles-Long Beach Harbors. The mean annual dissolved oxygen concentrations shall be 6.0 mg/L or greater, provided that no single determination shall be less than 5.0 mg/L. |
| MBAs | Waters shall not have MBAs in concentrations greater than 0.5 mg/L in waters designated for MUN. Note: Municipal and domestic use is identified as a 'potential' use for the identified receiving surface waters. |
| Mineral quality | There are no waterbody specific mineral quality objectives identified for any of the identified receiving surface waters in the Basin Plan. |
| Nitrogen | Nitrogen levels shall not exceed 10 mg/L (nitrate-nitrogen plus nitrite-nitrogen), 45 mg/L (as nitrate), 10 mg/L (as nitrate-nitrogen), or 1 mg/L (as nitrite-nitrogen). |
| Oil and grease | Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, cause nuisance, or otherwise adversely affect beneficial uses. |
| PCBs | Pass-through or uncontrollable discharges to waters of the region or at locations where the waste can subsequently reach water of the region, are limited to 71 pg/L (30-day average) for the protection of human health and 14 ng/L and 30 ng/L (daily average) to protect aquatic life in inland fresh waters and estuarine waters respectively. |
| Pesticides | Waters designated as domestic or municipal supply shall not contain concentrations of pesticides in excess of the limiting concentrations contained in Title 22 of the CCR, listed in Table 3-7 of the Basin Plan. Note: Municipal and domestic use is identified as a 'potential' use for this watershed. |

**Table 2.9-1. Los Angeles Regional Water Quality Control Board Water Quality Objectives for Inland Surface Waters, Enclosed Bays, and Estuaries**

| Parameter | Water Quality Objective |
|---|---|
| pH | The pH of inland surface wasters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of waste discharge. The pH of bays or estuaries shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.2 units from natural conditions as a result of waste discharge. |
| Radioactivity | Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life. |
| Suspended material | Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. |
| Settleable material | Waters shall not contain settleable material that causes nuisance or adversely affects beneficial uses. |
| Tastes and odors | Waters shall not contain taste- or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible aquatic resources, cause nuisance, or adversely affect beneficial uses. |
| Temperature | The natural receiving water temperature of all regional waters shall not be altered unless it can be demonstrated to the satisfaction of the RWQCB that such alteration in temperatures does not adversely affect beneficial uses. |
| Toxicity | All waters shall be maintained free of toxic substances in concentrations that are toxic to or produce detrimental physiological responses to human, plant, or aquatic life. |
| Turbidity | Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20 percent. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10 percent. Note: The Los Angeles Water Board may issue a specific WDRs permit allowing higher concentrations within zones of dilution. |

Notes:
BOD=biochemical oxygen demand; CCR=California Code of Regulations; MBA=methylene blue activated substance, mL=milliliters; mg/L=milligram per liter; MUN=municipal and domestic supply; ng/L=nanograms per liter; NTU=nephelometric turbidity unit; PCB=polychlorinated biphenyl; pg/L=picograms per liter; pH=potential of hydrogen; RWQCB=Regional Water Quality Control Board; WARM=warm freshwater habitat; WDR=waste discharge requirements

### *Los Angeles River Watershed*

The majority of the LA River Watershed is considered impaired, or not achieving water quality standards set by the Los Angeles RQWCB, because of a variety of point, specific or identifiable, and nonpoint, accumulation of contaminants from non-specific point, sources. Some of these constituents are of concern throughout the length of the LA River, while others are of concern only in certain reaches. The U.S. EPA has created a 303(d) Program as a part of the CWA that assists states, territories, and authorized tribes in submitting lists of impaired and threatened waters and developing TMDLs based

on the severity of the pollution and sensitivity of the waters. Impairment may be because of water column exceedances, excessive sediment levels of pollutants, or bioaccumulation of pollutants. Urban runoff and illegal dumping are the major contributors to impaired water quality in the LA River and its tributaries.

Table 2.9-2 lists the impairments for the following waterbodies within the LA River Watershed, as listed within the Los Angeles RWQCB Basin Plan.

**Table 2.9-2. Los Angeles River Impaired Watershed**

| Surface Water Body | Impairments |
|---|---|
| LA River Reach 1 (Estuary to Carson Street) | Coliform bacteria<br>Cyanide<br>Diazinon<br>Trash<br>Ammonia<br>Copper, dissolved<br>Lead<br>Nutrients (algae)<br>pH<br>Zinc, dissolved |
| Long Beach City Beach (Coastal Bay and Shoreline) | Indicator bacteria |
| San Pedro Bay Near/Off Shore Zones (Bay and Harbor) | Chlordane<br>DDT (tissue and sediment)<br>PCB<br>Sediment toxicity |

Source: State of California Los Angeles RWQCB 2018

Notes:
DDT=dichlorodiphenyltrichloroethane; LA River=Los Angeles River; PCB=polychlorinated biphenyls; pH=potential of hydrogen

*Dominguez Channel Watershed*

Dominguez Channel drains a highly industrialized area with numerous nonpoint sources of pollution for polycyclic aromatic hydrocarbons (PAH) and also contains remnants of persistent legacy pesticides, as well as polychlorinated biphenyls (PCB), which results in poor sediment quality within the channel and in adjacent Inner Harbor areas. Although highest in Dominguez Channel estuary and Consolidated Slip (the part of the Inner Harbor immediately downstream of Dominguez Channel) sediments, dichlorodiphenyltrichloroethane (DDT) is pervasive throughout the harbors. Metals, particularly copper, remain elevated at some locations in the sediments of the Inner Harbor. A likely major nonpoint source contributor to these concentrations is antifouling paint containing copper that leaches from the many ships and boats in the harbors. Sediment toxicity occurs more frequently in parts of the Inner Harbor than elsewhere. The Consolidated Slip continues to exhibit a very impacted benthic invertebrate community.

Table 2.9-3 lists the impairments for the following waterbodies within the Dominguez Channel Watershed, as listed within the Los Angeles RWQCB Basin Plan.

**Table 2.9-3. Dominguez Channel Watershed Impaired Waterbodies**

| Surface Water Body | Impairments |
|---|---|
| Dominguez Channel Estuary | Ammonia benthic community effects<br>Benzo(a)pyrene (PAHs)<br>Benzo[a]anthracene<br>Chlordane (tissue)<br>Chrysene (C1-C4)<br>Coliform bacteria<br>DDT (tissue and sediment)<br>Dieldrin (tissue)<br>Lead (tissue)<br>PCBs<br>Phenanthrene<br>Pyrene<br>Sediment toxicity<br>Zinc (sediment) |
| Los Angeles/Long Beach Inner Harbor | Beach closures<br>Benthic community effects<br>Benzo(a)pyrene (3,4 Benzopyrene -7-d)<br>Chrysene (C1-C4)<br>Copper<br>DDT<br>PCBs<br>Sediment toxicity<br>Zinc |
| Los Angeles/Long Beach Outer Harbor | DDT<br>PCBs<br>Sediment toxicity |

Source: State of California Los Angeles RWQCB 2018

Notes:
DDT=dichlorodiphenyltrichloroethane; PAH=benzo(a)pyrene; PCB=polychlorinated biphenyls

### 2.9.2.2 Groundwater

The Project is located in the South Coast hydrologic region. There are 56 groundwater basins in the South Coast hydrologic region, and the area within the Project limits is located in the Coastal Plain of Los Angeles groundwater basin. The Coastal Plain of Los Angeles is further divided into subbasins, including the Central Subbasin and West Coast Subbasin, which supply groundwater to the City. Though the area within the Project limits is underlain by the West Coast Subbasin, the Central Subbasin supplements the groundwater supply in the West Coast Subbasin.

The West Coast Subbasin, bordered on the east by the Central Subbasin, encompasses approximately 140 square miles. Water recharge of the aquifers in the West Coast Subbasin comes

from adjacent groundwater subbasins, including the Central Subbasin, as well as saltwater intrusion from the Pacific Ocean.

The Central Subbasin encompasses approximately 270 square miles. The Central Subbasin is divided into four divisions, which include the Los Angeles Forebay, Montebello Forebay, Whittier Area, and Pressure Area. The Los Angeles and Montebello Forebays are water table aquifers that allow surface water to seep into the deeper aquifers to replenish the subbasins. The Whittier Area and Pressure Area are confined aquifer systems that are primarily recharged from the up-gradient forebay areas and adjacent groundwater subbasins. The LA and San Gabriel Rivers flow over the Central Subbasin before emptying into the Pacific Ocean.

The beneficial uses identified in the Basin Plan for the West Coast Basin include the following (Los Angeles RWQCB 2014a):

- **MUN:** Municipal and domestic supply
- **IND:** Industrial
- **PROC:** Industrial process supply
- **AGR:** Agricultural

## 2.9.3 Environmental Consequences

### 2.9.3.1 Temporary Impacts

#### Alternative 1 (No Build)

Under Alternative 1 (No Build), no improvements to Shoemaker Bridge, other than routine maintenance, would be made. Therefore, Alternative 1 (No Build) would not result in temporary water quality impacts from construction-related activities.

#### Alternatives 2 and 3 (Design Options A and B)

Alternatives 2 and 3 (Design Options A and B) would require the construction activities of new Shoemaker Bridge in the LA River. Alternative 2 (Design Options A and B) would require partial demolition and removal of the existing Shoemaker Bridge, while Alternative 3 (Design Options A and B) would require the demolition of the entire existing Shoemaker Bridge. The following Project features are comprised of standard measures and BMPs that would be included as a part of the Project to address general construction impacts on water quality:

**PF-6** During construction, the City's Resident Engineer or designated contractor will ensure scheduling and move-in/move-out temporary erosion control (SS-1) to designate multiple move-ins to establish temporary erosion control on graded areas that are substantially complete.

**PF-7** During construction, the City's Resident Engineer or designated contractor will ensure that silt fence (SC-1) will be installed to protect the perimeter of the Project work sites.

**PF-8** During construction, the City's Resident Engineer or designated contractor will ensure that street sweeping (SC-7) will be utilized to clean up adjacent City streets.

**PF-9** During construction, the City's Resident Engineer or designated contractor will ensure that storm drain inlet protection (SC-10) will be used to protect the new and existing storm drain inlets.

**PF-10** To minimize the volume of decontamination wash water and prevent the transport of contaminates from work site areas during construction, the City's Resident Engineer or designated contractor will ensure the implementation of BMPs, including the following:

- Waste management (WM) -6, addressing hazardous waste management
- WM-7, addressing contaminated soil management
- Tracking control (TC) -3, which pertains to entrance outlet tire

*Substrate*

The first phase of construction would include activities that would disturb river sediment, such as excavation of the LA River Flood Channel bottom for placing foundation columns and construction equipment. The next phase of construction would include demolition work. During construction, the disturbance of existing channel bottom sediments would be localized around the proposed bridge columns and any temporary supports required to erect the new bridge. Because disturbance in the channel would be localized to a small area, no substantial changes to the substrate are anticipated. Project Feature PF-11, identified in Table 1-5 in Chapter 1 and listed below, will be implemented as a part of the Project.

**PF-11** During construction, the City's Resident Engineer or designated contractor will ensure that pile driving operations (NS-11) will involve mitigation measures to control waste from pile driving operations.

With the inclusion of Project Feature PF-11, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not result in temporary substantial adverse impacts during construction.

*Suspended Particulates (Turbidity)*

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would require heavy construction and demolition work and could disturb soil resulting in the transport of solid materials in surface runoff into the LA River Flood Channel and an increase in turbidity and TSS.

With the inclusion of the following Project Features PF-12 through PF-24, effects of turbidity as a result of construction activities would not be considered adverse. In addition, prior to the start of the construction phase, a SWPPP identified as PF-12, and listed below, would be prepared to outline appropriate construction BMPs to reduce erosion and sediment impacts into the LA River.

**PF-12** During construction, the City's Resident Engineer or designated contractor will ensure compliance with the provisions of the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009-DWQ, NPDES No. CAS000002), and any subsequent amendments (Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ), as they relate to construction activities for the Project. This will include submission of the Permit Registration Documents, including an (NOI, risk assessment, site map, SWPPP, annual fee, and signed certification statement to the SWRCB via the SMARTS at least 7 days prior to the start of construction.

- Construction activities will not commence until a WDID number is received from the SMARTS. The SWPPP will be prepared by a QSD.

- The SWPPP will meet the requirements of the Construction General Permit and identify potential pollutant sources associated with construction activities; identify non-stormwater discharges; develop a water quality monitoring and sampling plan; and identify, implement, and maintain BMPs to reduce or eliminate pollutants associated with the construction site. BMPs will include, but not be limited to, good housekeeping, erosion control, and sediment control BMPs.
- The BMPs identified in the SWPPP will be implemented during Project construction. Caltrans and the City will comply with the Risk Level 1 sampling and reporting requirements of the Construction General Permit.
- A REAP will be prepared and implemented by a QSD within 48 hours prior to a rain event of 50 percent or greater probability of precipitation according to NOAA. A NOT will be submitted to the SWRCB within 90 days of completion of construction and stabilization of the site.

**PF-13** During construction, the City's Resident Engineer or designated contractor will ensure all construction site BMPs follow the latest edition of the Stormwater Quality Handbooks: Construction Site BMPs Manual (Caltrans 2017a) to control and reduce the impacts of construction related activities, material, and pollutants on the watershed. These include, but are not limited to, temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-stormwater BMPs identified in the following Non-Stormwater (NS) BMPs listed below:

- NS-2, related to dewatering operations
- NS-3, related to paving and grinding operations
- NS-4, related to temporary stream crossing
- NS-5, related to clear water diversion
- NS-6, related to illicit connection/discharge
- NS-7, related to potable water/irrigation
- NS-11, related to pile driving operation
- NS-12, related to concrete curing
- NS-13, related to concrete finishing
- NS-16, related to temporary batch plants

In addition, during construction, the City's Resident Engineer or designated contractor will ensure compliance with the following materials management BMPs:

- WM-3, related to stockpile management
- WM-5, related to solid waste management
- WM-9, related to sanitary-septic waste management
- WM-10, related to liquid waste management

**PF-14** During the PS&E phase, the City's Resident Engineer will review the results of further geotechnical explorations to determine if dewatering is necessary during construction of deep foundations within the LA River.

**PF-15** During construction, the City's Resident Engineer or designated contractor will ensure that turbidity and pH testing will be conducted at discharge points during qualifying rain events.

**PF-16** During construction, the City's Resident Engineer or designated contractor will ensure that carriers be constructed at entry points to the receiving waters to prevent large debris from entering the receiving water.

**PF-17** During construction, the City's Resident Engineer or designated contractor will ensure that cofferdams be used during bank or sediment disturbing construction activities.

**PF-18** During construction, the City's Resident Engineer or designated contractor will ensure that turbidity curtains be used in lieu of silt curtains, which are less effective at trapping sediment in tidal channels.

**PF-19** During construction, the City's Resident Engineer or designated contractor will ensure that streambank stabilization (SS-12) be required to mitigate work involving the existing LA River banks.

**PF-20** During construction, the City's Resident Engineer or designated contractor will ensure that material and equipment use over water (NS-13) be required for work done over the LA River.

**PF-21** During construction, the City's Resident Engineer or designated contractor will ensure that structure demolition/removal over or adjacent to water (NS-15) be required for removal of the existing bridge over the LA River.

**PF-22** During construction, the City's Resident Engineer or designated contractor will ensure that solid waste management (WM-5) be used to control runoff from waste piles generated from demolishing the existing bridge structures.

*Oil, Grease, and Chemical Pollutants*

During construction, accidental discharge of waste products, trash left at the construction site and petroleum hydrocarbons that have spilled in the construction area could be sources of oil, grease, and chemical pollutants. However, prior to construction, an SWPPP (PF-12) would be prepared to outline appropriate construction BMPs to prevent any pollutants from entering the LA River. Additionally, the Project includes Project Features PF-17, PF-20 through PF-22, previously mentioned, and PF-23 through PF-38, identified below, to limit exposure of oil, grease, and chemical pollutants within the LA River. Therefore, no substantial increase in levels of oil, grease, and chemical pollutants would occur as a result of Alternatives 2 and 3 (Design Options A and B), and, thus, no temporary substantial adverse impacts on water quality are anticipated.

**PF-23** During construction, a temporary sediment basin (SC-2) will be utilized on the east side of the bridge to mitigate sediment transport into the existing pump station and LA River.

**PF-24** During construction, the City of Long Beach's Resident Engineer or designated contractor will ensure that proposed locations for servicing, washing, and refueling of equipment are designated in areas that are located away from temporary channels or swales that have the potential to quickly convey runoff to the drainage system and into the LA River. The

Resident Engineer or designated contractor will comply with the guidance outlined in BMP NS-8, pertaining to vehicle and equipment cleaning, NS-9, pertaining to vehicle and equipment fueling, and NS-10, pertaining to vehicle and equipment maintenance.

**PF-25** During construction, the City's Resident Engineer or designated contractor will ensure that construction materials be securely locked up to avoid vandalism and accidental spills into the watercourse. The City's Resident Engineer or designated contractor will follow measures outlined in BMPs materials management WM-1, regarding material delivery and storage, and WM-4, regarding spill prevention and control.

**PF-26** During construction, the City's Resident Engineer or designated contractor will ensure that contaminated material (e.g., oil, lubricants) will be kept at a safe distance (a minimum of 100 feet [30.5 meters]) from an entry point into a receiving water body. Temporary barriers and containers will be necessary to confine any contaminated materials. Upon completion of construction, all contaminated material on the construction site must be removed and disposed of in accordance with federal, regional, and local regulations.

**PF-27** During construction, the City's Resident Engineer or designated contractor will ensure that a temporary spill containment system will be installed and maintained on either side of the receiving water crossing. The City's Resident Engineer or designated contractor will be responsible for the containment plan and the execution of spill containment during the course of construction. The containment plan will be reviewed and approved by the City's Resident Engineer.

**PF-28** During construction, the City's Resident Engineer or designated contractor will ensure excess grease will be manually removed from moving parts of bridges and collected for disposal.

**PF-29** During construction, the City's Resident Engineer or designated contractor will ensure that structures will be degreased prior to painting and hydro-blasting to remove old paint with additive-free water, where possible.

**PF-30** During construction, the City's Resident Engineer or designated contractor will ensure that shrouds be erected around working areas. Nets and tarps will be suspended below bridges to catch debris from abrasive removal of old paint and over-spray, where wind conditions permit.

**PF-31** During construction, the City's Resident Engineer or designated contractor will ensure that debris be confined by anchoring tarps to enclose the bridge, where the bridge deck is close to the water level.

**PF-32** During construction, the City's Resident Engineer or designated contractor will ensure that booms be used to capture fugitive floating paint chips. Custom-built enclosures will be used to confine and capture abrasives, old paint chips, and paint.

**PF-33** During construction, the City's Resident Engineer or designated contractor will ensure that vacuum or suction shrouds on blast heads will be used to capture grit and old paint.

**PF-34** During construction, the City's Resident Engineer or designated contractor will ensure that storing, mixing, and cleaning operations will be carried out on land.

**PF-35** During construction, the City's Resident Engineer or designated contractor will ensure that concrete curing (NS-12) will be used to control waste related to concrete curing.

**PF-36** During construction, the City's Resident Engineer or designated contractor will ensure that temporary concrete washout and concrete management (WM-8) will be used to control runoff from waste concrete.

**PF-37** During construction, the City's Resident Engineer or designated contractor will ensure that paving and grinding operations (NS-3) will be used to manage waste from paving operations.

**PF-38** During construction, the City's Resident Engineer or designated contractor will ensure that stabilized construction entrance/exits (TC-1) will be situated at locations where construction traffic will enter paved roads.

*Storm, Wave, and Erosion Buffers*

Storm, wave, and erosion buffers in the Project area include riprap along the LA River banks. During construction, there could be soil erosion of the channels and banks; however, the Project would include construction site BMPs to protect the banks and control erosion (e.g., riprap, concrete walls, and sheet piling). In addition, the channel banks would be restored following construction, and storm, wave, and erosion buffers would function similar to existing conditions included as Project Features PF-12, PF-16, PF-18, and PF-19, mentioned above, and PF-39 through PF-43, identified below. Therefore, no temporary substantial adverse impacts from storm, wave, and erosion buffers are anticipated under Alternatives 2 and 3 (Design Options A and B).

**PF-39** During construction, the City's Resident Engineer or designated contractor will ensure that hydraulic mulch (SS-3) will be utilized to stabilize the graded slopes prior to plant establishment.

**PF-40** During construction, the City's Resident Engineer or designated contractor will ensure that hydroseeding (SS-4) and soil binders (SS-5) will be used for exposed slopes and stockpiles.

**PF-41** During construction, the City's Resident Engineer or designated contractor will ensure that outlet protection (SS-10) will be used to protect downstream areas from erosion.

**PF-42** During construction, the City's Resident Engineer or designated contractor will ensure that channel bank work include bank protection (riprap, concrete walls, and sheet piling) to eliminate the possibility of enhanced bank erosion. If channel bank work occurs during post construction, Caltrans' Resident Engineer or designated contractor will ensure that the same requirements are adhered to.

**PF-43** To minimize flow rates and volumes of storm water, the City's Resident Engineer or designated contractor will ensure the implementation of BMPs, which may include the following:

- Gross solid removal devices
- Wet basins
- Bioswales and stripes
- Media filters may be installed as per SSP 13-6.02C
- Catch basin inserts

*Aquifer Recharge/Groundwater*

Alternative 2 (Design Options A and B) would require excavation of the channel bottom, and Alternative 3 (Design Options A and B) would require anchoring barges under the existing structure to facilitate demolition and receive debris. The work area would be minimized to the extent feasible, and construction BMPs would reduce disturbances of aquatic habitat. Within the Project limits, existing beneficial surface water uses include groundwater recharge, and potential beneficial surface water uses of the LA River include municipal, domestic supply, and industrial process supply.

Support structures would be constructed with the cast-in-drilled-hole (CIDH) method or cast-in-steel-shell (CISS) method, where a hole is drilled, then filled with slurry to prevent cave-ins. The hole is then pumped with concrete, which displaces the slurry and is reused. Therefore, groundwater movement is unlikely to occur. In addition, active dewatering, other than emptying the hole prior to filling it with slurry, would not be anticipated. Therefore, no impacts on groundwater recharge would occur under Alternatives 2 and 3 (Design Options A and B).

During construction, there is also potential for encountering contaminated groundwater (i.e., groundwater that contains concentrations of pollutants of concern that exceed NPDES permit limits) during a dewatering operation. No temporary substantial adverse impacts on groundwater are anticipated with the inclusion of the Project features that address dewatering activities and groundwater mentioned previously, as well as Project Features PF-44 through PF-46 listed below.

**PF-44** During construction, the City's Resident Engineer or designated contractor will ensure compliance with the provisions of the General Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2013-0095, NPDES Permit No. CAG994004), effective July 6, 2013 (known as the Dewatering permit), as they relate to discharge of non-stormwater dewatering wastes for the Project. The two options to discharge would be to the local storm drain system and sanitary sewer system and would require a permit from the RWQCB and the City, respectively.

**PF-45** During construction, the City's Resident Engineer or designated contractor will ensure compliance with the provisions of the General Waste Discharge Requirements for Discharges of Treated Groundwater from Investigation and/or Cleanup of Volatile Organic Compounds-Contaminated Sites to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2013-0043, NPDES Permit No. CAG914001), effective April 7, 2013 (known as the Dewatering permit for contaminated sites), as they relate to discharge of non-stormwater dewatering wastes from contaminated sites for the Project. The two options to discharge would be to the local storm drain system and sanitary sewer system and would require a permit from the RWQCB and the City, respectively.

**PF-46** During construction, the City's Resident Engineer or designated contractor will ensure that an appropriate groundwater treatment method be determined based on a groundwater assessment and recommendations from the Los Angeles RWQCB. These three treatment methods include:

- On-site treatment: A temporary water treatment plant would be constructed to treat water generated from dewatering operations to reduce the concentrations of pollutants of concern below NPDES limits.

- Treatment and disposal off site: Water would be temporarily stored in the Project area, the waste would be profiled (i.e., categorized as hazardous or non-hazardous), and the water would be transported to a regulated facility for treatment and disposal.
- Disposal into the local sewer system: Groundwater would be disposed into the County of Los Angeles sewage treatment system via a local sewer or truck line, depending on the rate and flow. An Industrial Wastewater Discharge Permit, issued by the County of Los Angeles Sanitation Department, would be required. Treatment of the discharge water may be required to satisfy the permit.

*Aquatic Wildlife, Habitat, and Other Aquatic Organisms*

During construction under Alternatives 2 and 3 (Design Options A and B), temporary supports would be required in the LA River Flood Channel to erect the new bridge and excavation of the channel bottom for foundation columns and the positioning of outriggers. In addition, Alternative 3 (Design Options A and B) would require anchoring barges under the existing structure to facilitate demolition and receive debris. These construction activities have the potential to temporarily degrade aquatic habitat by reducing food sources and increasing suspended solids, noise, vibration, runoff, and litter.

The LA River contains deepwater aquatic habitat that is designated as EFH for coastal pelagic species and pacific coast groundfish species. Therefore, there is potential for fish passage in the LA River Flood Channel. During construction, the Project would require work over and within the LA River Flood Channel, which could restrict fish passage. However, the area within the Project limits is only expected to support northern anchovy and Pacific sardine, and the majority of these populations are located south of the Project area in Queensway and San Pedro Bays.

Aquatic wildlife, habitat, and other aquatic organisms within the Project limits may be impacted during construction. Project features, in addition to Avoidance Measures NC-3 and NC-5 and Mitigation Measure NC-4 identified in Section 2.16, Natural Communities, would be implemented to minimize and mitigate these impacts. Therefore, no temporary substantial adverse impacts on aquatic wildlife, habitat, and other aquatic organisms are anticipated.

*Invasive Species*

The invasive algae Caulerpa taxifolia (Caulerpa) was introduced into Southern California in 2000 and has the potential to outcompete other aquatic species and cause ecosystem-level impacts. Because Caulerpa grows very dense, it can kill all native aquatic vegetation and displace or kill marine organisms that depend on native aquatic vegetation.

Within the Project limits, the natural habitat in the LA River and surrounding area has been highly degraded and developed, and there is minimal natural vegetation. Though Caulerpa has not been previously reported in San Pedro Bay of the Los Angeles/Long Beach Harbor complex, the invasive algae has been reported in Huntington Harbor, approximately 7 miles southeast of the Project area. During construction, dredging and bottom-disturbing activities have the potential to spread Caulerpa in the Project limits. To reduce the potential for spreading Caulerpa, preconstruction surveys would be conducted prior to bottom-disturbing activities, and a management plan would be developed if Caulerpa is discovered in the Project area. Project operation would not require dredging or bottom-disturbing activities that could result in the introduction of invasive species. Measure IS-2, found in Section 2.21, Invasive Species, would reduce impacts on native aquatic vegetation and spread of this invasive algae.

### 2.9.3.2 Permanent Impacts

#### Alternative 1 (No Build)

Under Alternative 1 (No Build), there would be no change in impervious surface area in the Project limits. Existing roadway runoff in this area would remain untreated.

#### Alternatives 2 and 3 (Design Options A and B)

There would be no permanent substantial adverse impacts on substrate, storm wave, and erosion buffers; aquifer recharge/groundwater; and invasive species under Alternatives 2 and 3 (Design Options A and B) with the inclusion of the Project features noted in Section 2.9.3.1

*Suspended Particulates (Turbidity)*

Project Features PF-14 through PF-15, previously stated, as well as PF-47, listed below, would ensure that no long-term substantial adverse impacts would occur during Project operation:

**PF-47** Following construction, Caltrans' Resident Engineer or designated contractor will ensure that the new bridge structures be continuously maintained in accordance with Caltrans' standard maintenance policies and procedures to prevent excessive buildup of debris that could be discharged in a precipitation event.

*Impervious Area*

Pollutants of concern typically generated during the operation of a transportation facility include sediment/turbidity, nutrients, organic compounds, trash and debris, oxygen-demanding substances, bacteria and viruses, oil and grease, pesticides, and metals. However, Alternatives 2 and 3 (Design Options A and B) would not substantially change the uses of the area, as the area would continue to operate as a transportation facility. The proposed Project would result in a permanent decrease in impervious surfaces and a permanent increase in pervious surfaces. Alternatives 2 and 3 (Design Options A and B) would result in a decrease of approximately 10 acres of impervious area, as shown in Table 2.9-4.

**Table 2.9-4. Changes in Impervious Surfaces within the Project Limits**

| | New Impervious Area (acres) | Existing Impervious Area to be Removed (acres) | Net New Impervious Area (acres) | Replaced Impervious Surface (acres) | New Impervious Surface (acres) |
|---|---|---|---|---|---|
| ***Alternative 2*** | | | | | |
| Design Option A (Roundabout) | 6.81 | 15.46 | -8.65 | 15.5 | 6.85 |
| Design Option B ("Y" Intersection) | 6.23 | 16.04 | -9.81 | 15.55 | 5.74 |
| ***Alternative 3*** | | | | | |
| Design Option A (Roundabout) | 6.81 | 15.96 | -9.15 | 15.5 | 6.35 |

**Table 2.9-4. Changes in Impervious Surfaces within the Project Limits**

| | New Impervious Area (acres) | Existing Impervious Area to be Removed (acres) | Net New Impervious Area (acres) | Replaced Impervious Surface (acres) | New Impervious Surface (acres) |
|---|---|---|---|---|---|
| Design Option B ("Y" Intersection) | 6.23 | 16.54 | -10.31 | 15.55 | 5.25 |

Source: Caltrans 2018j

The more impervious surfaces on a site, the more runoff occurs from the site. The consequences of runoff are an increased speed of water flow, which cannot be absorbed into the ground as readily, increased erosion, and collection of pollutants over a larger area. Because Alternatives 2 and 3 (Design Options A and B) would reduce the impervious area by approximately 10 acres, it would have an overall net positive effect for runoff. Therefore, no permanent substantial adverse impacts on water quality from a change in impervious areas are anticipated to occur.

Through compliance with the Caltrans Statewide NPDES Permit, grading and construction permits from the City, Section 404 (of the CWA, issued by USACE), and a dewatering permit, as identified in Project features mentioned above, as well as Project Features PF-48 through PF-49 identified below, the design and operation of the proposed Project would not result in direct or indirect substantial adverse impacts on water quality. Specifically, PF-48 allows the LB MUST facility, a separate project within the Project limits that would be built and operating prior to the proposed Project, to treat and address water quality impacts during operation of Project facilities. Thus, in addition PF-49 identified below, permanent impacts as a result of additional drainage as part of the proposed Project would not be considered adverse.

**PF-48** Prior to construction, the City's Resident Engineer or designated contractor will ensure that the LB MUST Facility will accommodate drainage from the portion of the Project area to the north of Broadway.

**PF-49** Prior to construction, the City's Resident Engineer or designated contractor will ensure that a detention basin will be constructed as part of the Project to accommodate drainage from the portion of the Project area to the south of Broadway.

*Oil, Grease, and Chemical Pollutants*

During operation of the Project, oil, grease, and chemical pollutants could be discharged into the LA River in stormwater runoff as a result of incidental drippings from vehicles and accidental spills during maintenance activities, such as bridge painting and surface treatments. Compliance with the construction general permit and the SWPPP, Project Feature PF-12 would reduce impacts related to the oil, grease, and chemical pollutants during a stormwater event and reduce impacts on the LA River and its adjacent waterbodies because of construction materials and the exposure of the water body to potential contaminants from maintenance equipment and vehicles. Additionally, Project Feature PF-47, identified above, would result in no substantial adverse post construction impacts relating to oil, grease, and chemical pollutants as part of operation activities. Therefore, no substantial changes to the levels of oil, grease, and chemical pollutants are anticipated within the LA River impacting water quality during Project operation.

*Aquatic Wildlife, Habitat, and Other Aquatic Organisms*

During operation, the Project is expected to result in a net loss of deepwater aquatic habitat under Alternative 2 (Design Options A and B); thus, long-term impacts on aquatic habitat are anticipated. Under Alterative 3 (Design Options A and B), new aquatic habitat could become available where the existing bridge support structures would be removed. Construction of the new bridge could result in additional shade over aquatic habitat; however, impacts due to shading would not adversely affect the species utilizing the habitat because they are adapted to a wide range of habitats. With the inclusion of Project Feature PF-50, identified below, impacts associated with the operation of the Project would be reduced.

**PF-50** Prior to construction, the City's Resident Engineer or designated contractor will ensure that preservation of existing vegetation (SS-2) for any ESAs identified in the environmental document and existing park landscaping be protected during construction activities as designated on the construction documents.

Additionally, implementation of Mitigation Measure NC-4 in Section 2.16 Natural Communities, would mitigate impacts on habitats with the development of a Habitat Mitigation and Monitoring Plan (HMMP) in coordination with USACE, RWQCB, and CDFW to ensure no net loss of habitat. Thus, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not result in substantial changes to existing habitat for fish and other aquatic organisms; thus, no permanent substantial adverse impacts on deepwater aquatic habitat are anticipated to occur.

## 2.9.4 Avoidance, Minimization, and/or Mitigation Measures

The following avoidance, minimization, and mitigation measures from Sections 2.16, 2.20, and 2.21 will further minimize and reduce impacts on aquatic wildlife, habitat, and other aquatic organisms:

**NC-1** Prior to construction, the City of Long Beach (City) will ensure that an employee education program be developed and implemented by the Project Biologist. Each employee (including temporary, contractors, and subcontractors) will receive a training/awareness program prior to working on the proposed Project. They will be advised of the potential impact to the listed species and the potential penalties for taking such species. At a minimum, the program will include the following topics: (1) responsibilities of the biological monitor; (2) delineation and flagging of adjacent sensitive habitat; (3) limitations on all movement of those employed on site, including ingress and egress of equipment and personnel, to designated construction zones (personnel will not be allowed access to adjacent sensitive habitats); (4) occurrence of the listed and sensitive species in the area (including photographs), their general ecology, sensitivity of the species to human activities, legal protection afforded these species, (5) penalties for violations of Federal and State laws, reporting requirements, (6) on-site pet prohibitions; (7) use of trash containers for disposal and removal of trash; and (8) Shoemaker Bridge Replacement Project (Project) features designed to reduce the impacts on listed species and habitat and promote continued successful occupation of adjacent habitat areas.

**NC-2** The City of Long Beach's (City) Resident Engineer will ensure that the use of rodenticides, herbicides, insecticides, or other chemicals that could potentially harm listed species will be prohibited in and around the Los Angeles River (LA River).

**NC-3** During construction, the City of Long Beach's (City) Resident Engineer or designated contractor will ensure that any deliberate feeding of wildlife be prohibited.

**NC-4** Prior to construction, the City of Long Beach's (City) Resident Engineer will ensure that a Habitat Mitigation and Monitoring Plan (HMMP) will be developed in coordination with the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW) and will ensure no net loss of estuarine habitat value or acreage. The HMMP will comply with all terms and conditions set forth in the permits and opinions issued by the resource agencies and will typically include the following provisions:

- Permanent impacts on the Los Angeles River (LA River) will be replaced on or off site at a minimum 2:1 ratio. Temporary direct impacts on the LA River will be replaced at a minimum 1:1 ratio with in-kind habitat restored in place within the biological study area (BSA). If off-site restoration is conducted, it will be undertaken within the LA River Watershed, if feasible.
- Further criteria specified in the HMMP will include an establishment period for the replacement habitat, if applicable; regular trash removal; and regular maintenance and monitoring activities to ensure the success of the mitigation plan. After construction, annual summary reports of biological monitoring will be provided to USACE, RWQCB, and CDFW that document the monitoring effort. The duration of the monitoring and reporting will be established by resource agency permit conditions.

**NC-5** During construction, the City of Long Beach's (City) Resident Engineer or designated contractor will ensure that all soils and material, including contaminated topsoil and lead-based paint from demolished bridges, will be removed from the Biological Study Area (BSA) and disposed of properly. Floating booms will be used to contain debris discharged, and any debris discharged will be removed no later than the end of each day.

**TE-5:** During construction, the City of Long Beach (City) will ensure that all equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities will be restricted to designated areas located outside of jurisdictional wetlands or waters. The equipment will be located such that runoff from the designated areas will not enter western snowy plover and California least tern habitat, and will be shown on construction plans.

**TE-6:** During construction, the City of Long Beach (City) will ensure that the Project site will be kept as clear of debris as possible. All food-related trash items will be enclosed in sealed containers and regularly removed from the site. All spoils and material disposal will be disposed of properly. Disposal or temporary placement of excess fill, brush, or other debris will not be allowed in waters of the United States or their banks. All areas of temporary impact will be returned to original grade, and temporary construction fill will be removed from the waterway following project construction.

**IS-2** The City of Long Beach's (City) Resident Engineer will ensure that preconstruction surveys for the invasive seaweed (*Caulerpa taxifolia*) will be conducted by the National Marine Fisheries Service/California Department of Fish and Wildlife (NMFS/CDFW) Certified Field Surveyors prior to bottom-disturbing activities taking place in the Los Angeles River (LA

River) to ensure that the biological study area (BSA) is not infested with this nonnative invasive seaweed.

**IS-3** If invasive seaweed (*Caulerpa taxifolia*) is found within the biological study area (BSA), the City of Long Beach's (City) Resident Engineer will ensure that a management plan will be prepared according to guidelines in the National Marine Fisheries Service (NMFS) Caulerpa control protocol, or other approved protocol, and submitted to the U.S. Fish and Wildlife Service (USFWS) for approval prior to the start of construction. Construction activities will not begin prior to approval of this plan, if needed.

# 2.10 Geology/Soils/Seismicity/Topography

## 2.10.1 Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects "outstanding examples of major geological features." Topographic and geologic features are also protected under the California Environmental Quality Act (CEQA).

This section also discusses geology, soils, and seismic concerns as they relate to public safety and Project design. Earthquakes are prime considerations in the design and retrofit of structures. Structures are designed using Caltrans' Seismic Design Criteria (SDC). The SDC provides the minimum seismic requirements for highway bridges designed in California. A bridge's category and classification will determine its seismic performance level and which methods are used for estimating the seismic demands and structural capabilities. For more information, please see the Caltrans's Division of Engineering Services, Office of Earthquake Engineering, Seismic Design Criteria.

## 2.10.2 Affected Environment

This section is based on the *Preliminary Geotechnical Design Report* (PGDR) (URS 2010c) prepared for the I-710 Southern Terminus Improvement Project.

### 2.10.2.1 Topography

The coastal plain of the Los Angeles Basin (LA Basin) extends nearly 50 miles southeastward from the Santa Monica Mountains in Los Angeles to the Santa Ana Mountains in Orange County and 12 to 20 miles inland northerly from the coast to the Elysian, Repetto, Merced, and Puente Hills, which form the northerly and northeasterly boundaries of the basin.

A portion of the Project limits was originally elevated during placement of fill for the construction of levees for the LA River channel. The ground elevations in the area of the Project limits range from approximately 13 feet above mean sea level west of Shoemaker Bridge to approximately 20 feet above mean sea level east of the bridge.

### 2.10.2.2 Regional Geology

The Project is located in the southwestern LA Basin within the northwestern Peninsular Ranges geomorphic province of California. The LA Basin is bound in the north by the Transverse Ranges geomorphic province and the Colorado Desert geomorphic province in the east. The Peninsular Ranges extend 900 miles southward from the LA Basin to the tip of Baja California and is characterized by elongated, northwest-trending mountain ranges separated by sediment-filled valleys that began to take its present shape in the Late Miocene (approximately 7 million years ago) as a result of subsidence occurring between the Whittier, Palos Verdes, and Santa Monica Faults.

One of the most dominant structural features in the evolution of the LA Basin is the Newport-Inglewood Rose Canyon Fault Zone, which, like the Palos Verdes and Whittier Faults, is a northwest-trending, right-lateral strike-slip fault of the greater San Andreas Fault system. The Newport-Inglewood Rose Canyon Fault Zone is generally characterized by a series of uplifted hills and mesas from Newport Beach to Santa Monica.

The area within the Project limits is located on the southern reaches of a generally flat coastal plane at an elevation of approximately 15 feet above mean sea level, approximately 1 mile north of the Pacific coastline. The most prominent topographic feature in the vicinity of the Project limits is the LA River, which is enclosed by earthen levees approximately 15 feet high at 2:1 (horizontal:vertical) slopes. The portion of the LA River near the Project limits is considered to be in the tidal zone, which contributes to the seasonal fluctuation of the water level within the LA River.

As shown on Figure 2.10-1, the Project vicinity is underlain by the young alluvium Holocene- and late Pleistocene-age sandy sediments locally containing silts, clays, sands, and gravels deposited primarily by the LA River. These deposits range in thickness from approximately 80 to 200 feet. Beneath these Holocene alluvial deposits are Miocene- to Pleistocene-age sedimentary rocks consisting of deep- to shallow-water marine and continental deposits. These rocks overlie Pliocene- and upper Miocene-age sedimentary rocks. Near surface soils may contain layers of artificial fill, as discussed in Section 2.10.2.3.

### 2.10.2.3 Soil Conditions

Based on geotechnical condition information from the PGDR, subsurface soils in the immediate vicinity of the Project limits consist generally of variable amounts of sand, silt, and clay. In the upper 30 to 35 feet, subsurface soils consist of interlayered sand, silt, and clay that were noted to be soft to very stiff (loose to medium dense) in place.

Artificial fill materials can be locally present in the near surface soils to variable depths of a few feet up to approximately 10 feet. Below depths 30 to 35 feet, dense to very dense sands, silty sands, and clayey sands are reported to the maximum depth explored (approximately 100 feet below ground surface [bgs]). Locally, lenses of silt and clay were observed interlayered within the deeper sandy materials.

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| | |
|---|---|
| af | **Artificial Fill** - deposits of fill resulting from human construction, mining, or quarrying activities; includes engineered fill for buildings, roads, dams, airport runways, harbor facilities, and waste landfills |
| Qoa | **Old Alluvial Valley Deposits** - slightly to moderately consolidated, moderately dissected clay, silt, sand, and gravel along stream valleys and alluvial flats of larger rivers |
| Qya | **Young Alluvial Valley Deposits** - unconsolidated to slightly consolidated, undissected to slightly dissected clay, silt, sand, and gravel along stream valleys and alluvial flats of larger rivers |
| Qyf | **Young Alluvial Fan Deposits** - unconsolidated to slightly consolidated, undissected to slightly dissected boulder, cobble, gravel, sand, and silt deposits issued from a confined valley or canyon |
| Qol | **Old Lacustrine, Playa, and Estuarine (Paralic) Deposits** - slightly to moderately consolidated, moderately dissected fine-grained sand, silt, mud, and clay from lake, playa, and estuarine deposits of various types |

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*Shoemaker Bridge Replacement Project*

**Figure 2.10-1. Geologic Map**

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### 2.10.2.4 Oil and Gas Resources

Oil and gas resources can be a concern from a geologic standpoint because of the potential for land subsidence to occur in areas where extraction of these resources occurs. The Project traverses the Long Beach and Wilmington oil fields. The Wilmington field is the largest oil field in the LA Basin. Oil is extracted from reservoirs in semi- and unconsolidated Pliocene- and Miocene-age sandstone strata.

There are numerous active, abandoned, and plugged oil wells in the immediate vicinity of the Project limits, where it crosses the Wilmington field. The majority of these wells are located on the west side of the LA River. As discussed in Section 2.4, Utilities and Emergency Services, there is one active oil extraction operation (Oxy Oil) within the Project limits.

Land subsidence because of oil extraction in the Wilmington-Long Beach Harbor area of the Wilmington field began in the 1940s. The center of the subsidence area is located approximately 1 mile west of the southern Project limits. The center of the subsidence area dropped 29 feet before it was halted by oil reservoir injection water in the 1950s. The south end of the Project limits was also affected, with approximately 10 feet of subsidence. Ground surface elevation monitoring and water injection continues to counteract the effects of oil extraction.

### 2.10.2.5 Groundwater Conditions

As discussed in the PGDR, groundwater was encountered at a depth of approximately 16 feet bgs during drilling of the geotechnical test borings. As interpreted by the California Geological Survey (CGS), the depth to highest historical groundwater level in the Project limits vicinity is approximately 10 feet bgs. Groundwater is known to fluctuate seasonally, and, with the close proximity to the ocean, it is anticipated that groundwater may be within the pertinent depths of construction of the bridge deep foundations, embankments, and retaining walls.

### 2.10.2.6 Seismicity

The most substantial geologic hazard to the Project is the potential for moderate to strong ground shaking resulting from earthquakes generated on the faults within the seismically-active Southern California region. Active or potentially active surface faults are not known to exist on or near the site.

The Project is not situated within the Earthquake Fault-Rupture Hazard Zone as designated by the state (Bryant, W.A. and E.W. Hart 2007). However, other active faults without surface expression (blind faults) or other potentially active seismic sources also capable of generating an earthquake may be present under the site at depth but not yet identified. A regional fault map is shown on Figure 2.10-2.

The geo-seismic characteristics of some faults and their locations, based on the California Seismic Hazard Map, are listed in Table 2.10-1. The seismic sources listed are known quaternary active potential seismic sources within a site-to-fault-rupture-surface distance of approximately 10 kilometers or less.

## Table 2.10-1.Seismic Parameter for Earthquake Faults in the Study Area

| Faults | Maximum Moment Earthquake Magnitude | Estimated Closest Distance Rrup (km) | Fault Type | Peak Ground Acceleration (g) | |
|---|---|---|---|---|---|
| | | | | Caltrans ARS Online | USGS Deaggregation Hazard (Beta)Tool |
| Newport-Inglewood Rose Canyon Fault | 7.2 | 4.3 | Strike-Slip | 0.42 | 0.50 |
| Palos Verdes | 7.2 | 8.7 | Strike-Slip | 0.35 | |
| Thums-Huntington Beach | 6.6 | 5.0 | Strike-Slip | 0.37 | |
| Compton | 6.9 | 2.7 | Reverse | 0.53 | |
| Palos Verdes | 7.2 | 8.7 | Strike-Slip | 0.35 | |

Source: Caltrans 2017b

Notes:
ARS=acceleration response spectra; Caltrans=California Department of Transportation; g=acceleration due to gravity; km=kilometer; Rrup=closest distance (km) to the fault rupture plane; USGS=United States Geological Survey

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*Shoemaker Bridge Replacement Project*

**Figure 2.10-2. Fault Map**

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### 2.10.2.7 Liquefaction

The term liquefaction describes a phenomenon in which saturated, cohesionless soils temporarily lose shear strength (liquefy) because of increased pore water pressures induced by strong, cyclic ground motions during an earthquake. Structures founded on or above potentially liquefiable soils may experience bearing capacity failures because of the temporary loss of foundation support, vertical settlements (both total and differential), and/or undergo lateral spreading.

The factors known to influence liquefaction potential include soil type, relative density, grain size, confining pressure, depth to groundwater, and the intensity and duration of the seismic ground shaking. Liquefaction is most prevalent in loose to medium dense, silty, sandy, and gravelly soils below the groundwater table. In addition, soils most susceptible to liquefaction are saturated low-density sands and silts within 50 feet of the ground surface. Based on the Seismic Hazard Zone Map for the Long Beach quadrangle (California Division of Mines and Geology 1998), the area within the Project limits is located within a potential liquefaction hazard zone.

### 2.10.2.8 Compressible/Collapsible Soils

Soil collapse is a phenomenon in which the soils underlying a site settle or compress, resulting in a lower ground-surface elevation. Collapsible soils are distinguished by their potential to undergo a substantial decrease in volume upon an increase in moisture content, with or without an increase in external loads. Collapsible soils are typically associated with alluvial fans, windblown materials, and colluvium. Based on the exploration data in the PGDR, subsurface soils consist generally of variable amounts of sand, silt, and clay. In the upper 30 to 35 feet, subsurface soils consist of interlayered sand, silt, and clay noted as soft to very stiff (loose to medium dense) in place.

## 2.10.3 Environmental Consequences

### 2.10.3.1 Temporary Impacts

#### Alternative 1 (No Build)

No improvements would occur under Alternative 1 (No Build). Therefore, no temporary impacts related to geological or soil resources within the area of the Project limits would be anticipated.

#### Alternatives 2 and 3 (Design Options A and B)

Temporary impacts are related to construction activities. Alternatives 2 and 3 (Design Options A and B) would alter existing landforms because of grading and construction activities. Construction activities may also temporarily disturb soil within the Project limits, primarily in the trample zone around work areas, heavy equipment traffic areas, and material laydown areas. Temporary impacts would include soil compaction and increased potential of soil erosion.

Under Alternatives 2 and 3 (Design Options A and B), excavated soil would be exposed, and there would be an increased potential for soil erosion compared with existing conditions. Additionally, during a storm event, soil erosion could occur at an accelerated rate. The proposed Project would be required to adhere to the requirements of the general construction permit and implement erosion and sediment control BMPs identified in the Project SWPPP to keep sediment from moving off site into receiving waters. Refer to Section 2.9, Water Quality and Storm Water Runoff, for additional information regarding construction-related water quality issues, as well as avoidance, minimization, and mitigation measures.

The construction activities associated with the Alternatives 2 and 3 (Design Options A and B) could be affected by ground motion, liquefaction, and possibly ground deformation if an earthquake event were to occur during construction. However, implementation of safe construction practices and compliance with Caltrans and California Division of Occupational Safety and Health Administration (Cal-OSHA) requirements would reduce the impacts of these conditions. In addition, implementation of Minimization Measure GEO-1 would also reduce impacts by ensuring observation, monitoring, and testing of geologic site conditions are conducted during the duration of the construction phase. Based on the Project features identified within Section 2.9, Water Quality and Storm Water Runoff, compliance with standard Caltrans and Cal-OSHA requirements, and implementation of Minimization Measure GEO-1, temporary impacts related to soil compaction and erosion, ground motion, liquefaction, and potential ground deformation during construction activities would be not be considered adverse.

### 2.10.3.2 Permanent Impacts

#### Alternative 1 (No Build)

Under Alternative 1 (No Build), there would be no change to the existing setting or transportation facilities. There would be no impacts associated with Alternative 1 (No Build).

#### Alternatives 2 and 3 (Design Options A and B)

*Seismic Ground Shaking*

As discussed above, the Project is located within a seismically active region that will be subjected to future seismic shaking from earthquakes occurring along local or regional faults. The Newport Inglewood-Rose Canyon Fault and Palos Verdes Fault in the Project vicinity have been documented as producing earthquakes with a magnitude of 7.2. Therefore, the structures constructed for Alternatives 2 and 3 (Design Options A and B) would be subject to seismic ground shaking.

Indirect impacts related to seismic shaking may include ground deformation, including fissures, settlement, displacement, and loss of bearing strength, and are among the leading causes of damage to structures during moderate to large earthquakes. Other indirect impacts leading to ground deformation include liquefaction, settlement, and lateral spreading. Other hazards indirectly related to seismic shaking are inundation, tsunamis, and seiches. These potential indirect impacts as a result of seismic shaking on structures proposed under Alternatives 2 and 3 (Design Options A and B) are discussed below.

*Liquefaction*

Because of the varying and potentially high groundwater elevations in the area and the presence of loose/soft soils at the Project limits, the potential for liquefaction to occur from a moderate to strong earthquake event is considered high. However, as detailed in Minimization Measure GEO-2, the potential for liquefaction effects on the structures constructed under Alternatives 2 and 3 (Design Options A and B) would be further investigated during final design when engineering design is further along and a site-specific geotechnical investigation can be conducted to evaluate soil and groundwater conditions. A design-level geotechnical report, also referred to as a Geotechnical Design Report, will be prepared to document the findings of the surface investigations and will include appropriate measures to reduce geological/seismic hazards, such as liquefaction potential, lateral spreading, seismic-induced settlement, slope instability, compressible/collapsible soils, expansive soils, corrosive soils, and tsunamis and seiches. The proposed Project would be designed and constructed based on the recommendations from the geotechnical report and in accordance with applicable federal, state, and local seismic codes and Caltrans seismic design criteria for structures.

### *Compressible/Collapsible Soils*

Based on review of available geotechnical data, subsurface soils within the area of the Project limits consist of interlayered loose to medium dense sand, silt, and soft to stiff clays. These materials may be compressible and could undergo consolidation. In addition, the existing degree of compaction, material types, and underlying ground conditions of existing fill at the site is unknown. There is a potential for undocumented or inadequately compacted fill to be present. The new embankment fills, roadway fills, bridge and retaining wall foundations, and associated structures could result in settlement of soils. Differential settlement of soils could damage Project improvements, including concrete structures and foundations, retaining walls, and pavements. The settlement and collapse potential of the subsurface soils should be further investigated during final design.

### *Lateral Spreading*

Liquefaction-induced lateral spreading is defined as the finite lateral displacement of ground as a result of pore pressure build-up or liquefaction in shallow underlying soils during an earthquake. Lateral spreads can occur on sloping ground or where nearby steep banks are present. Because the area within the Project limits has a potential for liquefaction and encompasses the east and west embankments of the LA River, the proposed Project has the potential for lateral spreading. The potential for lateral spreading should be further evaluated during final design.

### *Expansive Soils*

Expansive soils generally result from specific clay minerals that have the capacity to shrink or swell in response to changes in moisture content. Sandy soils are generally not expansive. Expansive soils are characterized by their ability to undergo substantial volume change (shrink or swell) because of variations in moisture content. Changes in soil moisture content can result from rainfall, irrigation, pipeline leakage, surface drainage, perched groundwater, drought, or other factors. The change in volume of expansive soil may cause excessive cracking and heaving of structures with shallow foundations, concrete slabs, or pavements supported on these materials. The proposed Project under Alternatives 2 and 3 (Design Options A and B) may be subject to adverse impacts associated with expansive soils. The potential for soil expansion should be further investigated during final design.

### *Corrosive Soils*

The area within the Project limits is located in a geologic environment that could potentially contain soil conditions corrosive to concrete and metals. Corrosive soil could cause premature deterioration of buried conduits, foundations, and other buried concrete or metal improvements. As detailed in Minimization Measure GEO-2, the potential for soil corrosion effects on structures within the proposed Project limits under Alternatives 2 and 3 (Design Options A and B) would be further investigated during final design. If recommended by the geotechnical investigation, final design will include design features related to corrosive soils.

### *Tsunamis and Seiches*

A tsunami, or seismically generated sea wave, is generally created by a large, distant earthquake occurring near a deep ocean trough. A seiche is an earthquake-induced wave in a confined body of water, such as a lake or reservoir. Damage from tsunamis is typically confined to coastal areas that are 20 feet or less above mean sea level. A portion of the Project limits is located within the Tsunami Inundation Zone (State of California 2009), as identified in the City of Long Beach General Plan-Seismic Safety Element (City of Long Beach 1988). Therefore, there is a medium risk Alternatives 2 and 3 (Design Options A and B) are potentially at risk of inundation from a tsunami.

Seiches are another type of water-related seismically induced hazard. Seiches are extensive wave actions on lakes or reservoirs. Because the Project limits is not located downslope of any large bodies of water that could adversely affect the site, the potential for seiche is considered low.

Based on the discussion above, permanent impacts related to seismic ground shaking, liquefaction, compressible and collapsible soils, lateral spreading, expansive soils, corrosive soils, tsunamis, and seiches are not considered adverse with the implementation of Minimization Measures GEO-1 and GEO-2.

### 2.10.4 Avoidance, Minimization, and/or Mitigation Measures

The following minimization measures are recommended to reduce the potential impacts of geotechnical and soils conditions on structures constructed under Alternatives 2 and 3 (Design Options A and B):

**GEO-1** During final design, the City of Long Beach (City) will prepare a quality assurance/quality control plan that will be maintained during construction. The plan will include observation, monitoring, and testing by a geotechnical engineer and/or engineering geologist during construction to confirm that geotechnical/geologic recommendations are fulfilled, or if different site conditions are encountered, appropriate changes are made to accommodate such issues. The geotechnical engineer will prepare weekly reports while grading excavation and construction activities are underway.

**GEO-2** Prior to completion of final design, the geotechnical engineer will prepare a design-level geotechnical report. This report will document soil-related constraints and hazards, such as slope instability, settlement liquefaction, or related secondary seismic impacts, which may be present. The report will also include:

- Evaluation of expansive and potentially corrosive soils and recommendations regarding construction procedures and/or design criteria to reduce the effect of these soils on development of the Shoemaker Bridge Replacement Project (Project)
- Identification of potential liquefiable areas within the Project limits and recommendations for mitigation measures
- Demonstration that the design of all proposed retaining walls is geotechnically suitable for soils within the Project limits
- Geotechnical recommendations for the specific foundation design and earthwork construction considered for this Project

# 2.11 Paleontology

## 2.11.1 Regulatory Setting

Paleontology is a natural science focused on the study of ancient animal and plant life as it is preserved in the geologic record as fossils.

A number of federal statutes specifically address paleontological resources, their treatment, and funding for mitigation as a part of federally authorized projects.

23 United States Code (USC) 1.9(a) requires that the use of Federal-aid funds must be in conformity with all federal and state laws.

Under California law, paleontological resources are protected by the California Environmental Quality Act (CEQA).

## 2.11.2 Affected Environment

This section is based on the *Paleontological Identification and Evaluation Report* (PIR/PER) (Caltrans 2019f) prepared for the Project. The paleontological resources literature review was conducted using available references to identify sedimentary formations with paleontological resource sensitivity and fossil localities within the vicinity of the proposed Project. This included a review of available geologic maps and literature and a formal locality search through Southern California museums. A field survey of the area within proposed Project limits was conducted April 26, 2017.

Nearly all areas within the Project limits are heavily developed, with abundant houses, businesses, roads, railroads, and industrial areas. In the heavily developed areas, exposed ground surfaces occurred rarely, often as empty lots, and was covered by vegetation. Less heavily developed areas were found adjacent to the LA River, particularly in the area west of Golden Shore and north of West Ocean Boulevard. However, even in these areas, the ground has been disturbed and landscaped, leaving no visible exposed sediment or bedrock.

The Project is located in the northwestern portion of the Peninsular Ranges geomorphic province. The Peninsular Ranges province is distinguished by northwest trending mountain ranges and valleys following faults branching from the San Andreas Fault. The Peninsular Ranges are bound to the east by the Colorado Desert and extend north to the San Bernardino – Riverside County line, west into the submarine continental shelf, and south to the California state line.

The Project is within the LA Basin, an actively subsiding basin bound by the Santa Monica and San Gabriel Mountains to the north, the Santa Ana Mountains to the east, and the Palos Verdes Hills to the south. Rapid deposition of deep sediment fill has resulted from the subsidence, with sediment in the area of Long Beach reaching 14,000 feet in depth. This deep sediment fill has also resulted in the accumulation of notable fossil resources and petroleum resources, including the local Long Beach Oil Field.

The Project is located in the coastal zone, a heavily altered area of Long Beach, with little natural landscape remaining. The geology in the Project vicinity has been mapped at a scale of 1:100,000. A review of this map indicated the Project is located on four geologic units: artificial fill (af), young alluvial fan and valley deposits (Qyfa), unconsolidated shelf sediment (Qms), and old paralic deposits (Qops) (Figure 2.11-1). Table 2.11-1 lists the ages for the formations and units exposed within the Project limits. These units are described below.

**Table 2.11-1. Geologic Time Periods and Geologic Units within the Project Limits**

| Epoch | Age (years ago) | Geologic Formation/Unit | Map Symbol |
|---|---|---|---|
| ***Quaternary Period*** | | | |
| Holocene | Less than 100 | Artificial fill | af |
| Holocene | Less than 10,000 | Young alluvium, sand | Qyfa |
| Holocene | Less than 10,000 | Unconsolidated young shelf deposits | Qms |
| Pleistocene | 80,000–1.2 million | Old paralic deposits, silt | Qops |

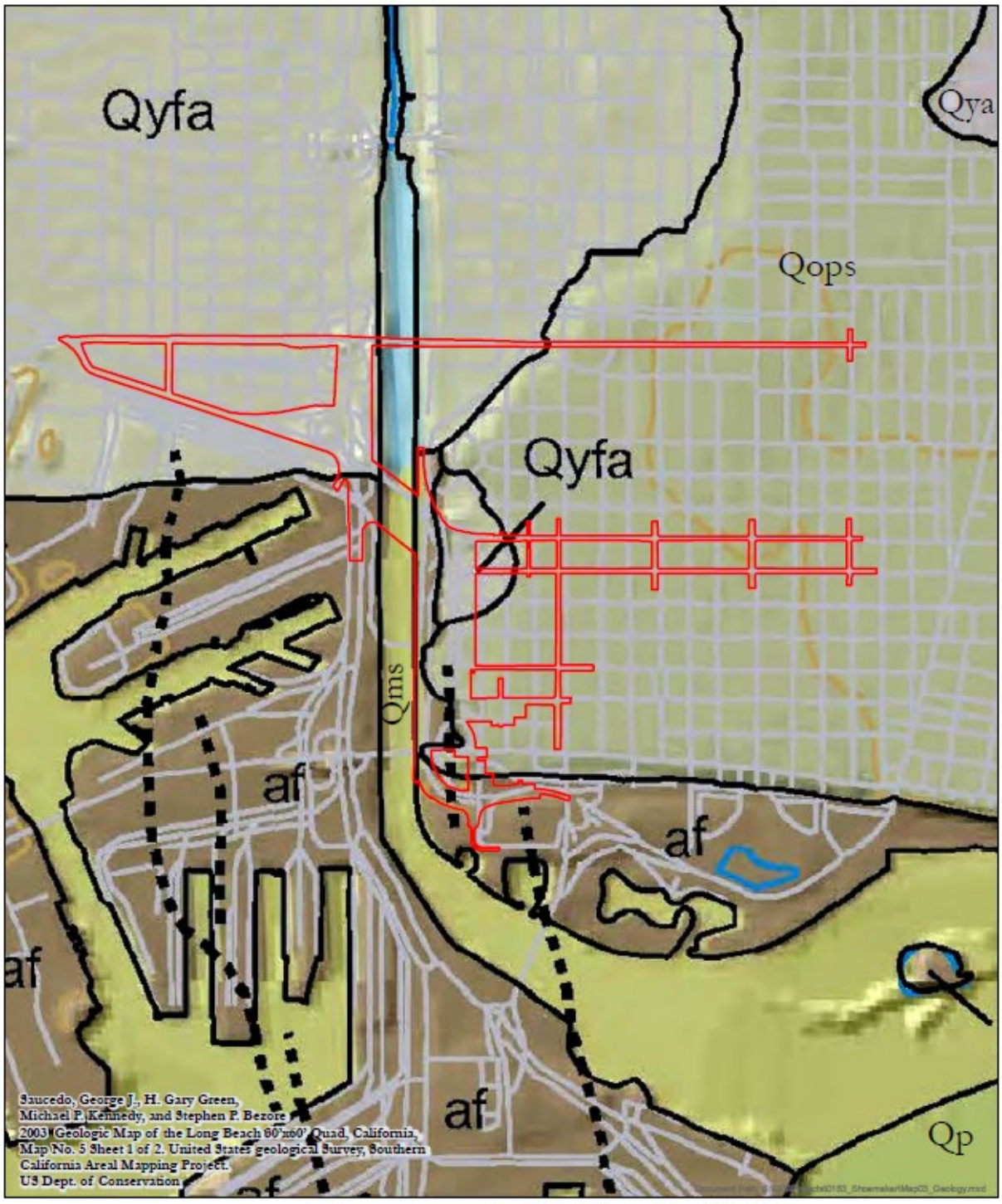
Source: Caltrans 2019f

Notes:
af=artificial fill; Qms=unconsolidated shelf sediment; Qops=old paralic deposits; Qyfa=young alluvium

**Artificial fill (af) (Holocene):** Artificial fill (Holocene epoch: 11,700 years ago to present) is composed of fill resulting from human construction, mining, or quarrying activities (Saucedo et al. 2003). Within the paleontological study area, these deposits are generally present south of West Ocean Boulevard, west of the LA River, and south of West 9th Street.

**Unconsolidated shelf sediment (Qms) (Holocene):** Unconsolidated shelf sediment (Holocene Epoch) is composed of mostly unconsolidated sand and silt on the continental shelf. Within the paleontological study area, these deposits are generally present in the LA River.

**Young alluvial fan and valley deposits (Qyfa) (late Pleistocene to Holocene):** Young alluvial fan and valley deposits within the Project limits are composed of mostly poorly consolidated and poorly sorted sand. These deposits are typically Holocene-age at the surface and transition into older, Pleistocene-age (2. 5 million years to 11,700 years ago) deposits at depth. Within the paleontological study area, these deposits are generally present north of West 9th Street, west of Magnolia Avenue, east of Maine Avenue, and north of 5th Street).

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City of Long Beach

Direct APE
af – Artificial fill
Qops – Pleistocene, Old paralic deposits, undivided, silt
Qyfa – Holocene, Young alluvial fan and valley deposits, sand
Qms – Holocene, Unconsolidated shelf sediment
Qya – Holocene, Young alluvial flood plain deposits
Qp – Pleistocene, sedimentary deposits, undivided

0 900 1,800 Feet
1 inch = 1,800 feet
1:21,600
N

**Figure 2.11-1. Geology Map**

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**Old paralic deposits (Qops) (late to middle Pleistocene):** Old paralic deposits are composed of mostly poorly sorted, moderately permeable, reddish-brown, interfingered strandline, beach, estuarine and colluvial deposits of sandstone, now resting on emergent wave cut abrasion platforms. Old paralic deposits underlies most of the Project limits, east of the LA River.

## 2.11.3 Sensitivity for Paleontological Resources in the Project Limits

Caltrans uses the following tripartite scale to determine the paleontological sensitivity of a rock unit (Caltrans 2014):

- **High Potential**: Rock units which, based on previous studies, contain or are likely to contain significant vertebrate, significant invertebrate, or significant plant fossils. These units include, but are not limited to, sedimentary formations that contain significant nonrenewable paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. These units may also include some volcanic and low-grade metamorphic rock units. Fossiliferous deposits with very limited geographic extent or an uncommon origin (e.g., tar pits and caves) are given special consideration and ranked as highly sensitive. High sensitivity includes the potential for containing: 1) abundant vertebrate fossils; 2) a few significant fossils (large or small vertebrate, invertebrate, or plant fossils) that may provide new and significant taxonomic, phylogenetic, ecologic, and/or stratigraphic data; 3) areas that may contain datable organic remains older than recent, including Neotoma (sp.) middens; or 4) areas that may contain unique new vertebrate deposits, traces, and/or trackways. Areas with a high potential for containing significant paleontological resources require monitoring and mitigation.
- **Low Potential:** This category includes sedimentary rock units that: 1) are potentially fossiliferous, but have not yielded significant fossils in the past; 2) have not yet yielded fossils, but possess a potential for containing fossil remains; or 3) contain common and/or widespread invertebrate fossils if the taxonomy, phylogeny, and ecology of the species contained in the rock are well understood. Sedimentary rocks expected to contain vertebrate fossils are not placed in this category because vertebrates are generally rare and found in more localized stratum. Rock units designated as low potential generally do not require monitoring and mitigation.
- **No Potential:** Rock units of intrusive igneous origin, most extrusive igneous rocks, and moderately to highly metamorphosed rocks are classified as having no potential for containing significant paleontological resources. For projects encountering only these types of rock units, paleontological resources can generally be eliminated as a concern when the preliminary environmental analysis report (PEAR) is prepared and no further action taken.

The records search at the Natural History Museum of Los Angeles County (LACM) produced two fossil localities directly within the Project boundaries: LACM 6896 and LACM 1144. Fossil locality LACM 6896, in the southeastern-most portion of the Project limits near the intersection of Magnolia Avenue and Ocean Boulevard, produced a specimen of fossil whale, cetacea, from pile driving activities at a depth of less than 100 feet bgs. Fossil locality LACM 1144, in the northeastern portion of the Project limits near the intersection of Lorna Vista Drive and Crystal Court, produced fossil specimens of sea lion, Zalophus, camel, Camelops, and bison, Bison, from a depth of less than 48 feet bgs (Caltrans 2019f). The records search also produced several unspecified fossil localities in similar deposits near the Project limits (Caltrans 2019f).

On March 24, 2017, a search was conducted of the University of California Museum of Paleontology (UCMP) online collections, the online Paleobiology Database (PBDB), and other published literature for fossil localities from similar deposits nearby (within 5 miles). Holocene deposits are too young to have accumulated and produced fossil material and are assigned a low sensitivity, so the records searches focused on similar deposits of Pleistocene age. The searches produced two additional nearby fossil localities: San Pedro Bay produced mammoth remains, and Signal Hill produced abundant arthropods and mollusks. Due to the fossiliferous nature of the Pleistocene-age deposits (Qops), they are assigned a high potential. The natural Holocene-age deposits (Qms, Qyfa) are assigned a low potential, and the Holocene-age artificial fill (af) is assigned no potential. However, the Holocene-age deposits may overlie older Pleistocene-age deposits at depth, which would have a high potential; LACM 6896 (whale) was recovered at depth under current artificial fill, and LACM 1144 (sea lion, camel, and bison) was recovered at depth under young alluvial fan and valley deposits (Caltrans 2019f). Therefore, the Holocene-age deposits should be considered to transition into high potential with deep ground-disturbing activity (Figure 2.11-2).

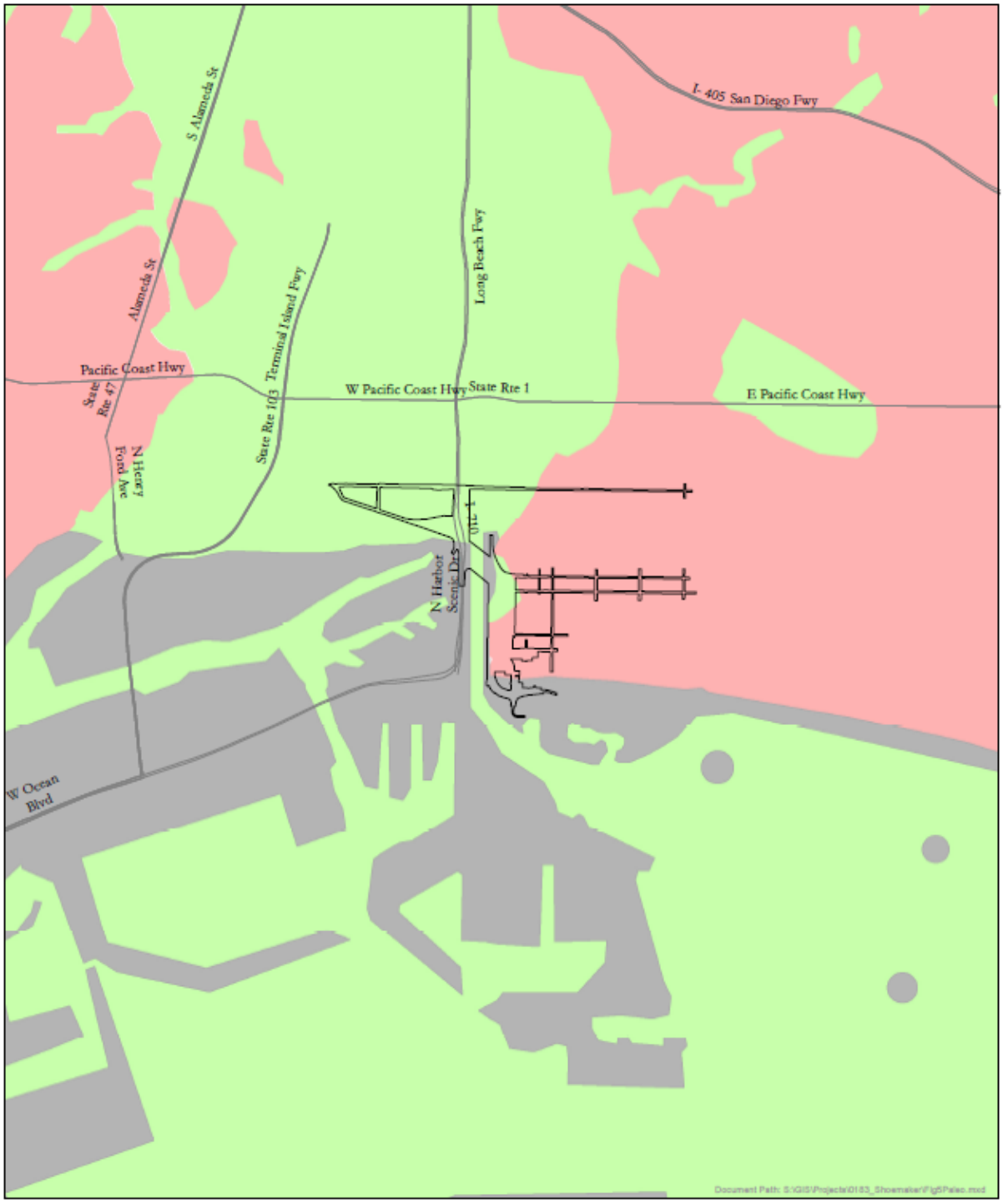
The specific sensitivities for formations and units within the Project limits are listed in Table 2.11-2. Sensitivities (and potential) for the older alluvium and old paralic deposits are high based on the presence of significant fossil remains that have been recovered from these units in other areas.

**Table 2.11-2. Geologic Units and their Paleontological Potential**

| Age | Geologic Unit[1] | Fossils Present | Paleontological Sensitivity[2] |
|---|---|---|---|
| Holocene | Artificial fill (af) | None | No potential |
| | Unconsolidated shelf sediments (Qms) | None | Low potential |
| | Young alluvial fan and valley deposits (Qyfa) | None | Low potential |
| Pleistocene | | Whale, sea lion, camel, bison, mammoth, gastropod, mollusc[3] | High potential |
| | Old paralic deposits (Qops) | | High potential |

Notes:
[1] Saucedo et al. 2016
[2] Caltrans 2014
[3] Caltrans 2019f
af=artificial fill; Qms=unconsolidated shelf sediment; Qops=old paralic deposits; Qyfa=young alluvium

No paleontological resources were observed during the field survey conducted within the area of the Project limits.

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SCH No. 2016041007
City of Long Beach

Project
Low Potential at Depth
High Potential at Depth
No Sensitivity

0 2,000 4,000 Feet
1 inch = 4,000 feet
1:48,000
N

**Figure 2.11-2. Paleontological Sensitivities Map**

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## 2.11.4 Environmental Consequences

### 2.11.4.1 Temporary Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not include any changes to the physical environment; therefore, no temporary impacts on paleontological resources would occur.

#### Alternatives 2 and 3 (Design Options A and B)

Alternatives 2 and 3 (Design Options A and B) would require ground disturbance and modification to existing freeway and local street structures. These construction activities could result in direct or indirect impacts on paleontological resources. The potential impacts on paleontological resources would be permanent direct or indirect impacts and are addressed below. Therefore, any analysis of direct or indirect temporary impacts is not applicable.

### 2.11.4.2 Permanent Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not include any excavation within the Project limits. Therefore, Alternative 1 (No Build) would not result in permanent adverse impacts related to paleontological resources.

#### Alternatives 2 and 3 (Design Options A and B)

In the area of the proposed new bridge abutments, excavation would be approximately 15 feet below current surface, and piles may extend to a depth of 150 feet. In the area between the LA River and Golden Avenue, excavation would be approximately 0 to 5 feet below current surface except where existing elevated roadways are being reprofiled or removed (6th Street, 7th Street, and Shoreline Drive), where excavation would be up to 23 feet deep. Between Golden Avenue and Magnolia Avenue, excavation would be approximately 0 to 3 feet below current surface, except along portions of Broadway Avenue, 6th Street, and 7th Street, where excavation would be approximately 12 feet below current surface (street reprofiling). East of Magnolia Avenue, there would be spot locations within the streets with 1 to 3 feet of excavation below the current street surface. On Golden Shore, on each side of Shoreline Drive (where the grade separation is being removed), there would be up to 23 feet of excavation below the current surface. In the median of SR-710, where the new Shoemaker Bridge would join the freeway, there would be approximately 3 to 8 feet of excavation below the current surface.

Fossils and their associated contextual data are nonrenewable scientific resources, and the loss of these resources resulting from construction of the proposed Project would be the primary impact on paleontological resources. Earthmoving operations could result in the destruction of fossils and fossiliferous rock units within the construction disturbance limits. It is often not possible to completely eliminate impacts on fossil resources. Earthmoving activity could, unavoidably, destroy some fossils. These types of impacts can be partially mitigated by collecting and preserving a representative sample of the entire fossil assemblage and associated geological information in the areas disturbed by Project construction.

Permanent impacts from Alternatives 2 and 3 (Design Options A and B) on paleontological resources would include:

- Destruction of paleontological resources
- Damage to paleontological resources during grading and pile driving
- Destruction of rock units that may contain paleontological resources
- Loss of contextual data associated with paleontological resources
- Loss of associations between paleontological resources

Table 2.11-2 summarizes the specific sensitivities for units within the Project limits. Table 2.11-2 lists the Paleontological Potential Sensitivity Scale used by Caltrans. Portions of the proposed Project are located in areas identified as having high paleontological sensitivity at the surface and at depth. Two LACM fossil localities are documented within the proposed Project limits, and several other fossil localities are known nearby from similar sediments. Therefore, Alternatives 2 and 3 (Design Options A and B) would have an adverse impact on paleontological resources even with the implementation of Mitigation Measures PAL-1 through PAL-5.

## 2.11.5 Avoidance, Minimization, and/or Mitigation Measures

The following mitigation measures will be implemented to address potential permanent impacts on paleontological resources.

**PAL-1** Prior to completion of the final design, the City of Long Beach's (City) Resident Engineer, the California Department of Transportation (Caltrans), and a qualified Principal Paleontologist shall prepare a paleontological mitigation plan (PMP) that includes the following measures:

- A preconstruction field survey shall be conducted in areas identified as having high paleontological sensitivity after vegetation and paving have been removed, followed by salvage of any observed surface paleontological resources prior to the beginning of additional grading.
- A qualified paleontologist shall attend the pregrade meeting. At this meeting, the paleontologist will explain the likelihood for encountering paleontological resources, what resources may be discovered, and the methods of recovery that will be employed.
- During construction excavation, a qualified vertebrate paleontological monitor shall initially be present on a full-time basis whenever excavation will occur within the sediments that have a high paleontological sensitivity rating and on a spot-check basis for excavation in sediments that have low sensitivity rating. Monitoring may be reduced to a part-time basis if no resources are being discovered in sediments with a high sensitivity rating (monitoring reductions, when they occur, will be determined by the qualified Principal Paleontologist). With the City's Resident Engineer's approval, the monitor shall temporarily divert construction equipment away from the immediate area of the discovery. The monitor shall be equipped to rapidly stabilize and remove fossils to avoid prolonged delays to construction schedules. If large mammal fossils or large concentrations of fossils are

encountered, the City shall consider using heavy equipment on site to assist in the removal and collection of large materials.

- Localized concentrations of small (or micro-) vertebrates may be found in all native sediments. Therefore, these sediments occasionally spot screened on site through 1/8- to 1/20-inch mesh screens determines whether microfossils are present during monitoring. If microfossils are encountered, sediment samples (up to 3 cubic yards, or 6,000 pounds) shall be collected and processed through one-twentieth-inch mesh screens to recover additional fossils.
- Recovered specimens shall be prepared to the point of identification and permanent preservation. This includes the sorting of any washed mass samples to recover small invertebrate and vertebrate fossils, the removal of surplus sediment from around larger specimens to reduce the volume of storage for the repository and storage cost, and the addition of approved chemical hardeners/stabilizers to fragile specimens.
- Specimens shall be identified to the lowest taxonomic level possible and curated into an institutional repository with retrievable storage. The repository institution usually charge a one-time fee based on volume; removing surplus sediment is important. The repository institution may be a local museum or university with a curator who can retrieve the specimens on request. Caltrans requires that a draft curation agreement be in place with an approved curation facility prior to the initiation of any paleontological monitoring or mitigation activities.

**PAL-2** Prior to construction, the City of Long Beach's (City) Resident Engineer will obtain a signed agreement with a repository that meets the California Department of Transportation's (Caltrans) requirements.

**PAL-3** Prior to construction, the City of Long Beach's (City) Resident Engineer will ensure a qualified paleontologist conduct paleontological awareness training for all ground disturbance personnel. This will include paleontological background; regulations and requirements protecting fossils, monitoring procedures, communication protocols; and a method for documenting training.

**PAL-4** During construction, the City of Long Beach's (City) Resident Engineer will ensure that a qualified paleontologist conducts paleontological monitoring in areas of old paralic deposits and where any ground disturbance may extend below surficial Holocene-age deposits**.**

**PAL-5** Upon completion of construction activities, the City of Long Beach's (City) Resident Engineer shall submit a paleontological mitigation report (PMR) to the California Department of Transportation (Caltrans), documenting completion of the Project's paleontological mitigation plan (PMP). The PMR shall discuss findings and analysis as a result of the Project's PMP implementation and shall be consistent with guidance contained in the Caltrans' Standard Environmental Reference (SER), Chapter 8. The PMR shall also be included in the Shoemaker Bridge Replacement Project (Project) environmental file and also submitted to the designated curation facility.

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# 2.12 Hazardous Waste/Materials

## 2.12.1 Regulatory Setting

Hazardous materials including hazardous substances and wastes are regulated by many state and federal laws. Statutes govern the generation, treatment, storage, and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Resource Conservation and Recovery Act of 1976 (RCRA). The purpose of CERCLA, often referred to as "Superfund," is to identify and clean-up abandoned contaminated sites so that public health and welfare are not compromised. The RCRA provides for "cradle to grave" regulation of hazardous waste generated by operating entities. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order (EO) 12088, Federal Compliance with Pollution Control Standards, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

California regulates hazardous materials, waste, and substances under the authority of the CA Health and Safety Code and is also authorized by the federal government to implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires clean-up of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and clean-up of contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during Project construction.

## 2.12.2 Affected Environment

This section is based on the *Initial Site Assessment* (ISA) (Caltrans 2018k). The hazardous waste/materials study area consists of properties located within and adjoining to the Project footprint. The Project footprint includes the existing and proposed Shoemaker Bridge alignments and all proposed related street improvements and additional ROW required for the proposed Project.

The ISA was conducted to identify potential and known contaminant sources or recognized environmental conditions (REC), historical RECs (HREC), and controlled RECs (CREC) in the Project limits. The ISA was prepared in general accordance with the ASTM International, Inc. (ASTM), Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E1527-13 (ASTM Standard) and Caltrans ISA procedures.

The following tasks were conducted as part of the ISA:

- **Environmental Database Review:** An environmental database search was conducted using Environmental Data Resources, Inc. (EDR) to gather government database records dated May 5, 2017. The search consisted of reviewing existing federal, state, local, tribal, and EDR proprietary environmental databases, per the ASTM Standard. The environmental database search radius consisted of the Project limits and properties up to approximately 1 mile from the Project limits.
- **Historical Land Use Records Review:** Historical aerial photographs, topographic maps, Sanborn fire insurance maps, and oil well maps on the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) website were reviewed.
- **Agency Records Review:** An agency records review was conducted for potential sites of concern that may have an impact on the proposed Project. Records were requested from the following agencies April 27 and May 9 and 12, 2017, and were reviewed (if available): Department of Toxic Substances Control (DTSC) Cypress office, DTSC Chatsworth office, Los Angeles RWQCB (LARWQCB), Los Angeles County Sanitation District (LACSD), SCAQMD, Long Beach Building and Safety (LBBS), Long Beach Certified Unified Program Agency (CUPA) (includes Long Beach Department of Health and Human Services [DHHS] and LBFD), and City of Long Beach. In addition, available records on the SWRCB GeoTracker and DTSC EnviroStor databases were also reviewed.
- **Site Reconnaissance:** On May 24, 2017, a site visit of properties within and adjoining to the Project limits was conducted to document current land uses and observe for any indication of potential contamination issues or releases that may have an impact on the Project. The site visit was limited to the exterior portions of properties and was observed from the public ROW.
- **Interviews:** Interviews were attempted with regulatory agencies for high risk properties to help close the data gaps. A summary of the interview efforts is summarized, below:
    - The Long Beach Fire Department (LBFD) was contacted by telephone on January 10, 2020. A voicemail was left inquiring for follow-up regarding sites of concern located at Assessor Parcel Numbers (APN) 7278-015-955 (624-700 West Broadway and 829 West Broadway) and 7278-003-037 (975 West Seaside Way). A subsequent call was made on January 13, 2020. To date, no response has been received from LBFD for these sites.
    - The Regional Water Quality Control Board (RWQCB) was contacted by telephone on January 10, 2020 in regards to the former Union Pacific Railroad (UPRR) Bulk Terminal

located at APN 7271-020-908 (960 De Forest Avenue) and former Los Angeles Metropolitan Transit Authority (MTA) Division 12 Bus Maintenance facility at APN 7271-023-900 (970 West Chester Place). No one from RWQCB picked up the phone; thus a voicemail was left. Another telephone call was placed and a voicemail was left on January 13, 2020. No response has been received. To date, no response has been received from RWQCB for this site.

The ISA was prepared in general accordance to ASTM Standard and Caltrans ISA procedures. The ISA does not meet "innocent landowner" provisions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which establishes a defense for the purchase of real property.

### 2.12.2.1 Sites of Concern

Based on the due diligence efforts completed as part of the ISA, 28 properties were identified to have RECs within the hazardous waste/materials study area. Of the 28 properties, 18 of the properties are located within the Project limits, and 10 of the properties are located adjacent to the Project limits. No HRECs or CRECs were identified within or adjacent to the Project limits. Table 2.12-1 and Table 2.12-2 list each site of concern and includes a description of the potential contamination issues that may have an impact on the Project, as well as a risk ranking of high, medium, or low. The hazardous risk ranking was determined using guidance from the Caltrans *Project Development Procedures Manual* (PDPM), Chapter 18 – Environmental Contamination (Caltrans 2006b) and based on existing site conditions, distance from the Project limits, and the nature of proposed design and construction activities in relation to the location and possible impact from a potential contaminant source. The Caltrans PDPM, Chapter 18 defines high, medium, and low risk sites as:

- **High Risk Sites:** Facilities with possible major hazardous waste issues that may require design change, such as landfills, post 1980s underground storage tanks (UST), properties utilized for industrial use greater than 20 years, junk yards, former Department of Defense facilities, ship yards, railroad yards, mines, metal recycling yards, and sites listed on the National Priority List
- **Medium Risk Sites:** Facilities with moderate hazardous waste issues that may require mitigation and/or minor design change, such as sites containing aerially deposited lead (ADL), asbestos in serpentine, pre 1980s USTs, aboveground storage tanks (AST), properties utilized for industrial use for less than 20 years and with apparent good best management practices, railroad property, mines, and debris laden fill sites
- **Low Risk Sites:** Facilities that would not require change in design or mitigation, such as bridge structures containing asbestos and lead

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## Table 2.12-1. Properties within the Project Limits with Recognized Environmental Conditions

| APN and Address | Property Type | Land Use | REC | Hazardous Risk Analysis |
|---|---|---|---|---|
| No APN or address | Existing ROW | Roadway | The alignment is a historic and existing transportation/railroad corridor, and the potential for soil impacts from ADL and other contaminants associated with roadways and/or railroads exists. There is potential soil and/or groundwater contamination may impact the Project and, as a result, additional investigation is warranted. | High |
| 7271-003-902<br>No address | Non-acquisition | California Resources Long Beach, Inc.<br>Active Oil Field | The extraction and storage of petroleum hydrocarbons occurs within the parcel located on the west side of the LA River. The potential release of petroleum hydrocarbons to soil and/or groundwater exists based on the use of the property as an active oil field and may impact the Project. Additional investigation is warranted. | High |
| 7278-011-908<br>No address | Proposed Caltrans easement, partial acquisition, and TCE | California Resources Long Beach, Inc.<br>Active Oil Field | The extraction and storage of petroleum hydrocarbons occurs within the parcel located on the west side of the LA River. The potential release of petroleum hydrocarbons to soil and/or groundwater exists based on the use of the property as an active oil field and may impact the Project. Additional investigation is warranted. | High |
| 7278-015-955<br>829 West Broadway<br>624-700 West Broadway | Proposed partial acquisition and TCE | Commercial Parking Lot | A gasoline and service station is listed at the address of 700 West Broadway from 1931 to 1948. No additional information regarding the location or removal of USTs associated with the gasoline station was provided during the review of historical documents or agency records. The portion of this parcel that would potentially be acquired or used as a TCE is an approximate 10-foot-wide sliver of the landscaped area located adjacent to the existing ROW to the north. The potential for the UST(s) to impact the partial acquisition and TCE area is considered unlikely; however, because of the unknown location of the potential USTs, the risk is considered high. Additional investigation is warranted. | High |

## Table 2.12-1. Properties within the Project Limits with Recognized Environmental Conditions

| APN and Address | Property Type | Land Use | REC | Hazardous Risk Analysis |
|---|---|---|---|---|
| 7278-003-037<br>975 West Seaside Way | Proposed TCE and permanent easement | Roadway | Three 2,000-gallon USTs are identified in the database report at the address of 975 West Seaside Way. No additional information regarding the location, contents, or removal of USTs was provided during the review of historical documents or agency records. The portion of this parcel that would potentially be used as a TCE and/or permanent easement area is an approximate 10-foot-wide sliver of the landscaped area located adjacent to the existing ROW to the west. The potential for the USTs to impact the TCE and/or permanent easement area is considered unlikely; however, because of the unknown location of the potential USTs, the risk is considered high. Additional investigation is warranted during final design. | High |
| 7278-002-010<br>11 Golden Shore | Proposed partial acquisition and TCE | Commercial Office Building and Parking Lot | The TCE area is a small sliver of landscaping adjacent to the current ROW. The address of the property is listed on a waste manifest for the off-site disposal of inorganic solid waste. No records pertaining to the release of petroleum hydrocarbons or other chemicals were identified for this property during the review of historical documents or agency records; therefore, no impacts on the Project are anticipated. | No impact |
| 7278-002-009<br>1 Golden Shore | Proposed TCE | Commercial Office Building and Parking Lot | The TCE area is a small sliver of landscaping adjacent to the current ROW. The address of the property is listed on a waste manifest for the off-site disposal of 0.0875 tons of waste oil and mixed oil in 2009. No records pertaining to the release of petroleum hydrocarbons or other chemicals were identified for this property during the review of historical documents or agency records; therefore, no impacts on the Project are anticipated. | No impact |

## Table 2.12-1. Properties within the Project Limits with Recognized Environmental Conditions

| APN and Address | Property Type | Land Use | REC | Hazardous Risk Analysis |
|---|---|---|---|---|
| 7278-003-034<br>400 Oceangate | Proposed TCE and permanent easement | Commercial | The TCE and permanent easement area is a small sliver of landscaping adjacent to the current ROW and a current driveway entrance to the property. The address of the property is listed on waste manifests for the off-site disposal of 1.689 ton of ACMs and 4.408 tons of PCB-impacted materials in 1993 and approximately 1.66 ton of PCB-impacted materials in 1996. A UST, installed in 1972 and containing approximately 350 gallons of diesel fuel, was owned and operated by the U.S. Coast Guard at this address. A second UST with unknown contents is also listed at this address. The second UST is owned and operated by Molina Medical Center. No records pertaining to the release of petroleum hydrocarbons or other chemicals were identified for this property during the review of historical documents or agency records; therefore, no impacts on the Project are anticipated. | No impact |
| 7271-003-904<br>No address | Non-acquisition | Vacant | Impacts on soil resulting from a leaking gasoline pipeline were identified on this parcel. No additional information regarding the assessment and potential remediation of the impacted soil was provided during the review of historical documents or agency records. The release of petroleum hydrocarbons to soil is considered a REC. However, no impacts on this parcel are planned as part of this Project; therefore, additional assessment of this parcel is not warranted at this time and the hazardous risk is considered low. Should the Project change and impacts were to occur to this parcel, additional assessment would be necessary. | Low |

## Table 2.12-1. Properties within the Project Limits with Recognized Environmental Conditions

| APN and Address | Property Type | Land Use | REC | Hazardous Risk Analysis |
|---|---|---|---|---|
| 7278-013-801<br>445 San Francisco Avenue | Non-acquisition | Seabright Substation | The address of the property is listed on waste manifests for the off-site disposal of 3.04 tons of waste oil and mixed oil in 2007 and 3.72 tons of unspecified waste in 2012. No records pertaining to the release of petroleum hydrocarbons or other chemicals were identified for this property during the review of historical documents or agency records; however, the Seabright Substation has been located on this parcel for several decades, and it is likely, at some point, that PCBs were used and/or stored on site. The long-term use of the property as a substation presents a REC associated with this parcel. However, no impacts on this parcel are planned as part of this Project; therefore, additional assessment of this parcel is not warranted at this time, and the hazardous risk is considered low. Should the Project change and impacts were to occur on this parcel, additional assessment would be necessary. | Low |
| 7271-024-901<br>601 Golden Avenue | Proposed TCE | Vacant | A 10,000-gallon leaded fuel UST, installed in July 1985, is listed at this address. No additional information regarding the location, contents, or removal of USTs or the release of petroleum hydrocarbons or other chemicals was provided during the review of historical documents or agency records. However, no impacts on this parcel are planned as part of this Project; therefore, additional assessment of this parcel is not warranted at this time, and the hazardous risk is considered low. Should the Project change and impacts were to occur on this parcel, additional assessment would be necessary. | Low |
| 7271-024-902<br>620 San Francisco Avenue | Proposed TCE | Commercial/Industrial | A release of gasoline to the soil located approximately 10 feet east of the current ROW was documented in a Phase II ESA completed on this parcel in December 2007. The depth of impacted soil is approximately 10 feet bgs and may extend into groundwater. However, no impacts on this parcel are planned as part of this Project; therefore, additional assessment of this parcel is not warranted at this time, and the hazardous risk is considered low. Should the Project change and impacts were to occur to this parcel, additional assessment would be necessary. | Low |

## Table 2.12-1. Properties within the Project Limits with Recognized Environmental Conditions

| APN and Address | Property Type | Land Use | REC | Hazardous Risk Analysis |
|---|---|---|---|---|
| 7278-024-902<br>457 Golden Avenue | Non-acquisition | Public Park<br>Cesar E. Chavez Park | A UST is listed at this address. No additional information regarding the location, contents, or removal of USTs or the release of petroleum hydrocarbons or other chemicals was provided during the review of historical documents or agency records. However, no impacts on this parcel are planned as part of this Project; therefore, additional assessment of this parcel is not warranted at this time, and the hazardous risk is considered low. Should the Project change and impacts were to occur to this parcel, additional assessment would be necessary. | Low |
| No APN<br>10th Street and Harbor Avenue | Existing ROW | Roadway | In December 2003, an unidentified substance that appeared to have a sheen was observed entering the storm drain at this intersection. The leak was noted as originating from underground. No additional information regarding the assessment and remediation of the leak was provided during the review of historical documents or agency records. This release is considered a REC. However, no impacts on this roadway, other than potential lane restriping, are planned as part of this Project; therefore, additional assessment of this release is not warranted at this time, and the hazardous risk is considered low. Should the Project change and impacts were to occur at this location, additional assessment would be necessary. | Low |
| 7436-008-902<br>No address | Existing ROW | Roadway | One plugged water injection well is identified on this parcel on the west side of the LA River. No records pertaining to the release of petroleum hydrocarbons or other chemicals were identified for this property during the review of historical documents or agency records; therefore, no impacts on the Project are anticipated. | No impact |

## Table 2.12-1. Properties within the Project Limits with Recognized Environmental Conditions

| APN and Address | Property Type | Land Use | REC | Hazardous Risk Analysis |
|---|---|---|---|---|
| 7278-014-914<br>1019 West Ocean Boulevard<br>1085 West Ocean Boulevard | Proposed permanent easement, partial acquisition, and TCE | Public Park<br>Cesar E. Chavez Park | Historical cleaners were identified at the addresses of 1019 West Ocean Boulevard in 1920 and 1085 West Ocean Boulevard from 1920 to 1939. No records pertaining to the release of petroleum hydrocarbons or other chemicals were identified for this property during the review of historical documents or agency records; therefore, no impacts on the Project are anticipated. | No impact |
| 7278-018-933<br>225 Golden Avenue | Proposed TCE and permanent easement | Public Park<br>Cesar E. Chavez Park | An historical cleaner was identified at the address of 15 Golden Avenue from 1924 to 1931. No records pertaining to the release of petroleum hydrocarbons or other chemicals were identified for this property during the review of historical documents or agency records; therefore, no impacts on the Project are anticipated. | No impact |
| 7271-024-003<br>921 West 6th Street | Proposed TCE | Manufacturing | An historical cleaner was identified at the address of 921 West 6th Street from 1931 to 194. No records pertaining to the release of petroleum hydrocarbons or other chemicals were identified for this property during the review of historical documents or agency records; therefore, no impacts on the Project are anticipated. | No impact |

Notes:
ACM=asbestos-containing material; ADL=aerially deposited led; APN=Assessor Parcel Number; bgs=below ground surface; Caltrans=California Department of Transportation; ESA=Environmental Site Assessment; LA River=Los Angeles River; PCB=polychlorinated biphenyls; REC=recognized environmental condition; ROW=right-of-way; TCE=temporary construction easement; U.S.=United States; UST=underground storage tank

## Table 2.12-2. Adjoining Properties with Recognized Environmental Conditions

| APN and Address | Distance from the Project Limits | Land Use | REC | Hazardous Risk Analysis |
|---|---|---|---|---|
| 7271-020-908<br>960 De Forest Avenue | Adjacent<br><100 feet northeast | Metro/Industrial<br>Bus maintenance yard<br>(Formerly UPRR Bulk Terminal) | A release of 18,000 gallons of xylenes from an underground pipe in 1979, a spill of an unknown quantity of petroleum product containing 2 percent benzene from a tank in 1990, a spill of 50 to 100 gallons of propylene glycol methyl ether in 1991, and multiple releases of sulfuric acid have been documented on the property. The potential media affected was soil, soil vapor, and groundwater.<br>Environmental assessment and cleanup activities were conducted from May 2007 through April 2012 and consisted of soil vapor extraction enhanced with thermal injection, and excavation and off-site disposal. An HHRA was conducted under three scenarios (vacant land, recreational, and commercial/industrial). The HHRA concluded that the cumulative health cancer risks were below the U.S. EPA risk threshold level for future indoor and outdoor workers and below a non-cancer hazard index of one for future outdoor workers. LARWQCB issued No Further Action for soil only on April 23, 2012.<br>Based on the up-gradient location of the property relative to the Project and the documented impacts on groundwater, this property presents a REC with potential to adversely impact the Project. | High |
| 7271-023-900<br>970 West Chester Place | Adjacent<br><100 feet northeast | Public Park<br>(Formerly MTA Division 12 Bus Maintenance Facility) | The property has an open cleanup case with containments of concern consisting of diesel, gasoline, MTBE, TBA, and other fuel oxygenates. Potentially impacted media includes soil and groundwater.<br>TPH-g, MTBE, and TAME have been detected in groundwater at concentrations of 2,300 µg/L, 2,300 µg/L, and 10 µg/L, respectively.<br>An HHRA was prepared in 2011 and assessed potential health impacts on residents and commercial workers from exposure to constituents detected in the soil matrix and shallow groundwater underlying the site. In August 2011, OEHHA agreed that the risks and hazards from the evaluated pathways were low, and the site did not pose an unacceptable risk. Case closure under the low threat closure policy was requested in July 2016.<br>Based on the up-gradient location of the property relative to the Project and the documented impacts on groundwater, this property presents a REC with potential to adversely impact the Project. | High |

## Table 2.12-2. Adjoining Properties with Recognized Environmental Conditions

| APN and Address | Distance from the Project Limits | Land Use | REC | Hazardous Risk Analysis |
|---|---|---|---|---|
| 7271-005-009<br>702 West Anaheim Street | Adjacent<br><100 feet north | Commercial/ Industrial<br>Thrift store | Records indicate that a release of chlorinated solvents, including PCE, trichloroethylene, and vinyl chloride, and gasoline have occurred at the property and affected the soil, soil vapor, and groundwater at the property.<br>Based on the up-gradient location of the property relative to the Project and the documented impacts on groundwater, this property presents a REC with potential to adversely impact the Project. | High |
| 7436-006-900<br>7436-006-909<br>7436-006-910<br>7436-006-911<br>7436-006-912<br>1701 West 9th Street | Adjacent<br><100 feet north | Commercial/ Industrial<br>Truck storage yard | Records indicate that a potential release of chromium and other metals and heavy metals may have occurred on site. No potential media of concern was identified; however, metal impacts are generally limited to the near surface soil.<br>Currently, no impacts on the adjacent Project area, other than potential lane restriping, are planned as part of this Project; therefore, additional assessment of this potential release is not warranted at this time, and the hazardous risk is considered low. Should the Project change and impacts were to occur at this location, additional assessment would be necessary. | Low |
| 7272-002-011<br>7272-002-012<br>490 West Anaheim Street | Adjacent<br><100 feet south | Chevron Gas Station | Records indicate that a release of petroleum hydrocarbons and MTBE has occurred at the property and affected the groundwater.<br>The site is currently being evaluated for Low-Threat Case Closure.<br>Currently, no impacts on the adjacent Project area, other than potential lane restriping, are planned as part of this Project; therefore, additional assessment of this potential release is not warranted at this time, and the hazardous risk is considered low. Should the Project change and impacts were to occur at this location, additional assessment would be necessary. | Low |

## Table 2.12-2. Adjoining Properties with Recognized Environmental Conditions

| APN and Address | Distance from the Project Limits | Land Use | REC | Hazardous Risk Analysis |
|---|---|---|---|---|
| 7272-002-039<br>500 West Anaheim Street | Adjacent<br><100 feet south | Shell Gas Station | Records indicate that a release of petroleum hydrocarbons and MTBE has occurred at the property and affected the groundwater.<br>The site is currently being evaluated for Low-Threat Case Closure.<br>Currently, no impacts on the adjacent Project area, other than potential lane restriping, are planned as part of this Project; therefore, additional assessment of this potential release is not warranted at this time, and the hazardous risk is considered low. Should the Project change and impacts were to occur at this location, additional assessment would be necessary. | Low |
| 7436-004-008<br>1326 West 12th Street | Off site<br>285 feet north | Industrial Warehouse | Records indicate that a release of gasoline has occurred at the property and impacted soil and groundwater. According to the most recent groundwater monitoring report (January 2017), the groundwater flow direction is southwest. Maximum concentrations of contaminants detected in groundwater were TPH-g at 38,100 µg/L, Benzene at 4,090 µg/L, Toluene at 2,100 µg/L, Ethylbenzene at 2,540 µg/L, total xylenes (m,p-xylene and o-xylene) at 8,460 µg/L, Naphthalene at 6,290 µg/L, nPropylbenzene at 2,380 µg/L, 3,5-Trimethylbenzene at 4,590 µg/L, 1,2,4-Trimethylbenzene at 2,130 µg/L, Iso-propylbenzene at 1,070 µg/L, n-Butylbenzene at 77.8 µg/L, and sec-Butylbenzene at 1,740 µg/L.<br>Based on the cross-gradient location of the property relative to the Project, there is low potential for this property to adversely impact the Project. | Low |
| 7432-004-022<br>1701 West Anaheim Street | Adjacent<br><100 feet north | Rocket Gas Station | Records indicate that a release of gasoline has occurred at the property and affected the soil and groundwater at the property.<br>Currently, no impacts on the adjacent Project area, other than potential lane restriping, are planned as part of this Project; therefore, additional assessment of this potential release is not warranted at this time, and the hazardous risk is considered low. Should the Project change and impacts were to occur at this location, additional assessment would be necessary. | Low |

## Table 2.12-2. Adjoining Properties with Recognized Environmental Conditions

| APN and Address | Distance from the Project Limits | Land Use | REC | Hazardous Risk Analysis |
|---|---|---|---|---|
| No APN<br>1300 Pier B Street | Off site<br>385 feet southwest | Marine Fuel Terminal | Records indicate that a release of petroleum hydrocarbons has occurred at the property and affected the soil and groundwater at the property.<br>Based on the down-gradient location of the property relative to the Project, there is low potential for this property to adversely impact the Project. | Low |
| No APN<br>1400 Pier C Street | Off site<br>0.14 mile southwest | Marine Fuel Terminal | Records indicate that a release of petroleum hydrocarbons has occurred at the property and affected the soil and groundwater at the property.<br>Based on the down-gradient location of the property relative to the Project, there is low potential for this property to adversely impact the Project. | Low |

Notes:
APN=Assessor Parcel Number; EPA=Environmental Protection Agency; HHRA=Human Health Risk Assessment; LARWQCB=Los Angeles Regional Water Quality Control Board; MTA=Metropolitan Transit Authority; MTBE=methyl tert-butyl ether; OEHHA=Office of Environmental Health Hazard Assessment; PCE=perchloroethylene; REC=recognized environmental condition; TAME=tert-amyl methyl ether; TBA=tert-butyl alcohol; TPH-g=total petroleum hydrocarbons-gasoline; UPRR=Union Pacific Railroad; U.S.=United States; µg/L=microgram per liter

## 2.12.3 Environmental Consequences

### 2.12.3.1 Temporary Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not involve ground or structure disturbance. Therefore, Alternative 1 (No Build) would not result in potential health and environmental risks associated with any hazardous materials present within the Project limits.

#### Alternatives 2 and 3 (Design Options A and B)

*Sites of Concern*

Based on the due diligence efforts that have been completed as part of the ISA, 28 properties were identified to have RECs within the hazardous waste/materials study area. Of these 28 properties, 8 were identified to have a potential impact on the Project (5 properties are located within the Project limits and 3 properties are located adjacent to the Project limits). Potential contamination associated with these properties are due to existing and past land uses and operation activities (e.g., existing and former gas stations, active oil wells, maintenance yards, and industrial facilities), which may have resulted in a release or spill. Table 2.12-3 and Table 2.12-4 list each site with the potential to impact the Project and includes a description of the contamination issues (Figure 2.12-1 depicts site locations).

Under Alternatives 2 and 3 (Design Options A and B), there is a potential for the Project to encounter soil and/or groundwater contamination associated with eight properties. Preliminary Site Investigations (PSI) are recommended for these properties to further assess for the presence of contamination issues and are described in Table 2.12-3 and Table 2.12-4. No temporary substantial adverse impacts from soil and/or groundwater contamination associated with these eight sites are anticipated under Alternatives 2 and 3 (Design Options A and B) with the implementation of Avoidance and Minimization Measures HAZ-1 through HAZ-9, identified in Section 2.12.4.

*Aerially Deposited Lead*

ADL from the historical use of leaded gasoline exists along roadways throughout California. There is the likely presence of soils with elevated concentrations of lead as a result of ADL on the state highway system ROW within the limits of the Project alternatives. Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed under the July 1, 2016, ADL agreement between Caltrans and the California DTSC. This ADL agreement allows such soils to be safely reused within the Project limits as long as all ADL agreement requirements are met.

Under Alternatives 2 and 3 (Design Options A and B), there is a potential the Project may encounter ADL contaminated soils during construction. Unpaved soils adjacent to the existing roadway should be tested for ADL according to Caltrans ADL testing guidelines. If ADL concentrations are detected in existing soils, such soils would be handled in accordance with Caltrans Standard Specification, Section 14-11.08 Material Containing Hazardous Waste Concentrations of Aerially Deposited Lead (2015) and under the July 1, 2016, ADL Agreement between Caltrans and the California DTSC, identified in Project Feature PF-51, below.

**PF-51** During the PS&E phase, the City will ensure unpaved soils adjacent to the existing roadway be tested for ADL according to Caltrans ADL testing guidelines. -Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed in accordance with Caltrans Standard Specifications, Section 14-11.08 Material Containing Hazardous Waste Concentrations of Aerially Deposited Lead (2015) and under the July 1, 2016, ADL Agreement between Caltrans and the California DTSC. This ADL Agreement allows such soils to be safely reused within the project limits, as long as all requirements of the ADL Agreement are met.

With the inclusion of PF-51, no temporary substantial adverse impacts from ADL contaminated soils are anticipated under Alternatives 2 and 3 (Design Options A and B).

No temporary substantial adverse impacts from soil and/or groundwater contamination associated with these eight sites are anticipated under Alternatives 2 and 3 (Design Options A and B) with the implementation of Avoidance and Minimization Measures HAZ 1 through HAZ 8, identified in Section 2.12.4.

**Table 2.12-3. Properties within the Project Limits with Potential Impact on Alternatives 2 and 3 (Design Options A and B)**

| Site ID and Sheet ID[1] | APN and Address | Property Type | Land Use | REC | Recommendation | Hazardous Risk Analysis |
|---|---|---|---|---|---|---|
| — | No APN or address | Existing ROW | Roadway | The alignment is an existing roadway/railroad corridor, and the potential for soil impacts from ADL and other contaminants associated with roadways and/or railroads exists. | A complete investigation of near surface soil and groundwater located adjacent to existing roadways/railroad corridors to assess the presence or absence of impacts is recommended. Unpaved soils adjacent to the existing roadway should be tested for ADL according to Caltrans ADL testing guidelines. If ADL concentrations are detected in existing soils, such soils would be handled in accordance with Caltrans SSP 14-11.08. Soil and groundwater within historical railroad ROWs should be tested for contaminants, such as petroleum hydrocarbons, asbestos, VOCs, SVOCs, and metals. A PSI is recommended. | High |
| Site 1<br>Sheet 1 | 7271-003-902<br>No address | Non-acquisition | Active Oil Field | A portion of the Wilmington Oil Field is located within the proposed Project limits on the western side of the LA River. The DOGGR lists numerous active and plugged oil/gas wells and water injection wells within the proposed Project limits.<br>The extraction and storage of petroleum hydrocarbons occurs within the parcel located on the west side of the LA River. The potential release of petroleum hydrocarbons to soil and/or groundwater exists based on the use of the property as an active oil field. | A complete investigation of soil and groundwater in the vicinity of the active and plugged oil/gas wells located along the western side of the LA River to assess the presence of petroleum hydrocarbon impacts is recommended. A PSI is also recommended. | High |
| Site 2<br>Sheet 4 | 7278-011-908<br>No address | Proposed Caltrans easement, partial acquisition, and TCE | Active Oil Field | The DOGGR website identifies several active oil/gas wells at this location. Several oil/gas and water injection wells, ASTs, and storage containers were observed on the western side of the river, within the area of the proposed Project limits.<br>The extraction and storage of petroleum hydrocarbons occurs within the parcel located on the west side of the LA River. The potential release of petroleum hydrocarbons to soil and/or groundwater exists based on the use of the property as an active oil field. | A complete investigation of soil and groundwater in the vicinity of the active and plugged oil/gas wells, ASTs, and other storage containers used to store hazardous materials to assess the presence of petroleum hydrocarbon impacts. A PSI is also recommended. | High |
| Site 3<br>Sheet 6 | 7278-015-955<br>829 West Broadway<br>624-700 West Broadway | Proposed partial acquisition and TCE | Commercial Parking Lot | A gasoline and service station is listed at the address of 700 West Broadway from 1931 to 1948. No additional information regarding the location or removal of USTs associated with the gasoline station was provided during the review of historical documents or agency records.<br>The portion of this parcel that would potentially be acquired or used as a TCE is an approximate 10-foot-wide sliver of the landscaped area located adjacent to the existing ROW to the north. The potential for the UST(s) to impact the partial acquisition and TCE area is considered unlikely; however, because of the unknown location of the potential USTs, the risk is considered high. | Prior to the finalization of the environmental document, an interview would be conducted with regulatory agency officials to determine if the USTs have been removed from the site. If no evidence can be obtained to conclude if the USTs have been removed, a PSI is recommended to investigate soil and groundwater within the partial take/TCE area for the presence of petroleum hydrocarbon impacts. | High |

**Table 2.12-3. Properties within the Project Limits with Potential Impact on Alternatives 2 and 3 (Design Options A and B)**

| Site ID and Sheet ID[1] | APN and Address | Property Type | Land Use | REC | Recommendation | Hazardous Risk Analysis |
|---|---|---|---|---|---|---|
| Site 4<br>Sheet 6 | 7278-003-037<br>975 West Seaside Way | Proposed TCE and permanent easement | Roadway | Three 2,000-gallon USTs are identified in the database report at the address of 975 West Seaside Way. No additional information regarding the location, contents, or removal of USTs was provided during the review of historical documents or agency records.<br>The portion of this parcel that would potentially be used as a TCE and/or permanent easement area is an approximate 10-foot-wide sliver of the landscaped area located adjacent to the existing ROW to the west. The potential for the USTs to impact the TCE and/or permanent easement area is considered unlikely; however, because of the unknown location of the potential USTs, the risk is considered high. | Prior to the finalization of the environmental document, an interview would be conducted with regulatory agency officials to determine if the USTs have been removed from the site. If no evidence can be obtained to conclude if the USTs have been removed, a PSI is recommended to investigate soil and groundwater within the TCE and/or permanent easement area for the presence of petroleum hydrocarbon impacts. | High |

Notes:

[1] Refer to Figure 2.12-1 for site location

ADL=aerially deposited led; APN=Assessor Parcel Number; AST=aboveground storage tank; Caltrans=California Department of Transportation; DOGGR=Division of Oil, Gas, and Geothermal Resources; ID=identification number; LA River=Los Angeles River; PSI=Preliminary Site Investigation; REC=recognized environmental condition; ROW=right-of-way; SSP=Standard Special Provisions; SVOC=semi-volatile organic compound; TCE=temporary construction easement; UST=underground storage tank; VOC=volatile organic compound

**Table 2.12-4. Adjoining Properties with Potential Impact on Alternatives 2 and 3 (Design Options A and B)**

| Site ID and Sheet ID[1] | APN and Address | Distance from Project Limits | Land Use | REC | Recommendation | Hazardous Risk Analysis |
|---|---|---|---|---|---|---|
| Site 5<br>Sheet 2 | 7271-020-908<br>960 De Forest Avenue | Adjacent<br><100 feet northeast | Metro/Industrial<br>Bus MAINTENANCE YARD<br>(Formerly UPRR Bulk Terminal) | A release of 18,000 gallons of xylenes from an underground pipe in 1979, a spill of an unknown quantity of petroleum product containing 2 percent benzene from a tank in 1990, a spill of 50 to 100 gallons of propylene glycol methyl ether in 1991, and multiple releases of sulfuric acid have been documented on the property. The potential media affected was soil, soil vapor, and groundwater.<br>Environmental assessment and cleanup activities were conducted from May 2007 through April 2012 and consisted of soil vapor extraction enhanced with thermal injection, as well as excavation and off-site disposal. An HHRA was conducted under three scenarios (vacant land, recreational, and commercial/industrial). The HHRA concluded that the cumulative health cancer risks were below the U.S. EPA risk threshold level for future indoor and outdoor workers and below a non-cancer hazard index of one for future outdoor workers. LARWQCB issued No Further Action for soil only on April 23, 2012.<br>Based on the up-gradient location of the property relative to the Project and the documented impacts on groundwater, this property presents a REC with potential to adversely impact the Project. | A No Further Action was received for soil contamination; however, the groundwater beneath the northeast portion of the proposed Project area may have been affected by the known release of contaminants to groundwater at the property. Based on the current design plans and technology to be implemented during the placement of bridge pilings, and based on no documentation in which groundwater has been remediated, Leighton recommends conducting an investigation of groundwater in the potentially affected proposed Project area to determine if special handling of construction waste water would be necessary and determine potential risks to construction workers. Interviews were requested with regulatory agency officials in efforts to conclude that groundwater remediation activities have been completed. However, after repeated attempts to contact regulatory agencies were unsuccessful. As a result, a PSI is recommended. | High |
| Site 6<br>Sheet 4 | 7271-023-900<br>970 West Chester Place | Adjacent<br><100 feet northeast | Public Park<br>(Formerly MTA Division 12 Bus Maintenance Facility) | The property has an open cleanup case with containments of concern consisting of diesel, gasoline, MTBE, TBA, and other fuel oxygenates. Potentially impacted media includes soil and groundwater.<br>TPH-g, MTBE, and TAME have been detected in groundwater at concentrations of 2,300 µg/L, 2,300 u µg/L, and 10 µg/L, respectively.<br>An HHRA was prepared in 2011 and assessed potential health impacts on residents and commercial workers from exposure to constituents detected in the soil matrix and shallow groundwater underlying the site. In August 2011, OEHHA agreed that the risks and hazards from the evaluated pathways were low, and the site did not pose an unacceptable risk. Case closure under the low threat closure policy was requested in July 2016.<br>Based on the up-gradient location of the property relative to the Project and the documented impacts on groundwater, this property presents a REC with potential to adversely impact the Project. | The groundwater beneath the northeast portion of the proposed Project area may have been affected by the known release of gasoline and diesel to groundwater at the property. Based on the current design plans and technology to be implemented during the placement of bridge pilings, and based on no formal case closure that has been received for this site, Leighton recommends conducting an investigation of groundwater in the potentially affected proposed Project area to determine if special handling of construction waste water would be necessary and determine potential risks to construction workers. Interviews were requested with regulatory agency officials in efforts to conclude that case closure was issued for this site. However, after repeated attempts to contact regulatory agencies were unsuccessful. As a result, a PSI is recommended. | High |
| Site 7<br>Sheet 2 | 7271-005-009<br>702 West Anaheim Street | Adjacent<br><100 feet north | Commercial/Industrial<br>Thrift store | Records indicate that a release of chlorinated solvents, including PCE, trichloroethylene, and vinyl chloride, and gasoline have occurred at the property and affected the soil, soil vapor, and groundwater at the property.<br>Based on the up-gradient location of the property relative to the Project and the documented impacts on groundwater, this property presents a REC with potential to adversely impact the Project. | The groundwater beneath the northeast portion of the proposed Project area may have been affected by the known release of chlorinated solvents to groundwater at the property. Based on the current design plans and technology to be implemented during the placement of bridge pilings, Leighton recommends conducting an investigation of groundwater in the potentially affected proposed Project area to determine if special handling of construction waste water would be necessary and determine potential risks to construction workers. A PSI is recommended. | High |

Notes:

[1] Refer to Figure 2.12-1 for site location.

APN=Assessor Parcel Number; EPA=Environmental Protection Agency; HHRA=Human Health Risk Assessment; ID=identification number; LARWQCB=Los Angeles Regional Water Quality Control Board; Leighton=Leighton Consulting; MTA=Metropolitan Transit Authority; MTBE=methyl tert-butyl ether; OEHHA=Office of Environmental Health Hazard Assessment; PCE=perchloroethylene; PSI=Preliminary Site Investigation; REC=recognized environmental condition; TAME=tert-amyl methyl ether; TBA=tert-butyl alcohol; TPH-g=total petroleum hydrocarbons-gasoline; UPRR=Union Pacific Railroad; U.S.= United States; µg/L=microgram per liter

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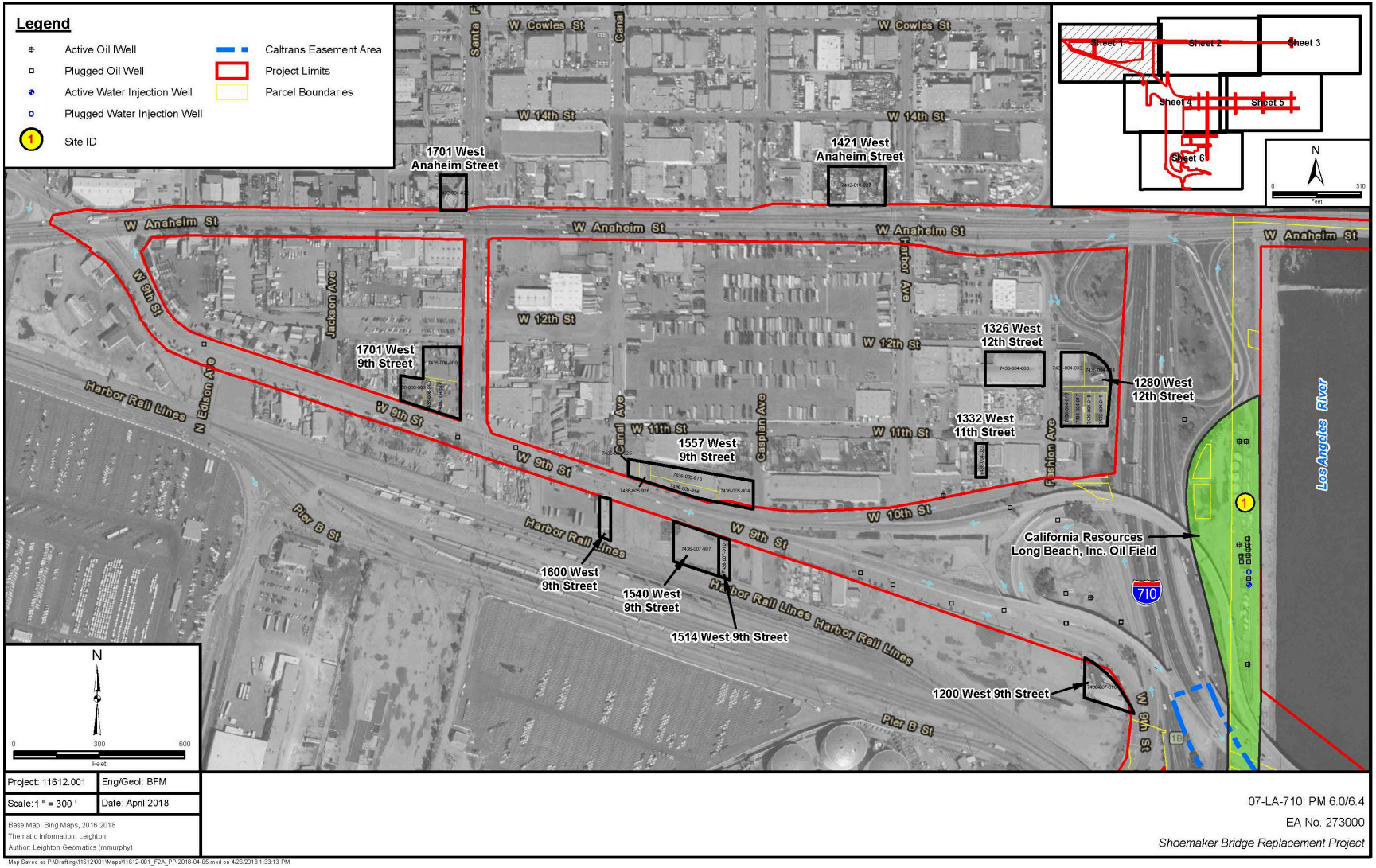


**Figure 2.12-1. Potential Hazardous Waste/Materials Sites (Sheet 1 of 6)**

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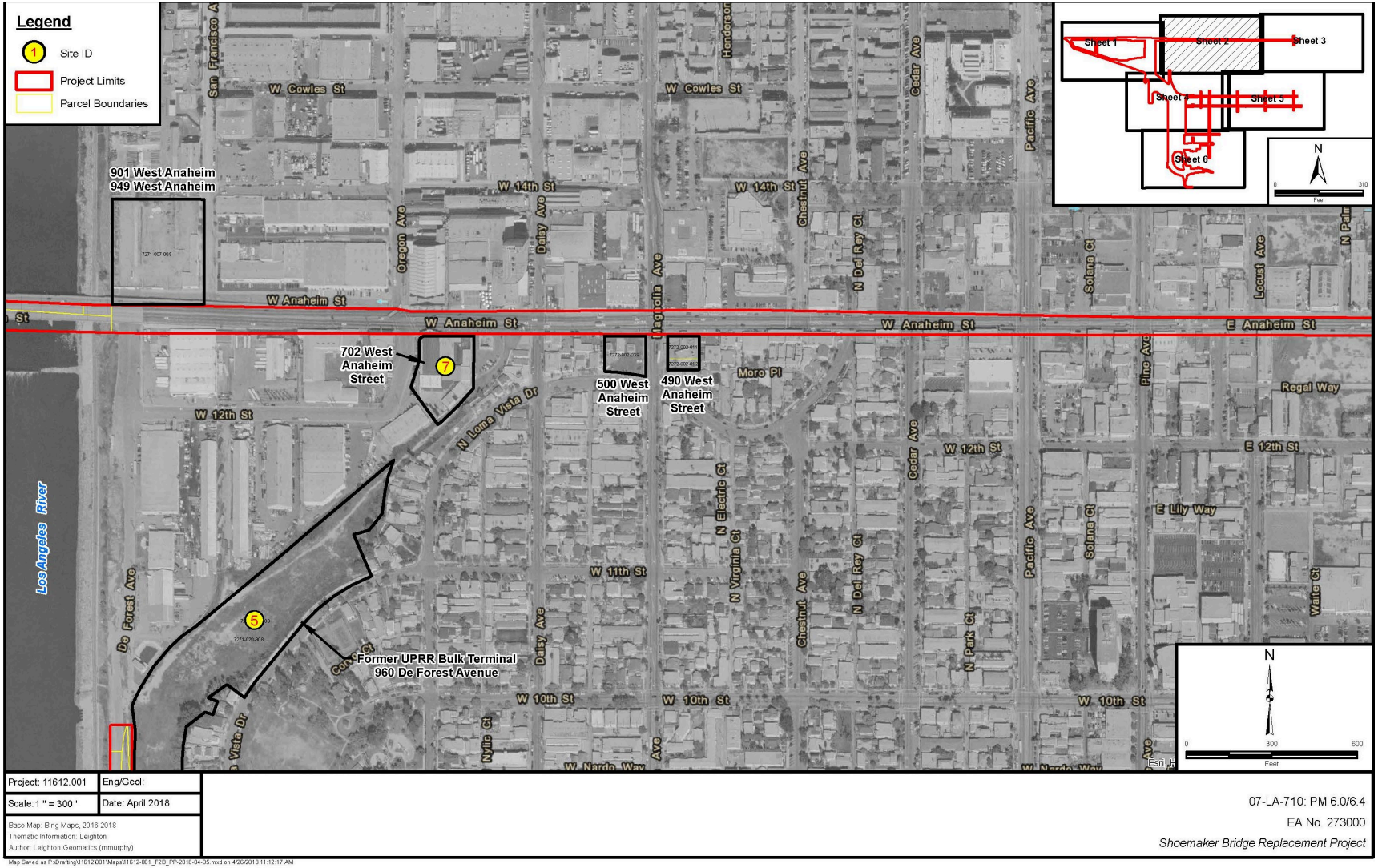


**Figure 2.12-1. Potential Hazardous Waste/Materials Sites (Sheet 2 of 6)**

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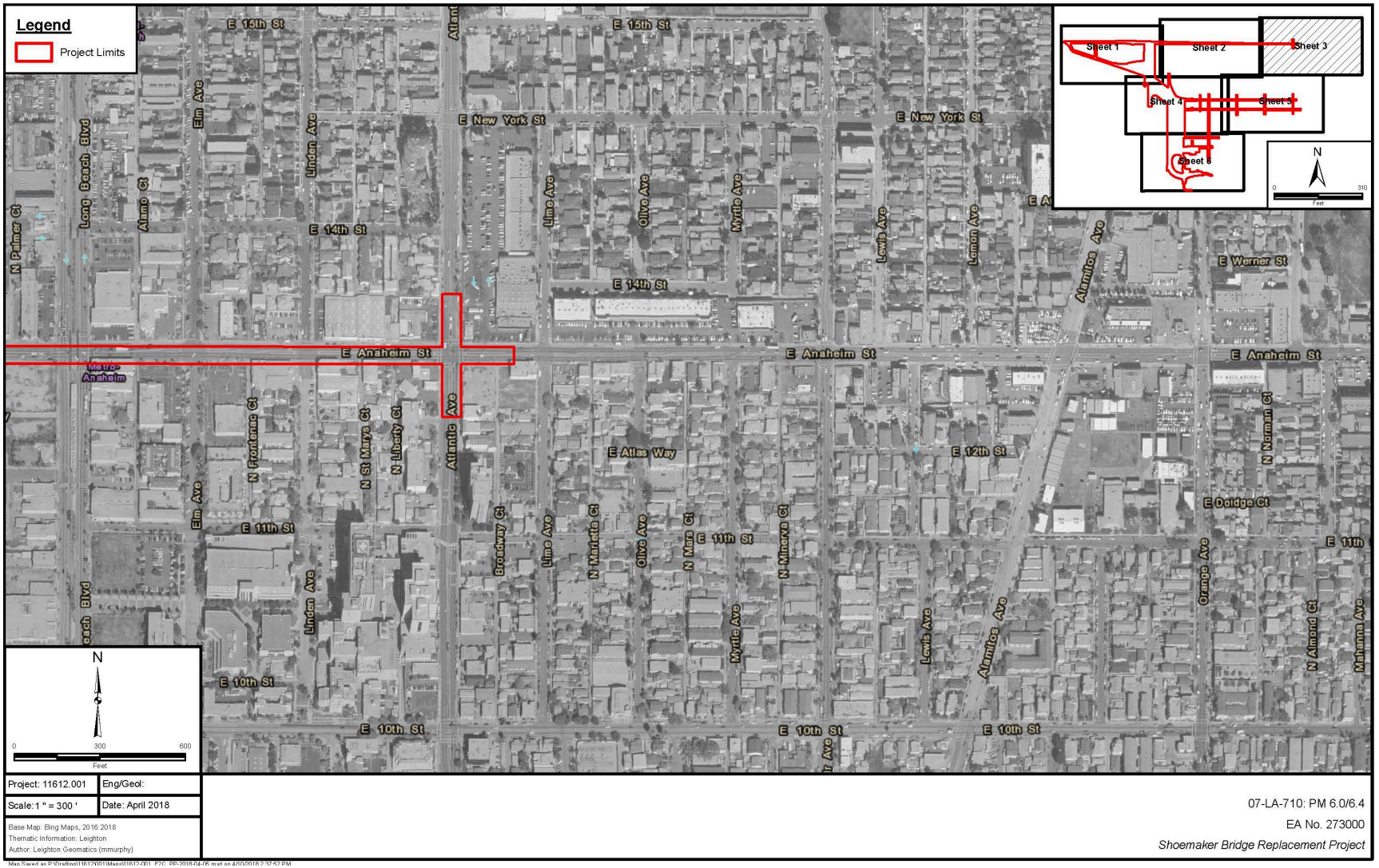


**Figure 2.12-1. Potential Hazardous Waste/Materials Sites (Sheet 3 of 6)**

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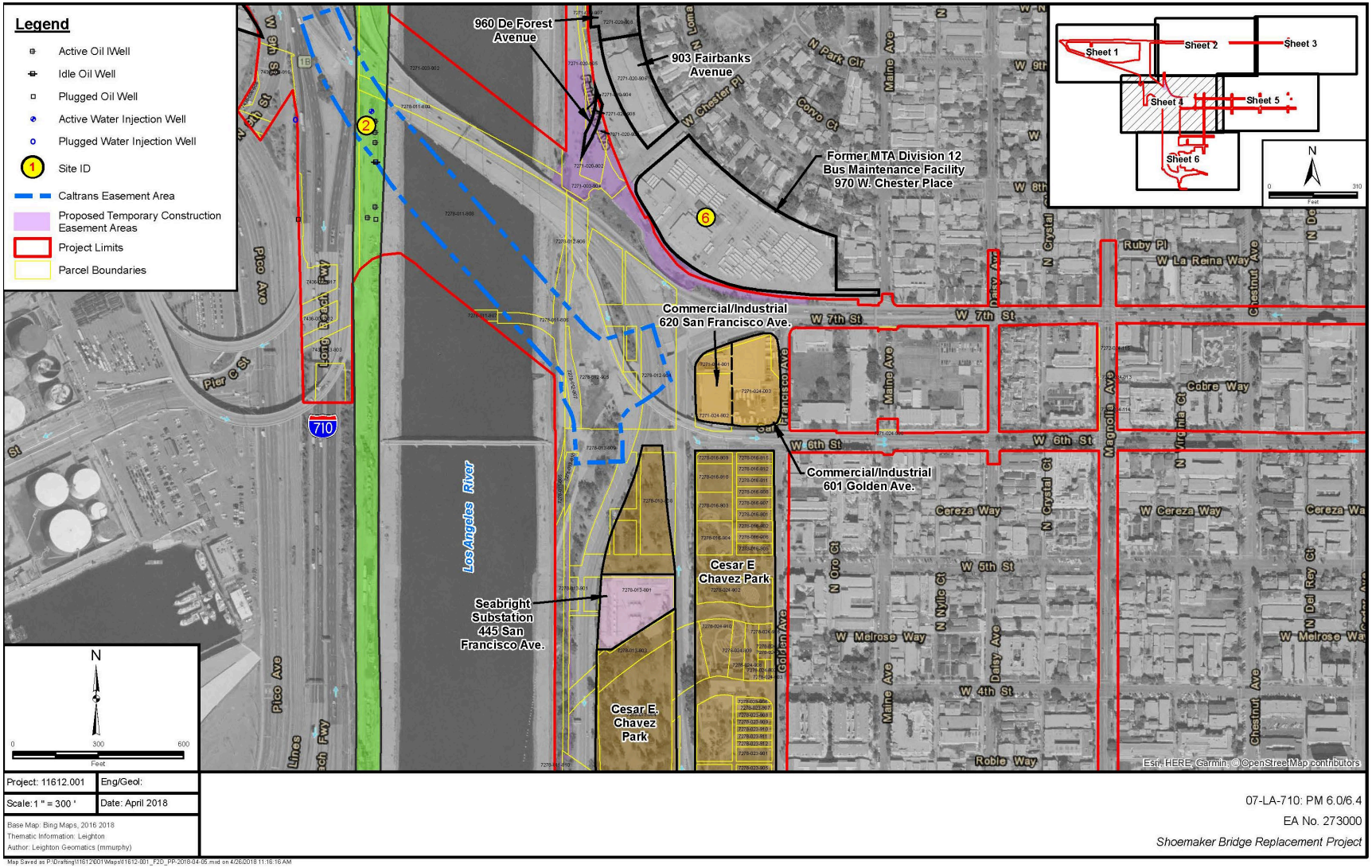


**Figure 2.12-1. Potential Hazardous Waste/Materials Sites (Sheet 4 of 6)**

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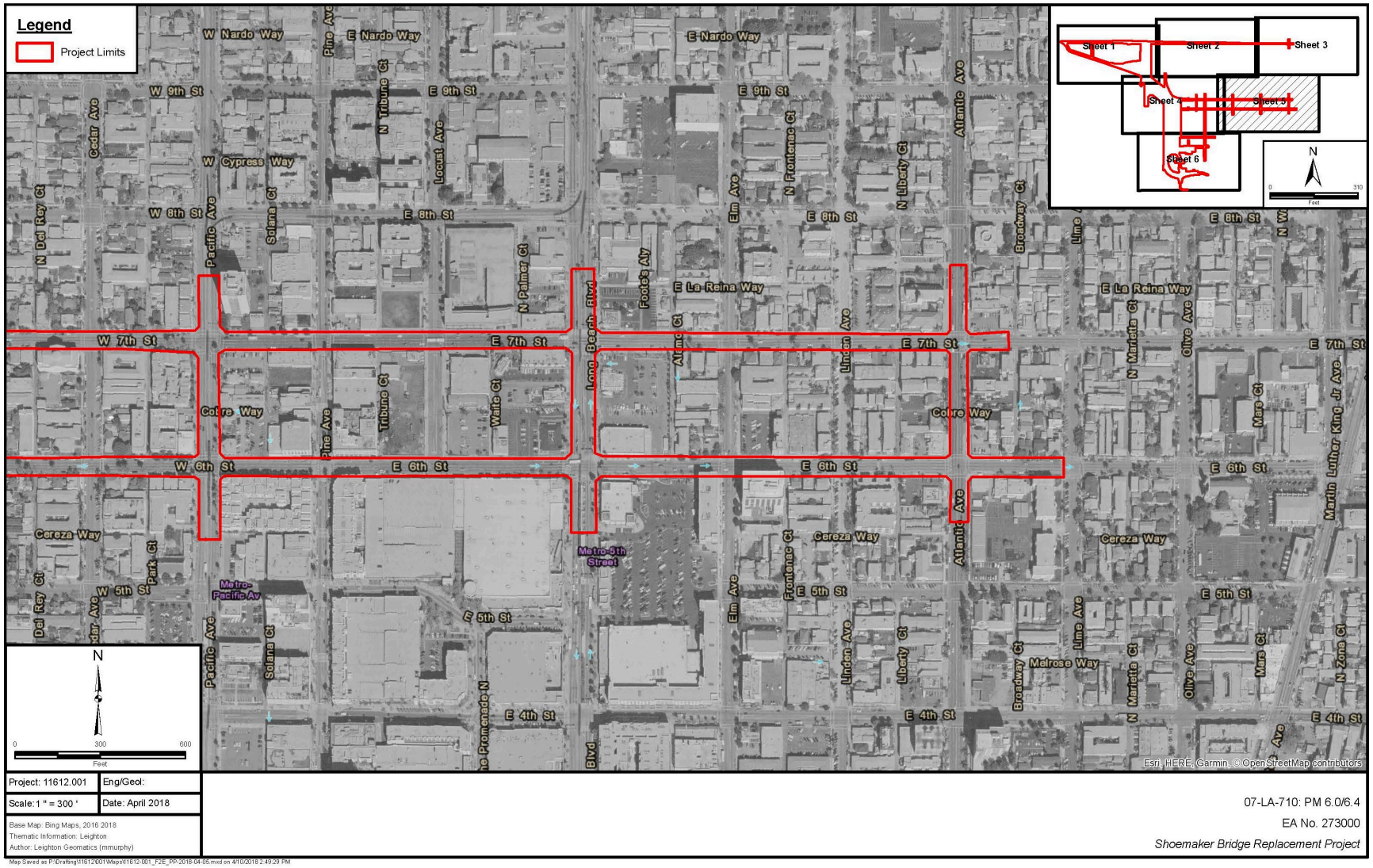


**Figure 2.12-1. Potential Hazardous Waste/Materials Sites (Sheet 5 of 6)**

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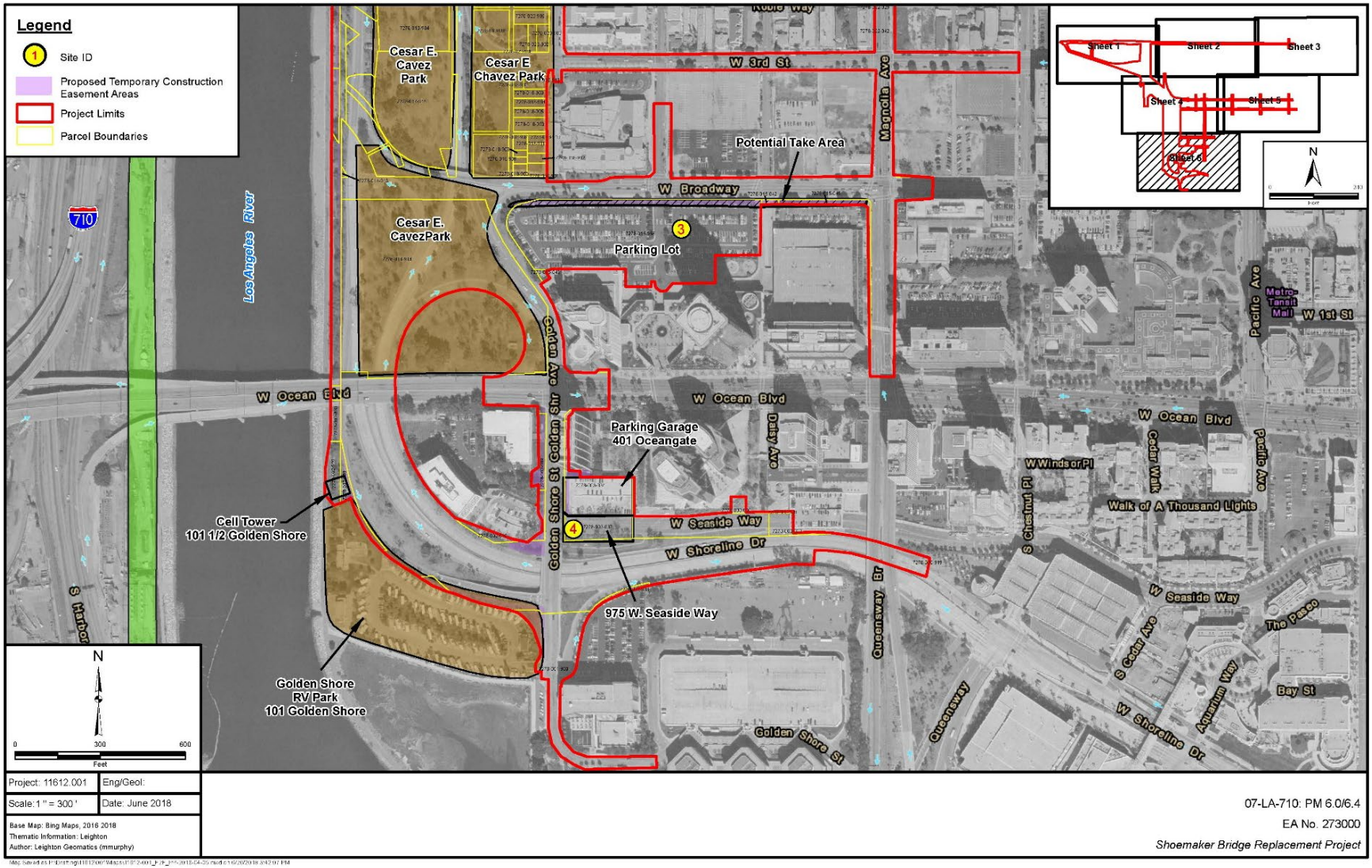


**Figure 2.12-1. Potential Hazardous Waste/Materials Sites (Sheet 6 of 6)**

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*Creosote and Pentachlorophenol*

Several telephone poles were observed within the Project limits. It is common practice to treat the wood used to make telephone poles, as well as fence posts, sill plates, landscape timbers, pilings, guardrails, and decking, with chemicals to protect the wood from insect attack and fungal decay. These chemicals include creosote and pentachlorophenol and require proper handling and disposal. Under Alternatives 2 and 3 (Design Options A and B), there is a potential the Project may require the removal of treated wooden telephone poles during construction. The removal of any wooden telephone poles would be conducted in accordance with Appendix XII of the CCR, Title 22, Division 4.5, Chapter 11, identified in Project Feature PF-52, below.

**PF-52** During construction, the City Resident Engineer will ensure that the removal of any wooden telephone poles would be conducted in accordance with Appendix XII of the CCR, Title 22, Division 4.5, Chapter 11.

With the inclusion of PF-52, no temporary substantial adverse impacts from worker exposure to creosote and pentachlorophenol associated with the removal of wooden telephone poles are anticipated under Alternatives 2 and 3 (Design Options A and B).

*Asbestos-Containing Materials/Lead-Based Paint*

Alternatives 2 and 3 (Design Options A and B) would require the modification or removal of structures, which may contain asbestos-containing materials (ACM) and lead-based paint (LBP). Alternatives 2 and 3 (Design Options A and B) would both require the removal of the Golden Shore grade separation over West Shoreline Drive. In addition, Alternative 2 (Design Options A and B) would include repurposing a portion of the existing Shoemaker Bridge for non-motorized transportation and recreational use, and Alternative 3 (Design Options A and B) would include the removal of the existing Shoemaker Bridge in its entirety. Any modification or removal of structures would require ACM and LBP surveys, as identified in Project Feature PF-53, below.

**PF-53** During the PS&E phase, the City will ensure that an ACM and LBP survey will be conducted for any structure requiring modification or removal. The City will ensure that the survey will be conducted in conformance with the U.S. EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR, SCAQMD Rule 1403, and in accordance with Caltrans SSP 14-11.13, Disturbance of Existing Paint Systems on Bridges, and Caltrans SSP 14-11.16, Asbestos-Containing Construction Materials in Bridges.

The modification or removal of LBP and ACM in bridges would be conducted in accordance with the U.S. EPA NESHAP 40 CFR, SCAQMD Rule 1403, and in accordance with Caltrans SSP 14-11.13, Disturbance of Existing Paint Systems on Bridges, and Caltrans SSP 14-11.16, Asbestos-Containing Construction Materials in Bridges. With the inclusion of PF-53, no temporary substantial adverse impacts from ACM and LBP associated with the modification or removal of structures are anticipated under Alternatives 2 and 3 (Design Options A and B).

*Lead and Chromium*

Elevated concentrations of lead and chromium may be present in the striping paint used on the existing roadways within the proposed Project limits. Under Alternatives 2 and 3 (Design Options A and B), there is a potential the Project may require removal or disturbance of paint striping during construction. Any removal or disturbance of paint striping would require sampling and analysis of yellow and white paint striping, as identified in Project Feature PF-54, below.

**PF-54** During the PS&E phase, the City will ensure lead and chromium sampling and analysis will be conducted of yellow and white paint striping that would be disturbed or removed by the Project. In addition, during construction, the City Resident Engineer will ensure the removal, handling, and disposal of yellow and white paint striping will be conducted in accordance with Construction Program Procedure Bulletin 99-2, Caltrans SSP 14-11.12, Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue, and Caltrans SSP 36-4, Residual Containing Lead from Paint and Thermoplastic.

The removal, handling, and disposal of yellow and white paint striping would be performed in accordance with Construction Program Procedure Bulletin 99-2, Caltrans SSP 14-11.12, Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue, and Caltrans SSP 36-4, Residual Containing Lead from Paint and Thermoplastic. With the inclusion of PF-54, no temporary substantial adverse impacts from lead and chromium associated with the removal or disturbance of paint striping are anticipated under Alternatives 2 and 3 (Design Options A and B).

*Polychlorinated Biphenyls*

PCBs were once used as industrial chemicals whose high stability contributed to both their commercial usefulness and long-term deleterious environmental and health effects. PCBs can be present in coolants or lubricating oils used in older electrical transformers, hydraulic systems, and other similar equipment. In 1979, the U.S. EPA generally prohibited the domestic use of PCBs in electrical capacitors, electrical transformers, vacuum pumps, hydraulic pumps, and gas turbines.

Several pole- and pad-mounted transformers were observed within the Project limits. In addition, the SCE Seabright Substation was observed within the Project limits, which may also contain PCBs. Under Alternatives 2 and 3 (Design Options A and B), there is a potential the Project may require the removal or disturbance of transformers during construction. Any removal or disturbance of transformers would require sampling for PCBs, as identified in Project Feature PF-55, below.

**PF-55** During the PS&E phase, the City will ensure PCB sampling will be conducted for any pole- or pad-mounted transformers and substations, including the SCE Seabright Substation, which would be disturbed or removed as part of the Project.

With the inclusion of PF-55, no temporary substantial adverse impacts from PCBs associated with transformers are anticipated under Alternatives 2 and 3 (Design Options A and B).

*Underground Utilities*

There are known underground transmission lines and facilities within the Project limits, which may be impacted under Alternatives 2 and 3 (Design Options A and B) during ground-disturbing activities associated with construction. USAs would be notified at least 2 days prior to ground-disturbing activities to enable all utility owners within the Project disturbance limits to identify the locations of known underground transmission lines and facilities, as identified in Project Feature PF-56, below.

**PF-56** During construction, the City Resident Engineer will ensure USA will be notified at least 2 days prior to ground-disturbing activities to enable all utility owners within the Project disturbance limits to identify the locations of known underground transmission lines and facilities.

With the inclusion of PF-56, no temporary substantial adverse impacts from encountering underground utility lines are anticipated under Alternatives 2 and 3 (Design Options A and B).

*Unknown Hazards*

Because of existing and past land uses and operation activities of facilities within and adjacent to the Project limits, there is a potential for the Project under Alternatives 2 and 3 (Design Options A and B) to encounter unknown hazards during construction, such as soil contamination and buried drums and underground tanks containing hazardous waste/materials. In addition, shallow groundwater (5 to 12 feet bgs) exist within and adjacent to the Project limits. It is likely that groundwater would be encountered during construction activities, which may also be contaminated. Any encountering of unknown hazards would follow the hazards procedures described in Chapter 7, Environmental Stewardship, of the Caltrans Construction Manual (Caltrans 2017a). In addition, a health and safety plan, a construction contamination management plan, and a construction contingency plan would be prepared prior to construction to protect worker health and safety and the environment, as identified in Project Feature PF-57, below. The results from any PSIs that are conducted for sites listed in Avoidance and Minimization Measures HAZ-1 through HAZ-9 (Section 2.12.4) will also be used to prepare these plans, as identified in Project Feature PF-58.

**PF-57** Prior to construction, the City Resident Engineer will ensure the preparation of the following plans to protect worker health and safety and the environment:

- **Health and Safety Plan:** A certified industrial hygienist will prepare a health and safety plan to guide all construction activities. The health and safety plan would identify all potential hazards and contain specific procedures for encountering expected and unexpected contaminants. It would prescribe safe work practices, contaminant monitoring, personal protective equipment, emergency response procedures, and safety training requirements to protect constructions workers and third parties.
- **Construction Contaminant Management Plan:** A soils and groundwater construction contaminant management plan will be prepared. This plan would include procedures for contaminant monitoring and identification, temporary storage, handling, treatment, and disposal of waste and materials.
- **Construction Contingency Plan:** A construction contingency plan will be prepared with guidance provided in Chapter 7, Environmental Stewardship, of the Caltrans Construction Manual (Caltrans 2017a) for the handling and dealing of unknown hazards. This plan would include provisions for responding to events, such as the discovery of unidentified USTs, hazardous material, petroleum hydrocarbons, or hazardous or solid wastes during construction. This plan would address UST decommissioning, field screening, and material testing methods, mitigation and contaminant management requirements, and health and safety requirements for construction workers.

**PF-58** During the PS&E phase and prior to start of construction and any parcel dedications, the City will ensure all recommended PSI activities are conducted for the eight properties described in Table 2.12-3 and Table 2.12-4, which are also referenced in Avoidance and Minimization Measures HAZ-1 through HAZ-9 in Section 2.12.4. The results of the PSIs will be used to determine appropriate measures to manage contaminated soil and groundwater and disposal options during construction. The PSI results would also be used to prepare the Health and Safety Plan, Construction Contaminant Management Plan, Construction Contingency Plan, as well as a Lead Compliance Plan if one is needed per the PSI results.

With the inclusion of hazards procedures described in Chapter 7, Environmental Stewardship, of the Caltrans Construction Manual (Caltrans 2017a) and Project Features PF-57 and PF-58, no temporary substantial adverse impacts from encountering unknown hazardous are anticipated under Alternatives 2 and 3 (Design Options A and B).

*Hazardous Materials Used and Hazardous Waste Generated During Construction*

During construction, Alternatives 2 and 3 (Design Options A and B) would require the use of hazardous materials (e.g., solvents, paints, oils, fuels) and would also generate hazardous waste (e.g., removal or modification of structures). The handling, storing, and disposal of hazardous waste would be conducted in all federal, state, and local regulatory agency requirements. Therefore, no temporary substantial adverse impacts from the handling, storing, and disposal of hazardous waste are anticipated under Alternatives 2 and 3 (Design Options A and B).

*Oil/Gas Wells and Injection Wells*

During construction, Alternatives 2 and 3 (Design Options A and B) have the potential to encounter active and plugged oil/gas wells and water injection wells associated with APNs 7271-003-902 and 7278-011-908, which are located within the proposed Project limits. The Project will avoid building over any plugged and abandoned wells. However, in the event a well cannot be avoided or is encountered during construction, the City Resident Engineer will notify the Department of Conservation's Division of Oil, Gas, and Geothermal Resource to determine if any remediation operations may be required, as described in Project Feature PF-59, below.

**PF-59** During construction, the Project will avoid building over any plugged and abandoned wells. However, if any wells, including any plugged, abandoned or unrecorded wells, are damaged or uncovered during excavation or grading, remedial plugging operations may be required. If such damage or discovery occurs, the Department of Conservation's Division of Oil, Gas, and Geothermal Resource district office will be contacted to obtain information on the requirements and approval to perform remedial operations.

With the inclusion of PF-59, no temporary substantial adverse impacts from encountering wells are anticipated under Alternatives 2 and 3 (Design Options A and B).

### 2.12.3.2 Permanent Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not change the existing physical environment; therefore, no permanent impacts on the surrounding environment, as a result of a release or exposure to hazardous waste or hazardous materials, would occur.

### Alternatives 2 and 3 (Design Options A and B)

Routine maintenance activities during operation of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would be required to follow applicable regulations with respect to the use, storage, handling, transport, and disposal of potentially hazardous materials. Therefore, the operation of the proposed Project would not result in substantial adverse direct or indirect permanent impacts related to hazardous waste or materials.

## 2.12.4 Avoidance, Minimization, and/or Mitigation Measures

In addition to the Project features identified above, the following avoidance and minimization measures will be implemented to avoid and/or minimize temporary impacts from hazards or hazardous waste/materials during construction under Alternatives 2 and 3 (Design Options A and B).

It is understood that if a PSI identifies site contamination, avoidance, minimization, and/or mitigation measures will be determined at that time and property owners are legally responsible for the cleanup of contamination on their private properties. If these PSIs determine that there is contamination present on that property that cannot be mitigated, measures to avoid the acquisition or temporary or permanent easement of the property may be implemented to avoid encountering the area of contamination during construction or maintenance activities. If acquisition limits cannot be adjusted, minimization measures may include indemnification, reduction in price, or acquisition as highway easement instead of in fee.

Acquisition of contaminated property must comply with applicable Caltrans directives, including the Caltrans Project Delivery Directive PD 02. If contamination is present when property is to be transferred to Caltrans, the impact of this contamination must be evaluated, and the transfer may be contingent upon acceptance of liability by the Caltrans Chief Engineer.

**HAZ–1** During the plans, specifications and estimate (PS&E) phase, the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed for soil and groundwater within historical railroad right-of-way (ROW) that would be disturbed by the Shoemaker Bridge Replacement Project (Project). The PSI would assess for the presence of petroleum hydrocarbons, asbestos, volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), and metals.

**HAZ-2** During the plans, specifications and estimate (PS&E) phase, the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed at Assessor Parcel Number (APN) 7271-003-902 in the area that would be disturbed by the Shoemaker Bridge Replacement Project (Project). The PSI would assess for the presence of petroleum hydrocarbons in soil and groundwater in the vicinity of the active and plugged oil/gas wells located along the western side of the Los Angeles River (LA River). The City, as the Certified Unified Program Authority (CUPA) has authority to direct property owners to mitigate hazardous materials and waste releases within their jurisdiction that may impact the project alternatives. If the PSI identifies contamination that impacts the Project alternative, the CUPA will direct the property owner to mitigate the contamination within the limits of the alternative.

**HAZ-3** During the plans, specifications and estimate (PS&E) phase, the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed at Assessor Parcel Number (APN) 7278-011-908 in the area that would be disturbed by the Shoemaker Bridge Replacement Project (Project). The PSI would assess for the presence of petroleum hydrocarbons in soil and groundwater in the vicinity of the active and plugged oil/gas wells,

aboveground storage tanks (AST), and other storage containers used to store hazardous materials. If the PSI identifies contamination that impacts the Project alternative, the Certified Unified Program Authority (CUPA) will direct the property owner to mitigate the contamination prior to acquisition for the alternative. If a delay in acquisition is not possible, the City will take possession of the portion of property needed for the alternative and hold the parcel until all mitigation is complete.

**HAZ-4** During the plans, specifications and estimate (PS&E) phase, the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed within the area that would be disturbed by the Shoemaker Bridge Replacement Project (Project) for Assessor Parcel Number (APN) 7278 015 955 (624 700 West Broadway and 829 West Broadway). The PSI would assess for the presence of petroleum hydrocarbons in soil and groundwater. If the PSI identifies contamination that impacts the Project alternative, the Certified Unified Program Authority (CUPA) will direct the property owner to mitigate the contamination prior to acquisition for the alternative. If a delay in acquisition is not possible, the City will take possession of the portion of property needed for the alternative and hold the parcel until all mitigation is complete.

**HAZ-5** During the plans, specifications and estimate (PS&E) phase, the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed within the area that would be disturbed by the Shoemaker Bridge Replacement Project (Project) for Assessor Parcel Number (APN) 7278 003 037 (975 West Seaside Way). The PSI would assess for the presence of petroleum hydrocarbons in soil and groundwater. If the PSI identifies contamination that impacts the Project alternative, the Certified Unified Program Authority (CUPA) will direct the property owner to mitigate the contamination prior to acquisition for the alternative. If a delay in acquisition is not possible, the City will take possession of the portion of property needed for the alternative and hold the parcel until all mitigation is complete.

**HAZ-6** During the plans, specifications and estimate (PS&E) phase the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed in the area that would be disturbed by the Shoemaker Bridge Replacement Project (Project), adjacent to APN 7271-020-908 (960 De Forest Avenue). The PSI would assess for the presence of petroleum hydrocarbons in groundwater. If the PSI identifies contamination that impacts the Project alternative, the Certified Unified Program Authority (CUPA) will direct the property owner to mitigate the contamination within the Project limits of the alternative.

**HAZ-7** During the plans, specifications and estimate (PS&E) phase, the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed in the area that would be disturbed by the Shoemaker Bridge Replacement Project (Project), adjacent to APN 7271-023-900 (970 West Chester Place). The PSI would assess for the presence of petroleum hydrocarbons in groundwater. If the PSI identifies contamination that impacts the Project alternative, the Certified Unified Program Authority (CUPA) will direct the property owner to mitigate the contamination within the Project limits of the alternative.

**HAZ-8** During the plans, specifications and estimate (PS&E) phase, the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed in the area that would be disturbed by the Shoemaker Bridge Replacement Project (Project), adjacent to Assessor Parcel Number (APN) 7271-005-009 (702 West Anaheim Street). The PSI would assess for the presence of chlorinated solvents in groundwater. If the PSI identifies contamination that impacts the Project alternative, the Certified Unified Program Authority (CUPA) will direct the property owner to mitigate the contamination within the Project limits of the alternative.

**HAZ-9** During the plans, specifications, and estimates (PS&E) phase, the City of Long Beach (City) will draft a non-standard specification (NSSP) 14-11.11 that will address the handling, containerizing, transporting, and disposing of hazardous waste generated during construction activities for the Project based on findings of the Preliminary Site Investigations (PSI) recommended in the avoidance and minimization measures identified in Section 2.12.4, Avoidance, Minimization, and Mitigation Measures. This project specific NSSP will serve as a special provision that will be approved by the Caltrans Division of Environmental Analysis – Hazardous Waste, Air, Noise, and Paleontology Office (HWANP) prior to acceptance by the Caltrans District 7 Office Engineer (OE) and will be included in the project's PS&E package.

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# 2.13 Air Quality

## 2.13.1 Regulatory Setting

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality while the California Clean Air Act is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (ARB), set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and state ambient air quality standards have been established for criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide ($NO_2$), ozone ($O_3$), particulate matter (PM), which is broken down for regulatory purposes into particles of 10 micrometers or smaller ($PM_{10}$) and particles of 2.5 micrometers and smaller ($PM_{2.5}$), Lead (Pb), and sulfur dioxide ($SO_2$). In addition state standards exist for visibility reducing particles, sulfates, hydrogen sulfide ($H_2S$), and vinyl chloride. The NAAQS and state standards are set at levels that protect public health with a margin of safety, and are subject to periodic review and revision. Both state and federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under the National Environmental Policy Act (NEPA). In addition to this environmental analysis, a parallel "Conformity" requirement under the FCAA also applies.

*Conformity*

The conformity requirement is based on FCAA Section 176(c), which prohibits the U.S. Department of Transportation (USDOT) and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to State Implementation Plan (SIP) for attaining the NAAQS. "Transportation Conformity" applies to highway and transit projects and takes place on two levels: the regional (or planning and programming) level and the project level. The proposed Project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and "maintenance" (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. U.S. EPA regulations at 40 Code of Federal Regulations (CFR) 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for carbon monoxide (CO), nitrogen dioxide ($NO_2$), ozone ($O_3$), particulate matter ($PM_{10}$ and $PM_{2.5}$), and in some areas (although not in California), sulfur dioxide ($SO_2$).

California has attainment or maintenance areas for all of these transportation-related "criteria pollutants" except SO2, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the FCAA to be covered in transportation conformity analysis. Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years (for the RTP), and 4 years (for the FTIP). RTP and FTIP conformity uses travel demand and emission models to determine whether or not the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements

of the Clean Air Act and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA), make the determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the Clean Air Act. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept, scope, and "open-to-traffic" schedule of a proposed transportation project are the same as described in the RTP and the FTIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Project-level conformity is achieved by demonstrating that the project comes from a conforming RTP and TIP; the Project has a design concept and scope[1] that has not changed significantly from those in the RTP and TIP; Project analyses have used the latest planning assumptions and EPA-approved emissions models; and in PM areas, the Project complies with any control measures in the SIP. Furthermore, additional analyses (known as hot-spot analyses) may be required for projects located in CO and PM nonattainment or maintenance areas to examine localized air quality impacts.

## 2.13.1 Affected Environment

This section is based on the *Air Quality Analysis Report* (AQAR) (Caltrans 2019g) prepared for the Project.

### 2.13.1.1 Climate

The proposed Project is in Los Angeles County, an area within the South Coast Air Basin (SCAB), which includes Orange County and the nondesert parts of Los Angeles, Riverside, and San Bernardino Counties. Air quality regulation in the SCAB is administered by the SCAQMD.

The SCAB climate is determined by its terrain and geographical location. The SCAB is a coastal plain with connecting broad valleys and low hills. The Pacific Ocean forms the southwestern boundary of the SCAB, and high mountains surround the rest of the SCAB. The region lies in the semipermanent high pressure zone of the eastern Pacific Ocean. The resulting climate is mild and tempered by cool ocean breezes. This climatological pattern is rarely interrupted; however, periods of extremely hot weather, winter storms, and Santa Ana wind conditions occur in the SCAB.

The annual average temperature varies little throughout the SCAB, ranging from the low to middle 60s (measured in degrees Fahrenheit [°F]). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station closest to the Project limits is the San Pedro Station. The annual average maximum temperature recorded at this station is 68.7°F, and the annual average minimum is 54.4°F. January is typically the coldest month in this area of the SCAB.

The majority of rainfall in the SCAB occurs between November and April. Summer rainfall is minimal and generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern part of the SCAB along the coastal side of the mountains. The climatological station closest to the Project limits that monitors precipitation is the San Pedro Station. Average rainfall measured at this station varied from a high of 2.37 inches in February to 0.25 inch or less between May and September, with an average annual total of 10.69 inches.

[1] "Design concept" means the type of facility that is proposed, such as a freeway or arterial highway. "Design scope" refers to those aspects of the project that would clearly affect capacity and thus any regional emissions analysis, such as the number of lanes and the length of the project.

The SCAB experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed from midafternoon to late afternoon on hot summer days, when the smog appears to clear up suddenly. Winter inversions frequently break by midmorning.

Winds near the Project limits blow predominantly from the west and southwest at relatively low velocities, with wind speeds averaging 4 miles per hour. Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion, limit the vertical dispersion of air pollutants throughout the SCAB. Strong, dry, northerly or northeasterly winds, known as Santa Ana winds, occur during the fall and winter months, dispersing air contaminants. Santa Ana conditions tend to last for several days.

Inversion layers have a substantial role in determining $O_3$ formation. $O_3$ and its precursors will mix and react to produce higher concentrations under an inversion. The inversion will also simultaneously trap and hold directly emitted pollutants, such as carbon dioxide ($CO_2$). $PM_{10}$ is both directly emitted and created indirectly in the atmosphere as a result of chemical reactions. Concentration levels are directly related to inversion layers due to the limitation of mixing space.

The combination of stagnant wind conditions and low inversions produces the greatest concentration of pollutants. On days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are CO and $NO_X$ because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and $NO_X$ to form photochemical smog.

## 2.13.2 Monitored Air Quality

The SCAQMD operates several air quality monitoring stations within the SCAB. The closest monitoring stations to the Project area are the Long Beach Stations, located at 2425 Webster Street and 1305 East Pacific Coast Highway in the City. Table 2.13-1 lists air quality trends identified from data collected at these air quality monitoring stations between 2013 and 2017. The locations of the two stations are shown on Figure 2.13-1.

## Table 2.13-1. Local Air Quality Levels

| Pollutant | Standard | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|
| ***Ozone[1]*** | | | | | | |
| Max 1-hr concentration | | 0.087 | 0.087 | 0.079 | 0.082 | 0.074 |
| No. days exceeded: State | 0.09 ppm | 0 | 0 | 0 | 0 | 0 |
| Max 8-hr concentration | | 0.072 | 0.066 | 0.059 | 0.068 | 0.063 |
| No. days exceeded: State<br><br>Federal | 0.070 ppm<br>0.070 ppm | 0<br>1 | 0<br>0 | 0<br>0 | 0<br>0 | 0<br>0 |
| ***Carbon Monoxide[1]*** | | | | | | |
| Max 1-hr concentration | | 3.7 | 3.3 | 3.3 | 3.9 | 4.7 |
| No. days exceeded: State<br><br>Federal | 20 ppm<br>35 ppm | 0<br>0 | 0<br>0 | 0<br>0 | 0<br>0 | 0<br>0 |
| Max 8-hr concentration | | 2.6 | 2.2 | 2.2 | 2.6 | 2.1 |
| No. days exceeded: State<br><br>Federal | 9.0 ppm<br>9 ppm | 0<br>0 | 0<br>0 | 0<br>0 | 0<br>0 | 0<br>0 |
| ***$PM_{10}$[2]*** | | | | | | |
| Max 24-hr concentration | | 59 | 62 | 56 | 70.9 | 55.7 |
| No. days exceeded: State<br><br>Federal | 50 µg/m$^3$<br>150 µg/m$^3$ | 2<br>0 | 2<br>0 | 3<br>0 | 2<br>0 | 1<br>0 |
| Max annual concentration | | 26.6 | 26.5 | 27.8 | 14.7 | 24.4 |
| exceeded: State? | 20 µg/m$^3$ | Yes | Yes | Yes | No | Yes |
| ***$PM_{2.5}$[2]*** | | | | | | |
| Max 24-hr concentration | | 52.2 | 48.3 | 28.9 | 56.3 | 77.3 |
| No. days exceeded: Federal | 35 µg/m$^3$ | 2 | 4 | 0 | 5 | 6 |

## Table 2.13-1. Local Air Quality Levels

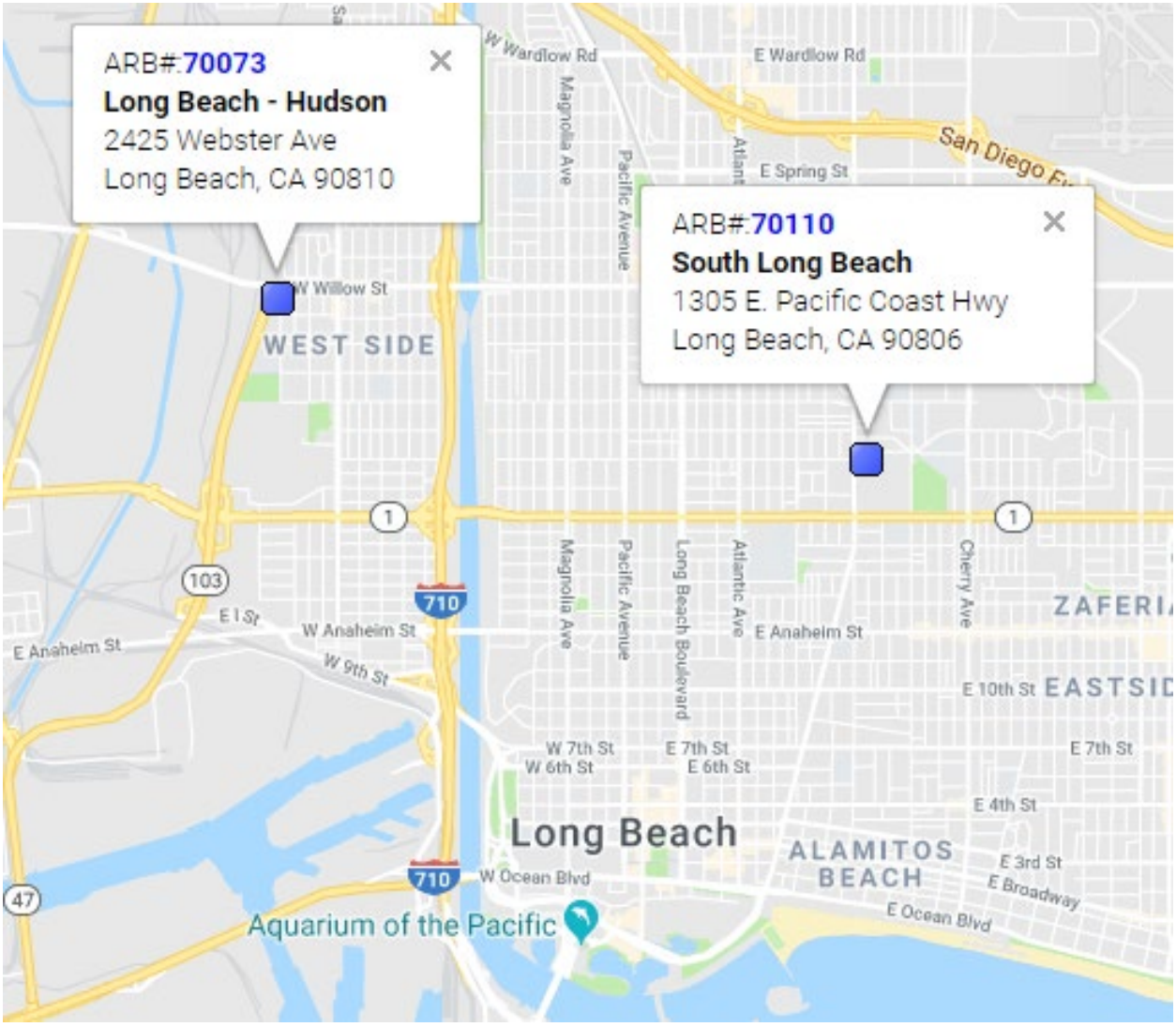
| Pollutant | Standard | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|
| Max annual concentration | | NA | 10.2 | 9.5 | 11.0 | 11.6 |
| exceeded: State?<br><br>Federal? | 12 µg/m$^3$<br>12.0 µg/m$^3$ | NA<br>NA | No<br>No | No<br>No | No<br>No | No<br>No |
| ***Nitrogen Dioxide[1]*** | | | | | | |
| Max 1-hr concentration | | 135.9 | 101.8 | 75.6 | 89.5 | 85.3 |
| No. days exceeded: State<br><br>Federal | 180 ppb<br>100 ppb | 0<br>2 | 0<br>1 | 0<br>0 | 0<br>0 | 0<br>0 |
| Max annual concentration | | 21 | 21 | 19 | 18 | 17 |
| exceeded: State?<br><br>Federal? | 30 ppb<br>53 ppb | No<br>No | No<br>No | No<br>No | No<br>No | No<br>No |

Notes:

Measurements recorded at the 2425 Webster Street, Long Beach Station, for O3, CO, and NO2; measurements recorded at the 1305 East Pacific Coast Highway, Long Beach Station, for PM10 and PM2.5.

CO=carbon monoxide; NA=not applicable; No.=number; NO2=nitrogen dioxide; O3=ozone; PM2.5=particulate matter broken down into particles less than 2.5 micrometers (microns) in aerodynamic diameter; PM10=particulate matter broken down into particles of 10 micrometers (microns) or less; ppb=parts per billion; ppm=parts per million; µg/m3=micrograms per cubic meter

**Figure 2.13-1. Map of Air Quality Monitoring Stations Located Near the Project**




### 2.13.2.1 Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive populations (sensitive receptors) that are in proximity to localized sources of toxics and CO are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The majority of the sensitive receptors within or adjacent to the Project area are residential, park, and school uses.

### 2.13.2.2 Criteria Pollutant Attainment/Nonattainment Status

The FCAA requires the U.S. EPA to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the NAAQS have been achieved. The federal standards are summarized in Table 2.13-2. The U.S. EPA has classified the SCAB as attainment/maintenance for CO, $PM_{10}$, and $NO_2$, and nonattainment for $O_3$ and $PM_{2.5}$.

The national and California Ambient Air Quality Standards (CAAQS) for the criteria pollutants are summarized in Table 2.13-2.

Air quality monitoring stations are located throughout the nation and maintained by the local air districts and state air quality regulating agencies. Data collected at permanent monitoring stations are used by the U.S. EPA to identify regions as attainment, nonattainment, or maintenance, depending on whether the regions meet the requirements stated in the primary NAAQS.

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## Table 2.13-2. State and Federal Criteria Air Pollutant Standards, Effects, and Sources

| Pollutant | Averaging Time | State Standard9 | Federal Standard9 | Principal Health and Atmospheric Effects | Typical Sources | Attainment Status |
|---|---|---|---|---|---|---|
| $O_3$[2] | 1 hour<br>8 hours | 0.09 ppm<br>0.070 ppm<br>— | —[4]<br>0.070 ppm[6] (4th highest in 3 years) | High concentrations irritate lungs. Long-term exposure may cause lung tissue damage and cancer. Long- term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include many known TACs. Biogenic VOC may also contribute. | Low-altitude $O_3$ is almost entirely formed from ROG or VOC and $NO_x$ in the presence of sunlight and heat. Major sources include motor vehicles and other mobile sources, solvent evaporation, and industrial and other combustion processes. | Federal:<br>Extreme Nonattainment (8-hour)<br>State:<br>Nonattainment (1-hour and 8-hour) |
| CO | 1 hour<br>8 hours<br>8 hours (Lake Tahoe) | 20 ppm<br>9.0 ppm[1]<br>6 ppm | 35 ppm<br>9 ppm<br>— | CO interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen. CO also is a minor precursor for photochemical $O_3$. | Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale. | Federal:<br>Attainment/Maintenance State:<br>Attainment |

## Table 2.13-2. State and Federal Criteria Air Pollutant Standards, Effects, and Sources

| Pollutant | Averaging Time | State Standard9 | Federal Standard9 | Principal Health and Atmospheric Effects | Typical Sources | Attainment Status |
|---|---|---|---|---|---|---|
| Respirable Particulate Matter ($PM_{10}$)[2] | 24 hours<br>Annual | 50 µg/$m^3$<br>20 µg/$m^3$ | 150 µg/[3]<br>—[2]<br>(expected number of days above standard < or equal to 1) | Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased cancer and mortality. Contributes to haze and reduced visibility. Includes some TACs. Many aerosol and solid compounds are part of $PM_{10}$. | Dust- and fume-producing industrial and agricultural operations; combustion smoke; atmospheric chemical reactions; construction and other dust-producing activities; unpaved road dust and re-entrained paved road dust; natural sources. | Federal: Attainment/Maintenance State: Nonattainment |
| Fine Particulate Matter ($PM_{2.5}$)[2] | 24 hours<br><br>Annual 24 hours (conformity process[5])<br><br>Secondary Standard (annual; also for conformity purposes) | —<br>12 µg/$m^3$<br>— | 35 µg/$m^3$<br>12.0 µg/$m^3$<br><br>15 µg/$m^3$ (98th percentile over 3 years) | Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most DPM – a TOC – is in the $PM_{2.5}$ size range. Many toxic and other aerosol and solid compounds are part of $PM_{2.5}$. | Combustion including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; also formed through atmospheric chemical (including photochemical) reactions involving other pollutants including NOx, SOx, ammonia, and ROG. | Federal: Moderate Nonattainment State: Nonattainment |

## Table 2.13-2. State and Federal Criteria Air Pollutant Standards, Effects, and Sources

| Pollutant | Averaging Time | State Standard9 | Federal Standard9 | Principal Health and Atmospheric Effects | Typical Sources | Attainment Status |
|---|---|---|---|---|---|---|
| $NO_2$ | 1 hour<br><br>Annual | 0.18 ppm<br><br>0.030 ppm | 0.100 ppm[6]<br><br>(98th percentile over 3 years)<br>0.053 ppm | Irritating to eyes and respiratory tract. Colors atmosphere reddish- brown. Contributes to acid rain. Part of the "NOx" group of $O_3$ precursors. | Motor vehicles and other mobile sources; refineries; industrial operations. | Federal:<br>Attainment/ Maintenance<br><br>State: Attainment |
| $SO_2$ | 1 hour<br><br>3 hours<br><br>24 hours | 0.25 ppm<br><br>-—<br><br>0.04 ppm | 0.075 ppm[7]<br><br>(98th percentile over 3 years)<br><br>0.5 ppm | Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, steel. Contributes to acid rain. Limits visibility. | Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing; some natural sources like active volcanoes. Limited contribution possible from heavy-duty diesel vehicles if ultra-low sulfur fuel not used. | Federal:<br>Attainment/Unclassified<br><br>State: Attainment/Unclassified |
| $Pb$[3] | Monthly Rolling 3-month average | 1.5 µg/$m^3$ | — | Disturbs gastrointestinal system. | Lead-based industrial processes like battery production and smelters. Lead paint, leaded gasoline. Aerially deposited lead from gasoline may exist in soils along major roads. | Federal:<br>Nonattainment<br>(Los Angeles County only)<br>State: Attainment |
| | | — | 0.15 µg/$m^3$<br>0.15 µg/$m^3$ [10] | Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also a TAC and water pollutant. | | |

## Table 2.13-2. State and Federal Criteria Air Pollutant Standards, Effects, and Sources

| Pollutant | Averaging Time | State Standard9 | Federal Standard9 | Principal Health and Atmospheric Effects | Typical Sources | Attainment Status |
|---|---|---|---|---|---|---|
| Sulfate | 24 hours | 25 µg/$m^3$ | — | Premature mortality and respiratory effects. Contributes to acid rain. Some TACs attach to sulfate aerosol particles. | Industrial processes, refineries and oil fields, mines, natural sources like volcanic areas, salt-covered dry lakes, and large sulfide rock areas. | State: Attainment/Unclassified |
| $H_2S$ | 1 hour | 0.03 ppm | — | Colorless, flammable, poisonous. Respiratory irritant, Neurological damage and premature death. Headache, nausea. | Industrial processes such as: refineries and oil fields, asphalt plants, livestock operations, sewage treatment plants, and mines. Some natural sources like volcanic areas and hot springs. | State: Attainment/Unclassified |
| VRP | 8 hours | Visibility of 10 miles or more (Tahoe: 30 miles) at relative humidity less than 70% | — | Reduces visibility. Produces haze. NOTE: not related to the Regional Haze program under the FCAA, which is oriented primarily toward visibility issues in National Parks and other ”Class I” areas. | See particulate matter above. | State: Attainment/Unclassified |
| Vinyl Chloride[3] | 24 hours | 0.01 ppm | — | Neurological effects, liver damage, cancer. Also considered a TAC. | Industrial processes | State: Attainment/Unclassified |

Source 1: California ARB 2016
Source 2: California ARB 2018

## Table 2.13-2. State and Federal Criteria Air Pollutant Standards, Effects, and Sources

| Pollutant | Averaging Time | State Standard9 | Federal Standard9 | Principal Health and Atmospheric Effects | Typical Sources | Attainment Status |
|---|---|---|---|---|---|---|

Notes:

[1] Rounding to an integer value is not allowed for the State 8-hour CO standard. Violation occurs at or above 9.05 ppm.

[2] Annual $PM_{10}$ NAAQS revoked October 2006; was 50 µg/m$^3$. 24-hour. $PM_{2.5}$ NAAQS tightened October 2006; was 65 µg/m$^3$. Annual $PM_{2.5}$ NAAQS tightened from 15 µg/m$^3$ to 12 µg/m$^3$ December 2012, and secondary standard set at 15 µg/m$^3$.

[3] The ARB has identified vinyl chloride and the particulate matter fraction of diesel exhaust as TACs. Diesel exhaust particulate matter is part of $PM_{10}$ and, in larger proportion, $PM_{2.5}$. Both the ARB and the U.S. EPA have identified Pb and various organic compounds that are precursors to $O_3$ and $PM_{2.5}$ as TACs. There are no exposure criteria for substantial health effects due to TACs, and control requirements may apply at ambient concentrations below any criteria levels specified above for these pollutants or the general categories of pollutants to which they belong.

[4] Prior to June 2005, the 1-hour NAAQS was 0.12 ppm. Emission budgets for 1-hour $O_3$ are still in use in some areas where 8-hour $O_3$ emission budgets have not been developed, such as the San Francisco Bay Area. On October 1, 2015, the national 8-hour $O_3$ primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[5] The 0.08 ppm 1997 $O_3$ standard is revoked FOR CONFORMITY PURPOSES ONLY when area designations for the 2008 0.75 ppm standard become effective for conformity use (July 20, 2013). Conformity requirements apply for all NAAQS, including revoked NAAQS, until emission budgets for newer NAAQS are found adequate, SIP amendments for the newer NAAQS are approved with an emission budget, U.S. EPA specifically revokes conformity requirements for an older standard, or the area becomes attainment/unclassified. SIP-approved emission budgets remain in force indefinitely unless explicitly replaced or eliminated by a subsequent approved SIP amendment. During the “Interim” period prior to availability of emission budgets, conformity tests may include some combination of build vs. no build, build vs. baseline, or compliance with prior emission budgets for the same pollutant.

[6] Final 1-hour NO2 NAAQS published in the Federal Register on February 9, 2010, effective March 9, 2010. Initial area designation for California (2012) was attainment/unclassifiable throughout. Project-level hot-spot analysis requirements do not currently exist. Near-road monitoring starting in 2013 may cause redesignation to nonattainment in some areas after 2016.

[7] The U.S. EPA finalized a 1-hour SO2 standard of 75 ppb in June 2010. Nonattainment areas have not yet been designated as of September 2012.

[8] California standards for $O_3$, CO (except 8-hour Lake Tahoe), $SO_2$ (1- and 24 hour), $NO_2$, and particulate matter ($PM_{10}$, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the CCR.

[9] National standards (other than $O_3$, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The $O_3$ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For $PM_{10}$, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m$^3$ is equal to or less than one. For $PM_{2.5}$, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

[10] Pb NAAQS are not considered in Transportation Conformity analysis.

CCR=California Code of Regulations; CO=carbon monoxide; DPM=diesel particulate matter; FCAA=Federal Clean Air Act; $H_2S$=hydrogen sulfide; mg/m$^3$ = milligrams per cubic meter; NA=not applicable; NAAQS= National Ambient Air Quality Standards; $NO_2$=nitrogen dioxide; $O_3$=ozone; Pb=lead; $PM_{2.5}$=particulate matter broken down into particles less than 2.5 micrometers (microns) in aerodynamic diameter; $PM_{10}$=particulate matter broken down into particles of 10 micrometers (microns) or less; ppb=parts per billion; ppm=parts per million; ROG=reactive organic gases; SIP=State Implementation Plan; $SO_x$ = sulfur oxides; TAC=toxic air contaminant; µg/m$^3$ =micrograms per cubic meter; VOC = volatile organic compounds; VRP=visibility reducing particles

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## 2.13.3 Environmental Consequences

### 2.13.3.1 Temporary Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not result in the construction of the proposed improvements to Shoemaker Bridge or improvements to local roadways and, therefore, would not result in temporary adverse impacts on air quality.

#### Alternatives 2 and 3 (Design Options A and B)

*Construction Emissions*

Site preparation and roadway construction would involve clearing, cut and fill activities, grading, removing or improving existing roadways, and paving roadway surfaces. During construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment powered by gasoline and diesel engines are also anticipated and would include CO, $NO_x$, VOCs, directly-emitted $PM_{10}$ and $PM_{2.5}$, and TACs, such as DPM. Construction activities are expected to increase traffic congestion in the area, resulting in increases in emissions from traffic during the delays. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Under the transportation conformity regulations (40 CFR 93.123(c)(5)), construction-related activities that cause temporary increases in emissions are not required in a hot-spot analysis. These temporary increases in emissions are those that occur only during the construction phase and last 5 years or less at any individual site. They typically fall into two main categories:

- **Fugitive Dust:** A major emission from construction due to ground disturbance. All air districts and the California Health and Safety Code (Sections 41700-41701) prohibit "visible emissions" exceeding 3 minutes in 1 hour; this applies not only to dust but also to engine exhaust. In general, this is interpreted as visible emissions crossing the ROW line.

  Sources of fugitive dust include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site may deposit mud on local streets, which could be an additional source of airborne dust after it dries. $PM_{10}$ emissions may vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. $PM_{10}$ emissions depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

- **Construction Equipment Emissions:** DPM is a California-identified TAC, and localized issues may exist if diesel-powered construction equipment is operated near sensitive receptors.

The construction emissions were estimated for the Project using the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, Version 9.0.0. While the model was developed for Sacramento conditions in terms of fleet emission factors, silt loading, and other modeling assumptions, it is considered adequate for estimating road construction emissions by the SCAQMD in its CEQA guidance and is used for that purpose in this analysis. Construction-related emissions for Alternative 2 are presented in Table 2.13-3.

**Table 2.13-3. Construction Emissions for Alternative 2 (Design Options A and B)**

| Construction Activity | $PM_{10}$ (pounds/day) | $PM_{2.5}$ (pounds/day) | CO (pounds/day) | $NO_x$ (pounds/day) | $CO_2e$ (pounds/day) |
|---|---|---|---|---|---|
| Grubbing/land clearing | 20.80 | 4.73 | 12.09 | 19.89 | 7,246.39 |
| Grading/excavation | 23.94 | 7.57 | 68.54 | 96.72 | 20,711.04 |
| Drainage/utilities/ sub-grade | 22.61 | 6.41 | 49.05 | 64.57 | 15,582.23 |
| Paving | 0.82 | 0.58 | 15.18 | 18.28 | 7,173.12 |
| Maximum daily or average daily | 23.94 | 7.57 | 68.54 | 96.72 | 20,711.04 |
| Project total (tons) | 5.22 | 1.56 | 12.95 | 17.85 | 4,169.94 |

Source: Caltrans 2019g

Notes:
CO=carbon monoxide; $CO_2e$=carbon dioxide equivalent; $NO_x$=nitrogen oxide; $PM_{2.5}$=particulate matter broken down into particles less than 2.5 micrometers (microns) in aerodynamic diameter; $PM_{10}$=particulate matter broken down into particles of 10 micrometers (microns) or less

Construction-related emissions for Alternative 3 are presented in Table 2.13-4. The emissions listed in Table 2.13-3 and Table 2.13-4 are applicable to Design Options A and B. The results of the Sacramento model are included the AQAR (Caltrans 2019g). The emissions are based on the best information available at the time of calculations and assume that the schedule for all improvements is anticipated to begin in 2022 and end in 2024. Default equipment assumptions for the Road Construction Emissions Model were used in developing the emissions estimates; these estimates can be refined once final engineering has been completed for the Project. As each phase of the Project construction is expected to last less than 5 years, construction-related emissions were not considered in the conformity analysis.

**Table 2.13-4. Construction Emissions for Alternative 3 (Design Options A and B)**

| Construction Activity | $PM_{10}$ (pounds/day) | $PM_{2.5}$ (pounds/day) | CO (pounds/day) | $NO_x$ (pounds/day) | $CO_2e$ (pounds/day) |
|---|---|---|---|---|---|
| Grubbing/land clearing | 25.84 | 5.79 | 12.26 | 21.17 | 7,972.81 |
| Grading/excavation | 28.94 | 8.61 | 68.54 | 96.72 | 20,711.04 |
| Drainage/utilities/ sub-grade | 27.61 | 7.45 | 49.05 | 64.57 | 15,582.23 |
| Paving | 0.82 | 0.58 | 15.18 | 18.28 | 7,173.12 |
| Maximum daily or average daily | 28.94 | 8.61 | 68.54 | 96.72 | 20,711.04 |
| Project total (tons) | 6.34 | 1.79 | 12.95 | 17.89 | 4,189.12 |

Source: Caltrans 2019g

Notes:
CO=carbon monoxide; $CO_2e$=carbon dioxide equivalent; $NO_x$=nitrogen ioxide; $PM_{2.5}$=particulate matter broken down into particles less than 2.5 micrometers (microns) in aerodynamic diameter; $PM_{10}$=particulate matter broken down into particles of 10 micrometers (microns) or less

The following Project features, some of which may also be required for other purposes, such as stormwater pollution control, would reduce air quality impacts resulting from construction activities. Although these Project features are anticipated to reduce construction-related emissions, these reductions cannot be quantified at this time.

**PF-60** During construction, the City's Resident Engineer will ensure that the construction contractor complies with the Caltrans' Standard Specifications in Section 14-9 (2018).

- Section 14.9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.

**PF-61** During construction, the City's Resident Engineer or designated contractor will ensure that water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions.

**PF-62** During construction, the City's Resident Engineer or designated contractor will ensure that a soil binder will be spread on any unpaved roads used for construction purposes and on all Project construction parking areas.

**PF-63** During construction, the City's Resident Engineer or designated contractor will ensure that trucks will be washed as they leave the ROW as necessary to control fugitive dust emissions.

**PF-64** During construction, the City's Resident Engineer or designated contractor will ensure that construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by CCR Title 17, Section 93114.

**PF-65** Prior to construction, the City's Resident Engineer or designated contractor will ensure that a dust control plan will be developed; documenting sprinkling, temporary paving, speed

limits, and timely revegetation of disturbed slopes, as needed; to minimize construction impacts on existing communities.

**PF-66** During construction, the City's Resident Engineer or designated contractor will ensure that equipment and materials storage sites will be located as far away from residential and park uses as practicable. Construction areas will be kept clean and orderly.

**PF-67** Prior to construction, the City's Resident Engineer or designated contractor will ensure that environmentally sensitive areas will be established near sensitive air receptors. Within these areas, construction activities involving the extended idling of diesel equipment or vehicles will be prohibited, to the extent feasible.

**PF-68** During construction, the City's Resident Engineer or designated contractor will ensure that track out reduction measures, such as gravel pads at Project access points to minimize dust and mud deposits on roads affected by construction traffic, will be used.

**PF-69** During construction, the City's Resident Engineer or designated contractor will ensure that all transported loads of soils and wet materials will be covered before transport or adequate freeboard (space from the top of the material to the top of the truck) will be provided to minimize emission of dust during transportation.

**PF-70** During construction, the City's Resident Engineer or designated contractor will ensure that dust and mud deposited on paved, public roads due to construction activity and traffic will be promptly and regularly removed to reduce particulate matter emissions.

**PF-71** During construction, the City's Resident Engineer or designated contractor will ensure, to the extent feasible, that construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.

**PF-72** During construction, the City's Resident Engineer or designated contractor will ensure that mulch will be installed or vegetation planted as soon as practical after grading to reduce windblown particulate matter in the area.

**PF-73** During construction, the City's Resident Engineer or designated contractor will ensure that all trucks that are to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.

**PF-74** During construction, the City's Resident Engineer will ensure that the contractor will adhere to Caltrans' Standard Specifications for Construction (Sections 14.9- 02).

*Construction Conformity*

Construction activities will not last for more than 5 years at one general location, so construction-related emissions do not need to be included in regional and Project-level conformity analysis (40 CFR 93.123(c)(5)).

*Naturally Occurring Asbestos*

The Project is located in Los Angeles County, which is among the counties listed as containing serpentine and ultramafic rock. However, the portion of the County within which the proposed Project

lies is not known to contain serpentine or ultramafic rock. Therefore, the impact from naturally occurring asbestos during Project construction would be minimal to none.

### 2.13.3.2 Permanent Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not result in any improvements to the Shoemaker Bridge and would not improve local roadways; therefore, it would not result in permanent adverse impacts on air quality.

#### Alternatives 2 and 3 (Design Options A and B)

*Regional Air Quality Conformity*

If a project is not exempt from conformity requirements and is regionally significant (40 CFR 93.101), it must come from a conforming RTP and Transportation Improvement Program (TIP). The Project is non-exempt, and, as the following paragraph shows, it is included in approved 2016 RTP/SCS and 2019 FTIP.

The proposed Project is listed in the 2016 financially constrained RTP, which was approved by the SCAG on April 7, 2016, and FHWA and FTA made a regional conformity determination finding on June 1, 2016. The 2016 RTP (Amendment 3) was found to conform by FHWA and FTA on December 17, 2018. The Project is also included in the financially constrained 2019 FTIP. The FTIP, Amendment 15, was approved by the FHWA on November 25, 2019. The Build Alternatives are consistent with the scope of design concept of the FTIP. The project description and opening year are currently being amended in the RTP. Therefore, the Build Alternatives will not be in conformance with the SIP until the amendment is incorporated. In California, no new regional conformity determinations can be approved by FHWA until emissions inventories are updated with new assumptions reflecting the recently-implemented Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. The 2016 RTP and 2019 FTIP listings are included in Appendix G. The Project would also comply with all SCAQMD requirements.

*Project Level Conformity*

Because the proposed Project is within an attainment/maintenance area for CO and $PM_{10}$ and a nonattainment area for federal $PM_{2.5}$ standards, local hot-spot screening analyses for CO, $PM_{2.5}$, and $PM_{10}$ are required for conformity purposes. The results of these hot-spot analyses are provided below.

*Carbon Monoxide*

The California Project-Level Carbon Monoxide Protocol† (CO Protocol) was used to analyze CO impacts for the proposed Project. The hot-spot analysis covered the most congested intersections affected by the Project in 2025 and 2035.

The ambient air quality effects of traffic emissions were evaluated qualitatively according to the CO Protocol. Although the proposed Project would potentially worsen air quality, it was determined that the CO concentrations at the intersections under study would be lower than those reported for the maximum of the intersections analyzed in the CO attainment plan. Therefore, the Project screens at Level 7 of the flow chart at Figure 3 in the CO Protocol and would not have the potential for causing or worsening violation of the NAAQS for CO.

*Particulate Matter ($PM_{10}$ and $PM_{2.5}$)*

The proposed Project is within a nonattainment area for federal $PM_{2.5}$ standards and within an attainment/maintenance area for the federal $PM_{10}$ standards. Therefore, per 40 CFR, Part 93, analyses are required for conformity purposes. However, the U.S. EPA does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in Section 93.123(b)(1) as an air quality concern. The Project does not qualify as a Project of Air Quality Concern (POAQC) for the following reasons:

- The proposed Project is not a new or expanded highway project. The proposed Project realigns Shoemaker Bridge and Shoreline Drive without increasing capacity; however, in addition to realigning Shoemaker Bridge, the Project would alter the traffic flow on local streets within the Project area. As shown in Table 2.13-5, the proposed Project would increase the traffic volumes along multiple roads within the Project limits. While the number of diesel trucks would increase along Ocean Boulevard and on Shoemaker Bridge, the future with Project volumes would not exceed the 10,000 average daily truck trip criteria for a POAQC.
- The LOS conditions in the Project vicinity with and without the proposed Project are shown in Table 2.13-6 through Table 2.13-9. As shown, the realignment of Shoemaker Bridge would result in a small decrease in the LOS at several intersections within the traffic study area; however, the Project would not result in a significant increase in the number of diesel vehicles in the traffic study area.
- The proposed Project does not include the construction of a new bus or rail terminal.
- The proposed Project does not expand an existing bus or rail terminal.
- The proposed Project is not in or affecting locations, areas, or categories of sites that are identified in the $PM_{2.5}$ and $PM_{10}$ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Therefore, the proposed Project meets the Clean Air Act (CCA) requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed Project would not create a new, or worsen an existing, $PM_{10}$ or $PM_{2.5}$ violation.

The project-level PM hot-spot analysis was presented to SCAG's Transportation Conformity Working Group (TCWG) for discussion and review July 24, 2018. The TCWG determined that the Project is not a POAQC.

**Table 2.13-5. Traffic Volumes (Average Daily Traffic/Truck Average Daily Traffic/Truck Percentage)**

| Roadway | 2025 No Build | 2025 Build | 2025 Percent Increase (%) | 2035 No Build | 2035 Build | 2035 Percent Increase (%) |
|---|---|---|---|---|---|---|
| Anaheim Street | 34,800/3,445/9.9 | 45,000/4,455/9.9 | 29.3 | 36,500/3,614/9.9 | 46,900/4,554/9.9 | 28.5 |
| 7th Street | 13,000/728/5.6 | 14,100/790/5.6 | 8.5 | 13,300/202/5.6 | 14,600/818/5.6 | 9.8 |
| 6th Street | 16,500/726/4.4 | 900/40/4.4 | -94.5 | 16,700/735/4.4 | 900/40/4.4 | -94.6 |

### Table 2.13-5. Traffic Volumes (Average Daily Traffic/Truck Average Daily Traffic/Truck Percentage)

| Roadway | 2025 No Build | 2025 Build | 2025 Percent Increase (%) | 2035 No Build | 2035 Build | 2035 Percent Increase (%) |
|---|---|---|---|---|---|---|
| 3rd Street | 10,600/254/2.4 | 4,900/118/2.4 | -53.8 | 10,300/247/2.4 | 5,100/122/2.4 | -50.5 |
| Broadway Avenue | 15,100/1,072/7.1 | 15,900/1,129/7.1 | 5.3 | 15,500/1,101/7.1 | 13,700/973/7.1 | -16.1 |
| Ocean Boulevard | 36,700/3,633/9.9 | 44,200/4,376/9.9 | 20.4 | 38,300/3,792/9.9 | 46,000/4,554/9.9 | 20.1 |
| Shoreline Drive on Shoemaker Bridge | 77,300/2,164/2.8 | 76,000/2,128/2.8 | -1.7 | 78,900/2,209/2.8 | 79,500/2,226/2.8 | 0.8 |

Source: Caltrans 2019g

### Table 2.13-6. 2025 No Build Condition Intersection Level of Service

| Intersection | | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay (seconds) | LOS | Delay (seconds) | LOS |
| 1 | Harbor Avenue/Anaheim Street | 9.1 | A | 12.4 | B |
| 2 | Santa Fe Avenue/Anaheim Street | 27.6 | C | 31.7 | C |
| 3 | Santa Fe Avenue/9th Street | 12.0 | B | 43.5 | D |
| 4 | Pier B Street/Pico Avenue/SR-710 Ramps/9th Street | >100 | **F** | 24.1 | C |
| 5 | Pico Avenue/Ocean Boulevard Ramps | 20.6 | C | 26.4 | C |
| 6 | Golden Shore/Ocean Boulevard | 24.0 | C | 25.8 | C |
| 7 | Magnolia Avenue/Queens Way/Ocean Boulevard | 18.1 | B | 14.6 | B |
| 8 | Magnolia Avenue/Broadway Avenue | 20.0 | B | 20.2 | C |
| 9 | Maine Avenue/Broadway Avenue | 3.0 | A | 6.1 | A |
| 10 | Golden Avenue/3rd Street | 16.1 | B | 12.3 | B |
| 11 | Maine Avenue/3rd Street | 13.2 | B | 13.0 | B |
| 12 | Magnolia Avenue/3rd Street | 17.0 | B | 17.0 | B |
| 13 | Magnolia Avenue/6th Street | 17.2 | B | 29.0 | C |
| 14 | Daisy Avenue/6th Street | 6.5 | A | 5.8 | A |
| 15 | Daisy Avenue/7th Street | 16.0 | B | 13.8 | B |
| 16 | Magnolia Avenue/7th Street | 17.9 | B | 19.1 | B |
| 17 | Magnolia Avenue/10th Street | 13.3 | B | 14.0 | B |

### Table 2.13-6. 2025 No Build Condition Intersection Level of Service

| Intersection | | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay (seconds) | LOS | Delay (seconds) | LOS |
| 18 | Pacific Avenue/Anaheim Street | 16.7 | B | 13.1 | B |
| 19 | Magnolia Avenue/Anaheim Street | 19.8 | B | 15.1 | B |
| 20 | Oregon Avenue/Anaheim Street | 4.2 | A | 14.6 | B |
| 21 | Cedar Avenue/Anaheim Street | 12.4 | B | 6.7 | A |
| 22 | Pacific Avenue/7th Street | 28.2 | C | 15.3 | B |
| 23 | Pacific Avenue/6th Street | 16.9 | B | 23.4 | C |
| 24 | Pacific Avenue/3rd Street | 22.9 | C | 12.4 | B |
| 25 | Pacific Avenue/Broadway Avenue | 18.4 | B | 18.4 | B |
| 26 | Pacific Avenue/Ocean Boulevard | 26.4 | C | 11.4 | B |
| 27 | Atlantic Avenue/Anaheim Street | 25.2 | C | 28.3 | C |
| 28 | Atlantic Avenue/7th Street | 21.2 | C | 16.4 | B |
| 29 | Atlantic Avenue/6th Street | 18.5 | B | 23.6 | C |
| 30 | Atlantic Avenue/3rd Street | 11.9 | B | 20.2 | C |
| 31 | Golden Shore/Broadway Avenue | NA | NA | NA | NA |
| 32 | Shoreline Drive/Broadway Avenue | NA | NA | NA | NA |
| 33 | Shoreline Drive/7th Street | NA | NA | NA | NA |
| 34 | Golden Shore Street/Shoreline Drive | NA | NA | NA | NA |
| 35 | Seaside Connector/Shoreline Drive | NA | NA | NA | NA |

Source: Caltrans 2019g
Notes:
Intersections are currently unsignalized.
LOS=level of service; NA=not applicable; SR-710=State Route 710

### Table 2.13-7. 2025 Build Condition Intersection Level of Service

| Intersection | | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay (seconds) | LOS | Delay (seconds) | LOS |
| 1 | Harbor Avenue/Anaheim Street | 22.2 | C | 12.2 | B |
| 2 | Santa Fe Avenue/Anaheim Street | 44.2 | D | 42.5 | D |
| 3 | Santa Fe Avenue/9th Street | 31.7 | C | 22.7 | C |
| 4 | Pier B Street/Pico Avenue/SR-710 Ramps/9th Street | >100 | **F** | 24.1 | C |

## Table 2.13-7. 2025 Build Condition Intersection Level of Service

| Intersection | | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay (seconds) | LOS | Delay (seconds) | LOS |
| 5 | Pico Avenue/Ocean Boulevard Ramps | 20.6 | C | 26.3 | C |
| 6 | Golden Shore/Ocean Boulevard | 22.3 | C | 19.9 | B |
| 7 | Magnolia Avenue/Queens Way/Ocean Boulevard | 47.5 | D | 36.4 | D |
| 8 | Magnolia Avenue/Broadway Avenue | 33.0 | C | 35.3 | D |
| 9 | Maine Avenue/Broadway Avenue | 25.0 | C | 18.9 | B |
| 10 | Golden Avenue/3rd Street | 9.2 | A | 8.7 | A |
| 11 | Maine Avenue/3rd Street | 17.3 | B | 16.2 | B |
| 12 | Magnolia Avenue/3rd Street | 27.8 | C | 20.8 | C |
| 13 | Magnolia Avenue/6th Street | 28.8 | C | 33.2 | C |
| 14 | Daisy Avenue/6th Street | 20.0 | B | 18.2 | B |
| 15 | Daisy Avenue/7th Street | 6.0 | A | 6.1 | A |
| 16 | Magnolia Avenue/7th Street | 46.7 | D | 29.7 | C |
| 17 | Magnolia Avenue/10th Street | 12.1 | B | 13.8 | B |
| 18 | Pacific Avenue/Anaheim Street | 24.4 | C | 20.9 | C |
| 19 | Magnolia Avenue/Anaheim Street | 18.0 | B | 27.1 | C |
| 20 | Oregon Avenue/Anaheim Street | 4.9 | A | 15.5 | B |
| 21 | Cedar Avenue/Anaheim Street | 9.5 | A | 16.0 | B |
| 22 | Pacific Avenue/7th Street | 40.7 | D | 35.7 | D |
| 23 | Pacific Avenue/6th Street | 12.0 | B | 19.9 | B |
| 24 | Pacific Avenue/3rd Street | 16.7 | B | 13.8 | B |
| 25 | Pacific Avenue/Broadway Avenue | 15.3 | B | 15.4 | B |
| 26 | Pacific Avenue/Ocean Boulevard | 24.1 | C | 15.7 | B |
| 27 | Atlantic Avenue/Anaheim Street | 21.5 | C | 23.6 | C |
| 28 | Atlantic Avenue/7th Street | 29.4 | C | 25.2 | C |
| 29 | Atlantic Avenue/6th Street | 10.3 | B | 23.7 | C |
| 30 | Atlantic Avenue/3rd Street | 10.2 | B | 15.2 | B |
| 31 | Golden Shore/Broadway Avenue | 14.8 | B | 14.1 | B |
| 32 | Shoreline Drive/Broadway Avenue | 10.8 | B | 25.7 | C |

### Table 2.13-7. 2025 Build Condition Intersection Level of Service

| Intersection | | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay (seconds) | LOS | Delay (seconds) | LOS |
| 33 | Shoreline Drive/7th Street (Design Option A) | 5.3 | A | 11.6 | B |
| 33 | Shoreline Drive/7th Street (Design Option B) | 54.8 | D | 57.6 | E |
| 34 | Golden Shore Street/Shoreline Drive | 27.7 | C | 18.1 | B |
| 35 | Seaside Connector/Shoreline Drive | 11.2 | B | 12.9 | B |

Source: Caltrans 2019g
Notes:
Intersections are currently unsignalized.
LOS=level of service; SR-710=State Route 710

### Table 2.13-8. 2035 No Build Condition Intersection Level of Service

| Intersection | | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay (seconds) | LOS | Delay (seconds) | LOS |
| 1 | Harbor Avenue/Anaheim Street | 9.2 | A | 12.5 | B |
| 2 | Santa Fe Avenue/Anaheim Street | 30.8 | C | 40.6 | D |
| 3 | Santa Fe Avenue/9th Street | 12.0 | B | 47.6 | D |
| 4 | Pier B Street/Pico Avenue/SR-710 Ramps/9th Street | >100 | **F** | 30.0 | C |
| 5 | Pico Avenue/Ocean Boulevard Ramps | 28.9 | C | 44.7 | D |
| 6 | Golden Shore/Ocean Boulevard | 24.2 | C | 26.2 | C |
| 7 | Magnolia Avenue/Queens Way/Ocean Boulevard | 18.3 | B | 15.1 | B |
| 8 | Magnolia Avenue/Broadway Avenue | 20.0 | B | 20.3 | C |
| 9 | Maine Avenue/Broadway Avenue | 3.0 | A | 6.1 | A |
| 10 | Golden Avenue/3rd Street | 16.1 | B | 13.4 | B |
| 11 | Maine Avenue/3rd Street | 13.4 | B | 13.2 | B |
| 12 | Magnolia Avenue/3rd Street | 17.2 | B | 17.2 | B |
| 13 | Magnolia Avenue/6th Street | 17.8 | B | 29.6 | C |
| 14 | Daisy Avenue/6th Street | 6.5 | A | 5.9 | A |
| 15 | Daisy Avenue/7th Street | 16.2 | B | 14.8 | B |
| 16 | Magnolia Avenue/7th Street | 18.3 | B | 19.4 | B |
| 17 | Magnolia Avenue/10th Street | 13.4 | B | 14.0 | B |

### Table 2.13-8. 2035 No Build Condition Intersection Level of Service

| Intersection | | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay (seconds) | LOS | Delay (seconds) | LOS |
| 18 | Pacific Avenue/Anaheim Street | 16.9 | B | 13.4 | B |
| 19 | Magnolia Avenue/Anaheim Street | 20.0 | B | 15.8 | B |
| 20 | Oregon Avenue/Anaheim Street | 4.3 | A | 15.9 | B |
| 21 | Cedar Avenue/Anaheim Street | 12.4 | B | 6.8 | A |
| 22 | Pacific Avenue/7th Street | 28.7 | C | 15.4 | B |
| 23 | Pacific Avenue/6th Street | 17.0 | B | 23.7 | C |
| 24 | Pacific Avenue/3rd Street | 23.0 | C | 12.4 | B |
| 25 | Pacific Avenue/Broadway Avenue | 18.5 | B | 18.5 | B |
| 26 | Pacific Avenue/Ocean Boulevard | 28.3 | C | 11.4 | B |
| 27 | Atlantic Avenue/Anaheim Street | 25.4 | C | 34.3 | C |
| 28 | Atlantic Avenue/7th Street | 21.3 | C | 16.8 | B |
| 29 | Atlantic Avenue/6th Street | 18.4 | B | 24.5 | C |
| 30 | Atlantic Avenue/3rd Street | 12.1 | B | 20.2 | C |
| 31 | Golden Shore/Broadway Avenue | NA | NA | NA | NA |
| 32 | Shoreline Drive/Broadway Avenue | NA | NA | NA | NA |
| 33 | Shoreline Drive/7th Street | NA | NA | NA | NA |
| 34 | Golden Shore Street/Shoreline Drive | NA | NA | NA | NA |
| 35 | Seaside Connector/Shoreline Drive | NA | NA | NA | NA |

Source: Caltrans 2019g
Notes:
Intersections are currently unsignalized.
LOS=level of service; NA=not applicable; SR-710=State Route 710

## Table 2.13-9. 2035 Build Condition Intersection Level of Service

| Intersection | | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay (seconds) | LOS | Delay (seconds) | LOS |
| 1 | Harbor Avenue/Anaheim Street | 22.3 | C | 12.5 | B |
| 2 | Santa Fe Avenue/Anaheim Street | 46.1 | D | 52.6 | D |
| 3 | Santa Fe Avenue/9th Street | 33.8 | C | 25.9 | C |
| 4 | Pier B Street/Pico Avenue/SR-710 Ramps/9th Street | >100 | **F** | 30.0 | C |
| 5 | Pico Avenue/Ocean Boulevard Ramps | 28.9 | C | 34.3 | C |
| 6 | Golden Shore/Ocean Boulevard | 22.7 | C | 21.0 | C |
| 7 | Magnolia Avenue/Queens Way/Ocean Boulevard | 51.4 | D | 38.6 | D |
| 8 | Magnolia Avenue/Broadway Avenue | 34.7 | C | 38.5 | D |
| 9 | Maine Avenue/Broadway Avenue | 25.4 | C | 21.5 | C |
| 10 | Golden Avenue/3rd Street | 9.2 | A | 8.7 | A |
| 11 | Maine Avenue/3rd Street | 17.6 | B | 16.7 | B |
| 12 | Magnolia Avenue/3rd Street | 28.4 | C | 21.1 | C |
| 13 | Magnolia Avenue/6th Street | 33.1 | C | 34.1 | C |
| 14 | Daisy Avenue/6th Street | 20.0 | B | 18.2 | B |
| 15 | Daisy Avenue/7th Street | 6.2 | A | 6.8 | A |
| 16 | Magnolia Avenue/7th Street | 51.7 | D | 31.4 | C |
| 17 | Magnolia Avenue/10th Street | 12.3 | B | 14.2 | B |
| 18 | Pacific Avenue/Anaheim Street | 25.1 | C | 21.6 | C |
| 19 | Magnolia Avenue/Anaheim Street | 19.6 | B | 33.5 | C |
| 20 | Oregon Avenue/Anaheim Street | 5.1 | A | 16.2 | B |
| 21 | Cedar Avenue/Anaheim Street | 9.6 | A | 18.3 | B |
| 22 | Pacific Avenue/7th Street | 41.4 | D | 38.7 | D |
| 23 | Pacific Avenue/6th Street | 13.6 | B | 20.3 | C |
| 24 | Pacific Avenue/3rd Street | 16.7 | B | 15.2 | B |
| 25 | Pacific Avenue/Broadway Avenue | 15.4 | B | 15.5 | B |
| 26 | Pacific Avenue/Ocean Boulevard | 25.6 | C | 16.3 | B |
| 27 | Atlantic Avenue/Anaheim Street | 22.2 | C | 26.1 | C |
| 28 | Atlantic Avenue/7th Street | 30.4 | C | 25.4 | C |
| 29 | Atlantic Avenue/6th Street | 10.4 | B | 23.7 | C |
| 30 | Atlantic Avenue/3rd Street | 10.4 | B | 15.2 | B |

**Table 2.13-9. 2035 Build Condition Intersection Level of Service**

| Intersection | | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Delay (seconds) | LOS | Delay (seconds) | LOS |
| 31 | Golden Shore/Broadway Avenue | 15.7 | C | 14.5 | B |
| 32 | Shoreline Drive/Broadway Avenue | 16.4 | B | 25.7 | C |
| 33 | Shoreline Drive/7th Street (Design Option A) | 5.7 | A | 15.8 | B |
| 33 | Shoreline Drive/7th Street (Design Option B) | 68.8 | E | 64.4 | E |
| 34 | Golden Shore Street/Shoreline Drive | 28.8 | C | 18.2 | B |
| 35 | Seaside Connector/Shoreline Drive | 12.0 | B | 13.5 | B |

Source: Caltrans 2019g
Notes:
Intersections are currently unsignalized.
LOS=level of service; SR-710=State Route 710

### *Mobile Source Air Toxics*

Controlling air toxic emissions became a national priority with the passage of the CAA Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. EPA regulate 188 air toxics, also known as hazardous air pollutants. The U.S. EPA has assessed this expansive list in its rule on the Control of Hazardous Air Pollutants from Mobile Sources (*Federal Register*, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are part of U.S. EPA's Integrated Risk Information System (IRIS). In addition, the U.S. EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers or contributors and non-hazard contributors from the 2011 National Air Toxics Assessment (NATA). These are 1,3-butadiene, acetaldehyde, acrolein, benzene, DPM, ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. While the FHWA considers these the priority mobile source air toxics (MSAT), the list is subject to change and may be adjusted in consideration of future U.S. EPA rules.

The 2007 U.S. EPA rule mentioned above requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using U.S. EPA's MOVES2014a model, even if VMT increases by 45 percent from 2010 to 2050 as forecast, a combined reduction of 91 percent in the total annual emission rate for the priority MSATs is projected for the same time period, as shown on Figure 2.13-2.

MSAT emissions were estimated for baseline, no build, and alternatives for the opening year 2025 and horizon year 2035. Emissions factors for each of the MSATs were obtained for the Project area using emission rates generated by CT-EMFAC2017 and the VMT associated with each of the Project alternatives. The modeling results for the baseline, no build, and alternatives are presented in Table 2.13-10. The MSAT emissions in Table 2.13-10 apply to both design options and alternatives.

The analysis indicates that a substantial decrease in MSAT emissions can be expected between the existing (2015) and future (2025 and 2035) no build alternative conditions. This decrease is prevalent throughout the highest priority MSATs and the analyzed alternatives. In addition, all of the 2025 and 2035 alternative MSAT emissions are lower than the corresponding no build alternative emissions.

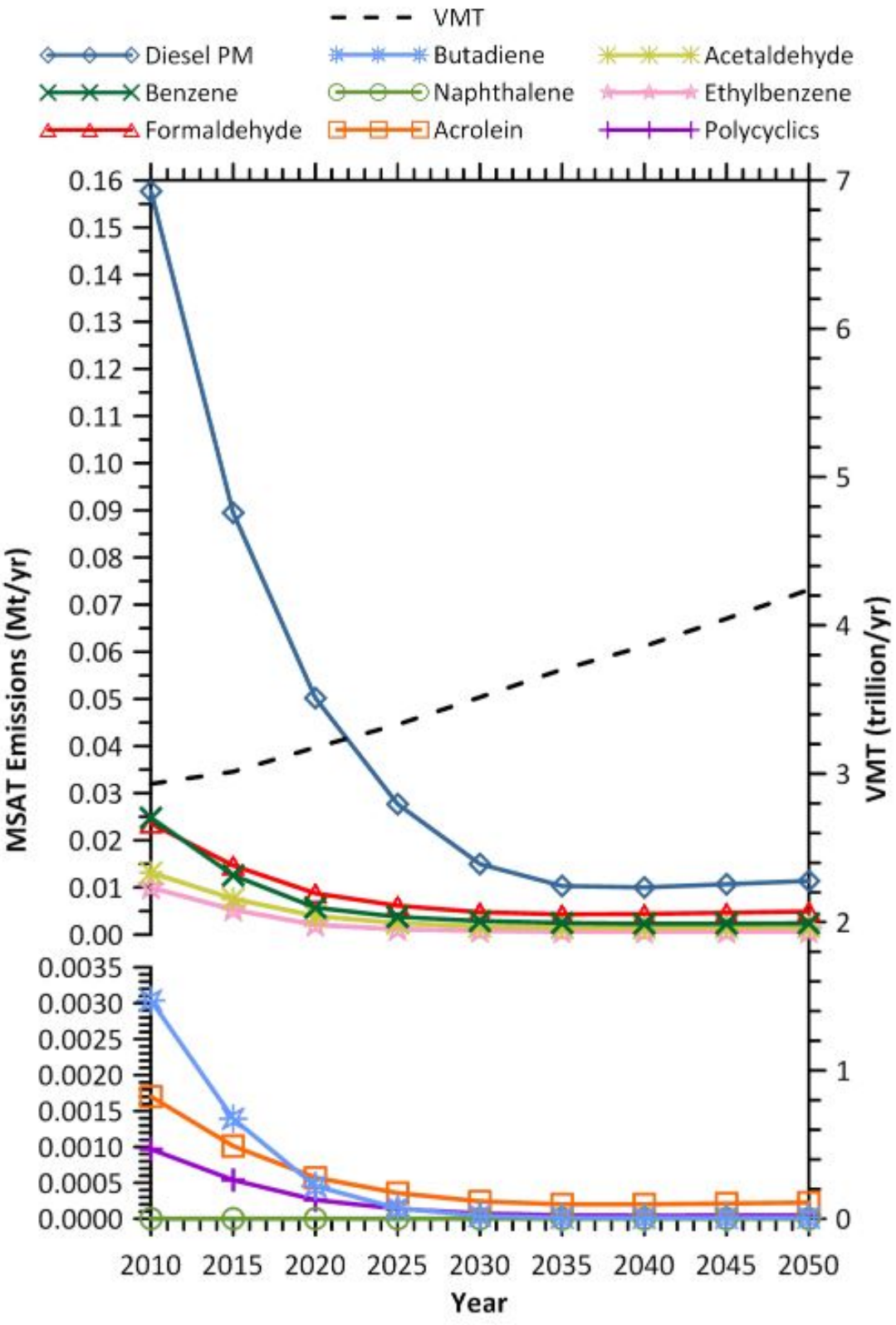


**Figure 2.13-2. Projected National Mobile Source Air Toxic Trends, 2010-2050**

Source: FHWA 2016

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## Table 2.13-10. Summary of Comparative Mobile Source Air Toxic Emissions Analysis

| Scenario Analysis Year | 1,3-butadiene (pounds/day) | Acetal-dehyde (pounds/day) | Acrolein (pounds/day) | Benzene (pounds/day) | DPM (pounds/day) | Ethyl-benzene (pounds/day) | Formal-dehyde (pounds/day) | Naph-thalene (pounds/day) | Polycyclic Organic Matter (pounds/day) |
|---|---|---|---|---|---|---|---|---|---|
| Baseline (Existing Conditions) 2015 | 0.13 | 0.55 | 0.03 | 0.85 | 1.38 | 0.56 | 1.31 | 0.05 | 0.03 |
| No Build 2025 | 0.05 | 0.11 | 0.01 | 0.35 | 0.09 | 0.30 | 0.29 | 0.03 | 0.01 |
| Alternatives 2 and 3 2025 | 0.05 | 0.10 | 0.01 | 0.33 | 0.09 | 0.28 | 0.27 | 0.02 | 0.01 |
| No Build 2035 | 0.04 | 0.15 | 0.01 | 0.31 | 0.09 | 0.26 | 0.36 | 0.02 | 0.01 |
| Alternatives 2 and 3 2035 | 0.04 | 0.13 | 0.01 | 0.30 | 0.09 | 0.24 | 0.33 | 0.02 | 0.01 |

Notes:
DPM=diesel particulate matter

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## 2.13.4 Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures would be implemented to avoid and/or minimize Project impacts on air quality during construction:

**AQ-1** During clearing, grading, earthmoving, or excavation operations, the City of Long Beach's (City's) Resident Engineer or designated contractor will ensure that fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in South Coast Air Quality Management District (SCAQMD) Rule 403. All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day. All material transported on site or off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust. The areas disturbed by clearing, grading, earthmoving, or excavation operations will be minimized so as to prevent excessive amounts of dust. These control techniques will be indicated in Shoemaker Bridge Replacement Project (Project) specifications. Visible dust beyond the property line emanating from the Project will be prevented to the maximum extent feasible.

**AQ-2** The Shoemaker Bridge Replacement Project (Project) grading plans will show the construction duration. During construction, the City of Long Beach's (City's) Resident Engineer or designated contractor will ensure that ozone ($O_3$) precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications.

**AQ-3** All trucks that are to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and(e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.

**AQ-4** The contractor will adhere to the California Department of Transportation (Caltrans) Standard Specifications for Construction (Section 14.9 02).

## 2.13.5 Climate Change

Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has issued explicit guidance or methods to conduct project-level greenhouse gas analysis. FHWA emphasizes concepts of resilience and sustainability in highway planning, project development, design, operations, and maintenance. Because there have been requirements set forth in California legislation and executive orders on climate change, the issue is addressed in the California Environmental Quality Act (CEQA) chapter of this document. The CEQA analysis may be used to inform the National Environmental Policy Act (NEPA) determination for the Project.

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# 2.14 Noise

## 2.14.1 Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA) provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

### 2.14.1.1 California Environmental Quality Act

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless those measures are not feasible. The rest of this section will focus on the NEPA/Title 23 Part 772 of the Code of Federal Regulations (23 CFR 772) noise analysis; please see Chapter 3 of this document for further information on noise analysis under CEQA.

### 2.14.1.2 National Environmental Policy Act and 23 Code of Federal Regulations 772

For highway transportation projects with Federal Highway Administration (FHWA) involvement (and the Caltrans, as assigned), the Federal-Aid Highway Act of 1970 and its implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations include noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 dBa) is lower than the NAC for commercial areas (72 dBA). Table 2.14-1 lists the noise abatement criteria for use in the NEPA/23 CFR 772 analysis.

**Table 2.14-1. Noise Abatement Criteria**

| Activity Category | NAC, Hourly A- Weighted Noise Level, Leq(h) | Description of Activity Category |
|---|---|---|
| A | 57 (Exterior) | Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. |
| B[1] | 67 (Exterior) | Residential. |
| C[1] | 67 (Exterior) | Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings. |

**Table 2.14-1. Noise Abatement Criteria**

| Activity Category | NAC, Hourly A- Weighted Noise Level, Leq(h) | Description of Activity Category |
|---|---|---|
| D | 52 (Interior) | Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios. |
| E | 72 (Exterior) | Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A–D or F. |
| F | No NAC—reporting only | Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical, etc.), and warehousing. |
| G | No NAC—reporting only | Undeveloped lands that are not permitted. |

Notes:
[1] Includes undeveloped lands permitted for this activity category.
$L_{eq}$(h)=hourly equivalent noise level; NAC=noise abatement criteria

Figure 2.14-1 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise levels discussed in this section with common activities.

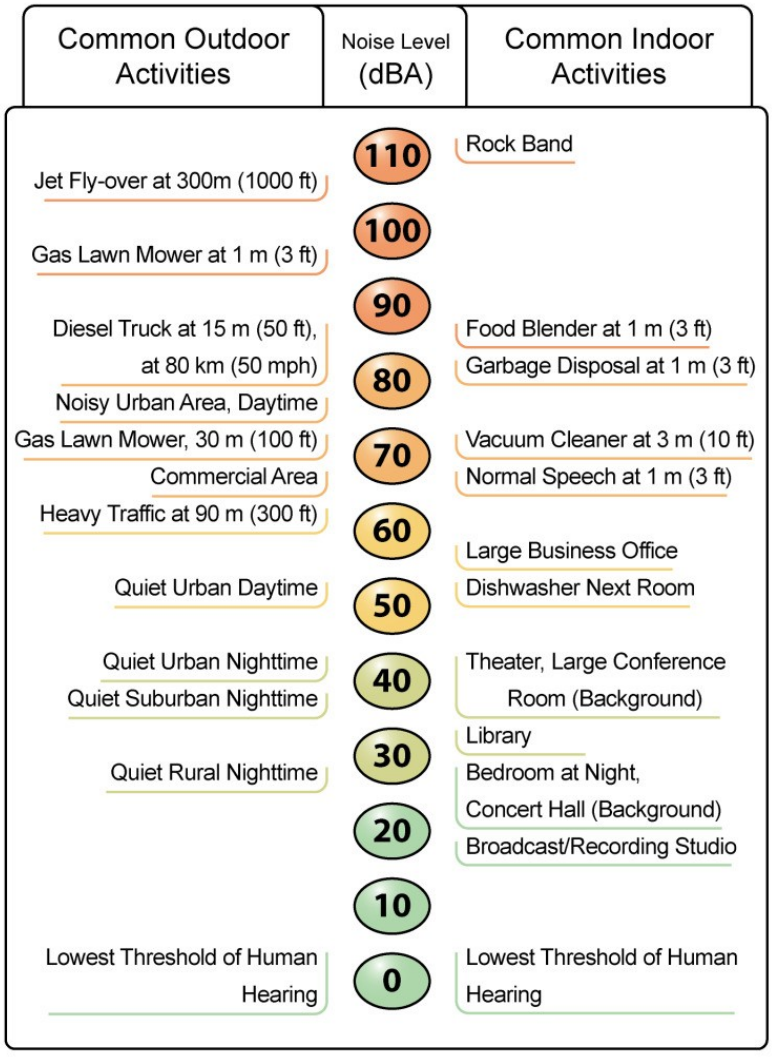
According to the Caltrans' *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, May 2011,* a noise impact occurs when the predicted future noise level with the project substantially exceeds the existing noise level (defined as a 12 dBA or more) or when the future noise level with the project approaches or exceeds the NAC. A noise level is considered approaching the NAC if it is within 1 dBA of the NAC.

If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

Caltrans' *Traffic Noise Analysis Protocol* sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. Any noise abatement proposed for a given project must reduce predicted noise by at least 5 dB at an impacted receptor in order to be considered feasible from an acoustical perspective. It must also be possible from a design constructability level to implement the proposed noise abatement measure, for it to be considered feasible. Factors that affect the design and constructability of noise abatement include, but are not limited to, sight distances and other safety issues, potential barrier height and how it may change the views of a given benefitted receptor, existing topography that may prove challenging to construct noise abatement, drainage and runoff in the area that the noise abatement is proposed, potential access requirements for existing driveways, the presence of local cross streets that would limit the barrier length, the need to underground utilities in the same area of the proposed noise abatement, the presence of other noise sources within the area, and the ability to provide continuous maintenance of the abatement measure.

The overall reasonableness of noise abatement is determined by the following three factors: 1) the ability for the proposed noise abatement to reduce noise by 7 dB at one or more impacted receptors; 2) the cost of noise abatement; and 3) the viewpoints of benefited receptors (including property owners and residents of the benefited receptors).

**Figure 2.14-1. Noise Levels of Common Activities**




## 2.14.2 Affected Environment

This section is based on the *Noise Study Report* (NSR) (Caltrans 2019h) prepared for the Project. The NSR modeled and evaluated traffic noise levels in noise-sensitive areas within the boundaries of the proposed Project.

### 2.14.2.1 Surrounding Land Use and Sensitive Receptors

Developed and undeveloped land uses in the Project vicinity were identified through land use maps, aerial photography, and site inspection. Within all land use categories, outdoor frequent human use areas associated with single-family and multi-family residences, an RV park, three schools, public parks, a hotel; other uses that include office, commercial, and industrial uses were identified as receptors within the Project area. Existing land uses in the Project limits are described below in further detail.

- **Shoreline Drive South of Ocean Boulevard:** Land uses in this area include Golden Shore RV Park, which is located south of Shoreline Drive and is approximately 7 feet lower in elevation, and office uses, which are located north of Shoreline Drive at an elevation similar to Shoreline Drive. The southbound off-ramp from Golden Shore Street is higher in elevation than Shoreline Drive, which provides topographical shielding for the RV Park. The RV Park was evaluated under Activity Category B, which has an exterior NAC of 67 dBA Leq. The office has no outdoor frequent human use areas and was classified under Activity Category E for documentation purposes.
- **Shoreline Drive between Ocean Boulevard and Broadway:** Land uses in this area include a hotel, parks, and commercial uses. The hotel is located east of Shoreline Drive and is approximately 9 feet higher in elevation. The northbound on-ramp from Golden Shore Street is higher in elevation than Shoreline Drive, which provides topographical shielding for the hotel. Santa Cruz Park is located east of Shoreline Drive (similar in elevation to the road) and west of the northbound on-ramp from Golden Shore Street. Golden Park is located between the NB and SB lanes of Shoreline Drive. An outdoor swimming pool area associated with the hotel was evaluated under Activity Category E, which has an exterior NAC of 72 dBA Leq. The park was classified under Activity Category C, which has an exterior NAC of 67 dBA Leq.
- **Shoreline Drive between Broadway Avenue and 3rd Street:** Land uses in this area include Cesar Chavez Elementary School, which is located east of Shoreline Drive and is approximately 10 feet higher in elevation, where there is topographical shielding provided by the elevation difference. The school's playground was evaluated under Activity Category C, which has an exterior NAC of 67 dBA Leq. The school's classrooms were evaluated under Activity Category D, which has an interior NAC of 52 dBA Leq. 3rd Street passes along the north side of the school and transitions into an on-ramp to Shoreline Drive. The Broadway Avenue off-ramp coming from Shoreline Drive passes along the southern side of the school. There is no shielding along the northern or southern sides of the school.
- **Shoreline Drive between 3rd Street and 6th Street:** Land uses in this area include Cesar E. Chavez Park, located east of Shoreline Drive, and multi-family residences located east of Golden Avenue. The southern half of Cesar E. Chavez Park is approximately 10 feet higher in elevation, which provides topographical shielding for the park. The northern half of Cesar E. Chavez Park is similar in elevation to Shoreline Drive, and an existing 9-foot-high wall (Existing Wall [EW] No. 1) runs along the western edge of the park. Cesar E. Chavez Park provides topographical shielding, and the existing wall partially shields for these multi-family residences. The multi-family residences are located approximately 360 feet from Shoreline Drive. 3rd Street transitions into an on-ramp to Shoreline Drive; also, 6th Street is an off-ramp overpass coming from Shoreline Drive. The park's outdoor active use areas were evaluated under

Activity Category C, which has an exterior NAC of 67 dBA Leq. The multi-family residences were evaluated under Activity Category B, which has an exterior NAC of 67 dBA Leq.

- **Shoreline Drive between 6th Street and 7th Street:** Land uses in this area include Edison Elementary School and bus yard (i.e., commercial/industrial) uses. Edison Elementary School is located east of Shoreline Drive and is approximately 12 feet lower in elevation. The school's outdoor active use areas at Edison Elementary School were evaluated under Activity Category C, which has an exterior NAC of 67 dBA Leq. The school's classrooms were evaluated under Activity Category D, which has an interior NAC of 52 dBA Leq. The bus yard is located between the school and Shoreline Drive, which provides shielding for the school. The bus yard was classified under Activity Category F. The 6th Street off-ramp overpass coming from Shoreline Drive passes along the southern side of the school. Also, 7th Street passes along the northern side of the school and transitions into an on-ramp to Shoreline Drive. There is no shielding for the northern or southern sides of the school.
- **Shoreline Drive North of 7th Street:** Land uses in this area include single-family residences, a bus mechanical facility, and commercial/industrial uses that are located approximately 20 to 30 feet lower in elevation than Shoreline Drive/Shoemaker Bridge. There is an existing 7-foot-high property wall (EW No. 2) that runs along the rear property line of all the single-family residences in this area, where the backyards of these residences face toward Shoreline Drive/Shoemaker Bridge. The single-family residences were evaluated under Activity Category B, which has an exterior NAC of 67 dBA Leq. The commercial/industrial uses were classified under Activity Category E, which has an exterior NAC of 72 dBA Leq. The bus mechanical facility was classified under Activity Category F for documentation purposes.
- **West of SR-710 between 9th Street and Pier B Street:** Land uses in this area include commercial uses that are located approximately 25 feet lower in elevation than SR-710. The commercial uses were classified under Activity Category E, which has an exterior NAC of 72 dBA Leq.
- **Anaheim Street between I-710 and Atlantic Avenue:** Land uses in this area include multi-family residences and commercial uses that are located at grade with Anaheim Street. The residences were evaluated under Activity Category B, which has an exterior NAC of 67 dBA Leq. The commercial uses were classified under Activity Category E, which has an exterior NAC of 72 dBA Leq.
- **7th Street between Shoreline Drive and Atlantic Avenue:** Land uses in this area include single-family and multi-family residences, churches, and commercial uses that are located at grade with 7th Street. The residences were evaluated under Activity Category B, which has an exterior NAC of 67 dBA Leq. The churches were evaluated under Activity Category C, which has an exterior NAC of 67 dBA $L_{eq}$ and Activity Category D, which has an interior NAC of 52 dBA $L_{eq}$. The commercial uses were classified under Activity Category E, which has an exterior NAC of 72 dBA Leq.
- **6th Street between Shoreline Drive and Atlantic Avenue:** Land uses in this area include single-family and multi-family residences, a church, and commercial uses that are located at grade with 6th Street. The residences were evaluated under Activity Category B, which has an exterior NAC of 67 dBA Leq. The church was evaluated under Activity Category C, which has an exterior NAC of 67 dBA $L_{eq}$ and Activity Category D, which has an interior NAC of

52 dBA $L_{eq}$. The commercial uses were classified under Activity Category E, which has an exterior NAC of 72 dBA Leq.

- **3rd Street between Shoreline and Magnolia Avenue:** Land uses in this area include single-family and multi-family residences and commercial uses that are located at grade with 3rd Street. The residences were evaluated under Activity Category B, which has an exterior NAC of 67 dBA Leq. The commercial uses were classified under Activity Category E, which has an exterior NAC of 72 dBA Leq.
- **Magnolia Avenue between 7th Street and Ocean Boulevard:** Land uses in this area include single-family and multi-family residences and commercial uses that are located at grade with Magnolia Avenue. The residences were evaluated under Activity Category B, which has an exterior NAC of 67 dBA Leq. The commercial uses were classified under Activity Category E, which has an exterior NAC of 72 dBA Leq.
- **Pacific Avenue between 7th Street and 6th Street:** Land uses in this area include multi-family residences and commercial uses that are located at grade with Pacific Avenue. The residences were evaluated under Activity Category B, which has an exterior NAC of 67 dBA Leq. The commercial uses were classified under Activity Category E, which has an exterior NAC of 72 dBA Leq.
- **Atlantic Avenue between 7th Street and 6th Street:** Land uses in this area include multi-family residences and commercial uses that are located at grade with Atlantic Avenue. The residences were evaluated under Activity Category B, which has an exterior NAC of 67 dBA Leq. The commercial uses were classified under Activity Category E, which has an exterior NAC of 72 dBA Leq.

A total of 189 receptor locations, shown on Figure 2.14-2, were selected to represent noise-sensitive land uses in the Project vicinity. These receptor locations were representative of outdoor frequent human use areas associated with existing single-family and multi-family residences, an RV park, three schools, public parks, churches, a hotel, and other uses that include office, commercial, and industrial uses.

### 2.14.2.2 Existing Noise Environment

The primary source of noise in the Project area is traffic on Shoreline Drive, as well as the Golden Shore on- and off-ramps, the Broadway Avenue off-ramp, the 3rd Street on-ramp, the 6th Street off-ramp, and the 7th Street on-ramp. Secondary noise also emanates from the local street traffic on the surface streets in downtown Long Beach.

#### Noise Measurement Results

The existing noise environment in the area surrounding the Project limits is determined based on short-term and long-term 24-hour noise level measurements. Also, exterior-to-interior noise level reduction measurements were conducted in classrooms at the Cesar Chavez and Edison Elementary Schools to evaluate potential interior noise impacts.

*Short-Term Monitoring*

As it would be impractical to take noise measurements at every sensitive receptor, the short-term measurement locations were selected to be representative of noise sensitive uses in the Project area. Table 2.14-2 shows the results of the short-term noise level measurements. These short-term noise

measurements were used to calibrate the noise model and to predict the noise levels at all 189 modeled receptors area of the Project limits. The short term monitoring locations are shown on Figure 2.14-2.

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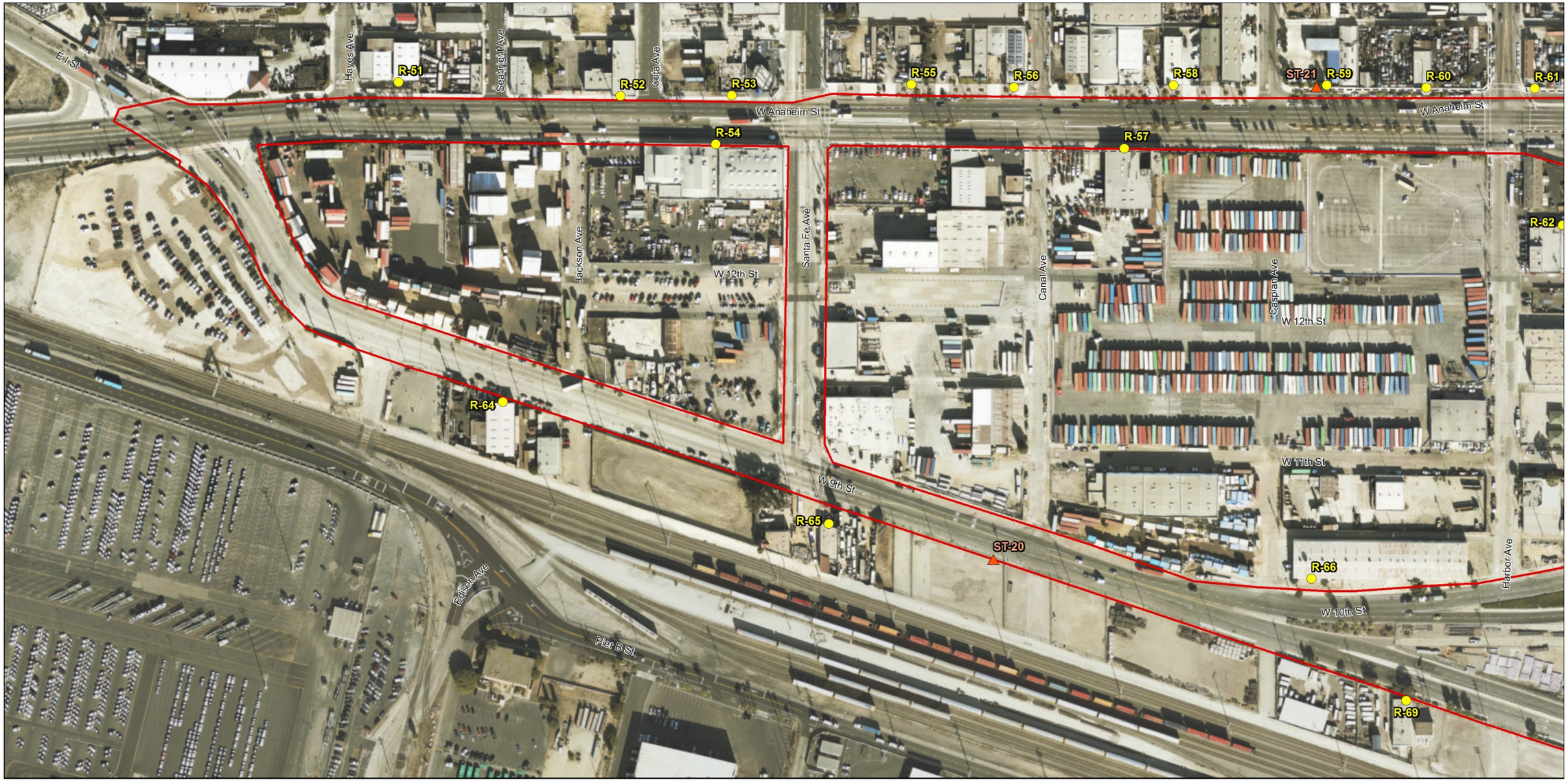


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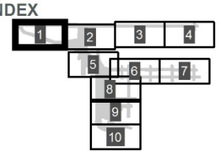
**LEGEND**

- Project Limits
- Modeled Noise Receptor Location
- Short-Term Monitoring Location
- Long-Term Monitoring Location
- Roadway Improvements
- Existing Right-of-Way

**MAP INDEX**

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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.14-2. Modeled Receptor Locations (Sheet 1 of 10)**

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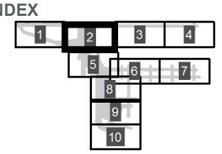
**LEGEND**

- Project Limits
- Modeled Noise Receptor Location
- Short-Term Monitoring Location
- Long-Term Monitoring Location
- Roadway Improvements
- Existing Right-of-Way

**MAP INDEX**

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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.14-2 Modeled Receptor Locations (Sheet 2 of 10)**

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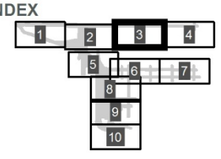
**LEGEND**

- Project Limits
- Modeled Noise Receptor Location
- Short-Term Monitoring Location
- Long-Term Monitoring Location
- Roadway Improvements
- Existing Right-of-Way

**MAP INDEX**

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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.14-2 Modeled Receptor Locations (Sheet 3 of 10)**

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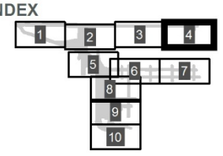
**LEGEND**

- Project Limits
- Modeled Noise Receptor Location
- Short-Term Monitoring Location
- Long-Term Monitoring Location
- Roadway Improvements
- Existing Right-of-Way

**MAP INDEX**

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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.14-2 Modeled Receptor Locations (Sheet 4 of 10)**

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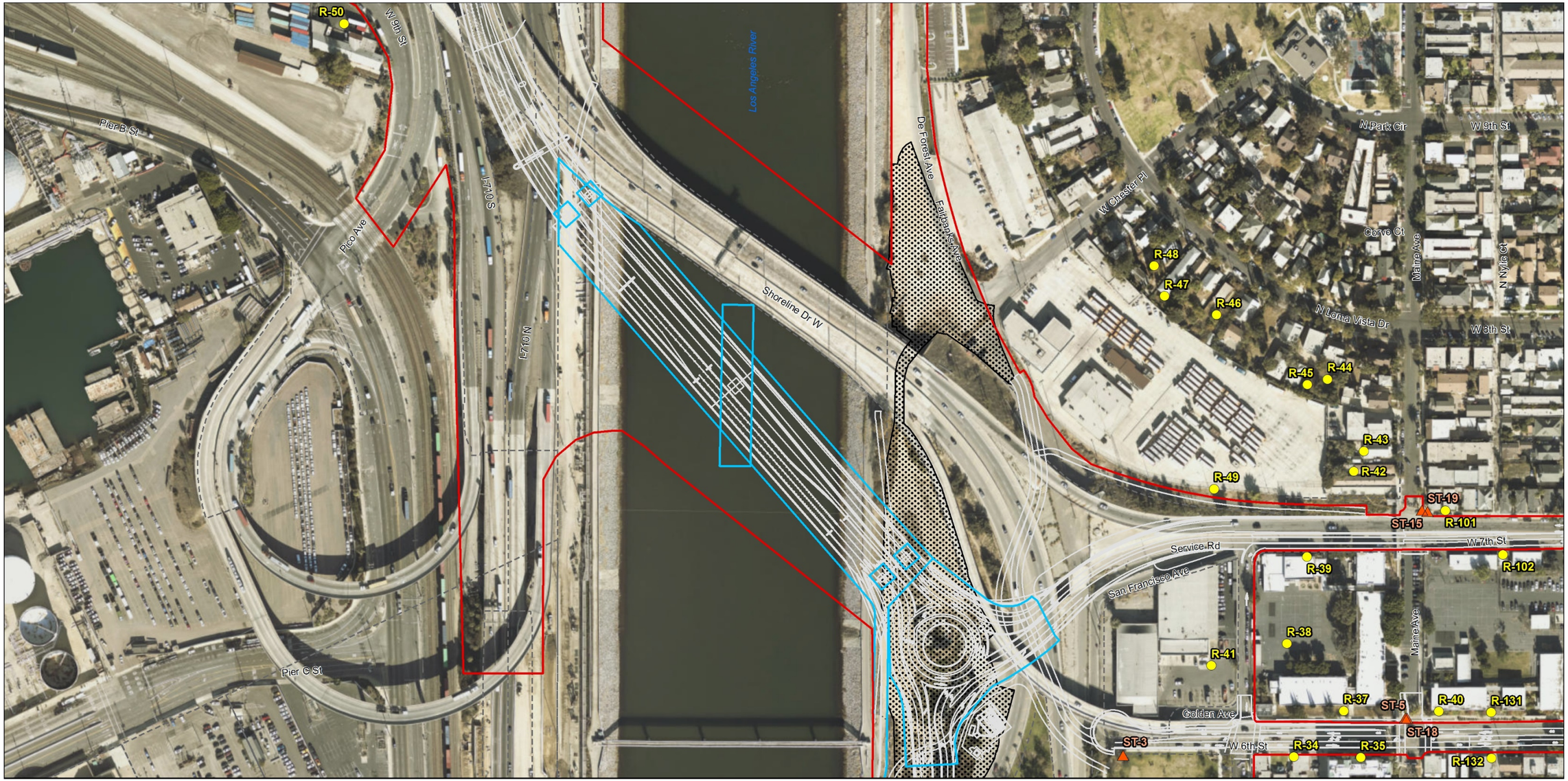


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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.14-2 Modeled Receptor Locations (Sheet 5 of 10)**

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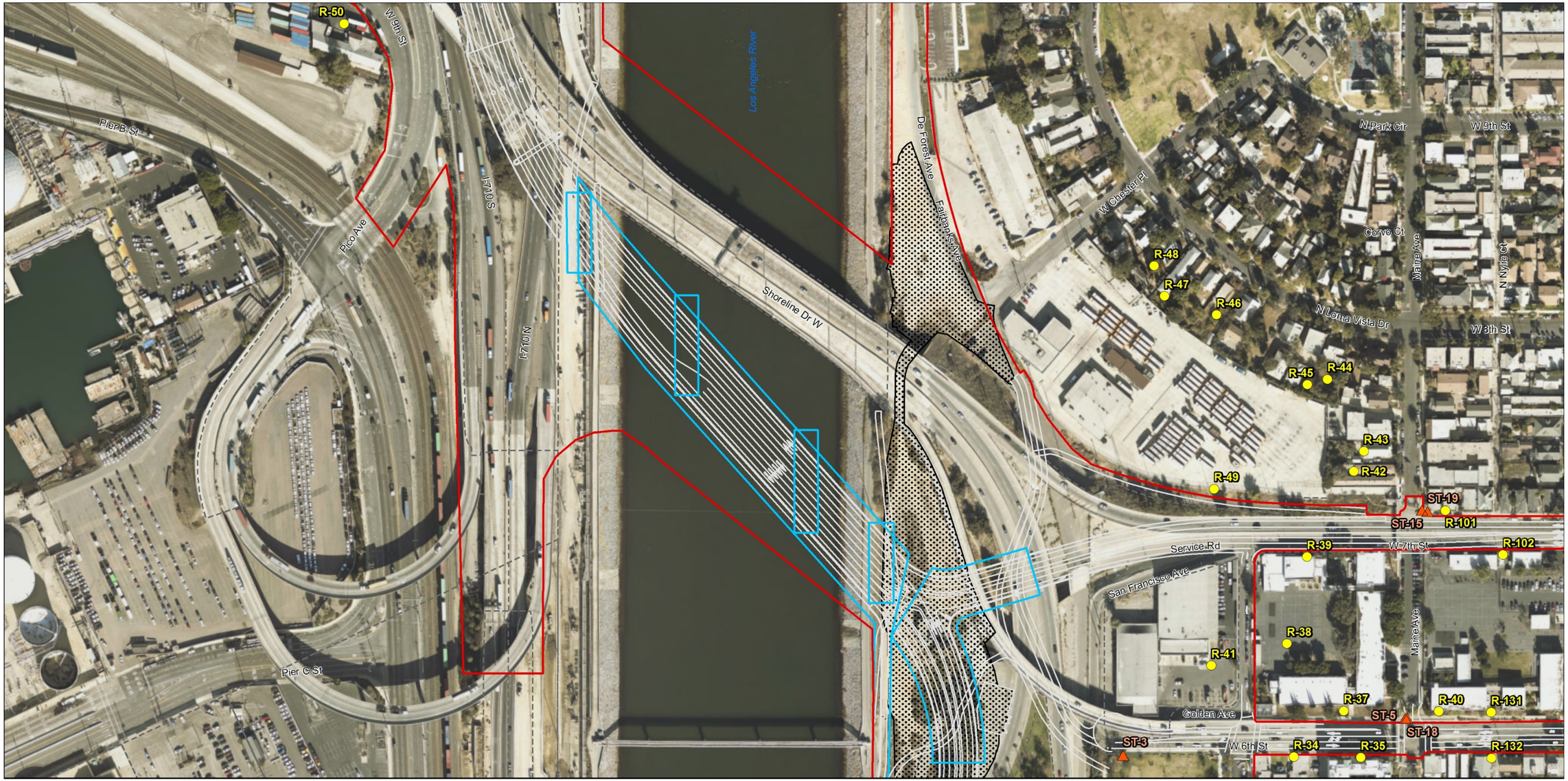


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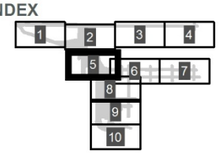
**LEGEND**

- Project Limits
- Modeled Noise Receptor Location
- Short-Term Monitoring Location
- Long-Term Monitoring Location
- Roadway Improvements
- Existing Right-of-Way
- Proposed Right-Of-Way
- Long Beach MUST Project

**MAP INDEX**

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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.14-2 Modeled Receptor Locations (Sheet 6 of 10)**

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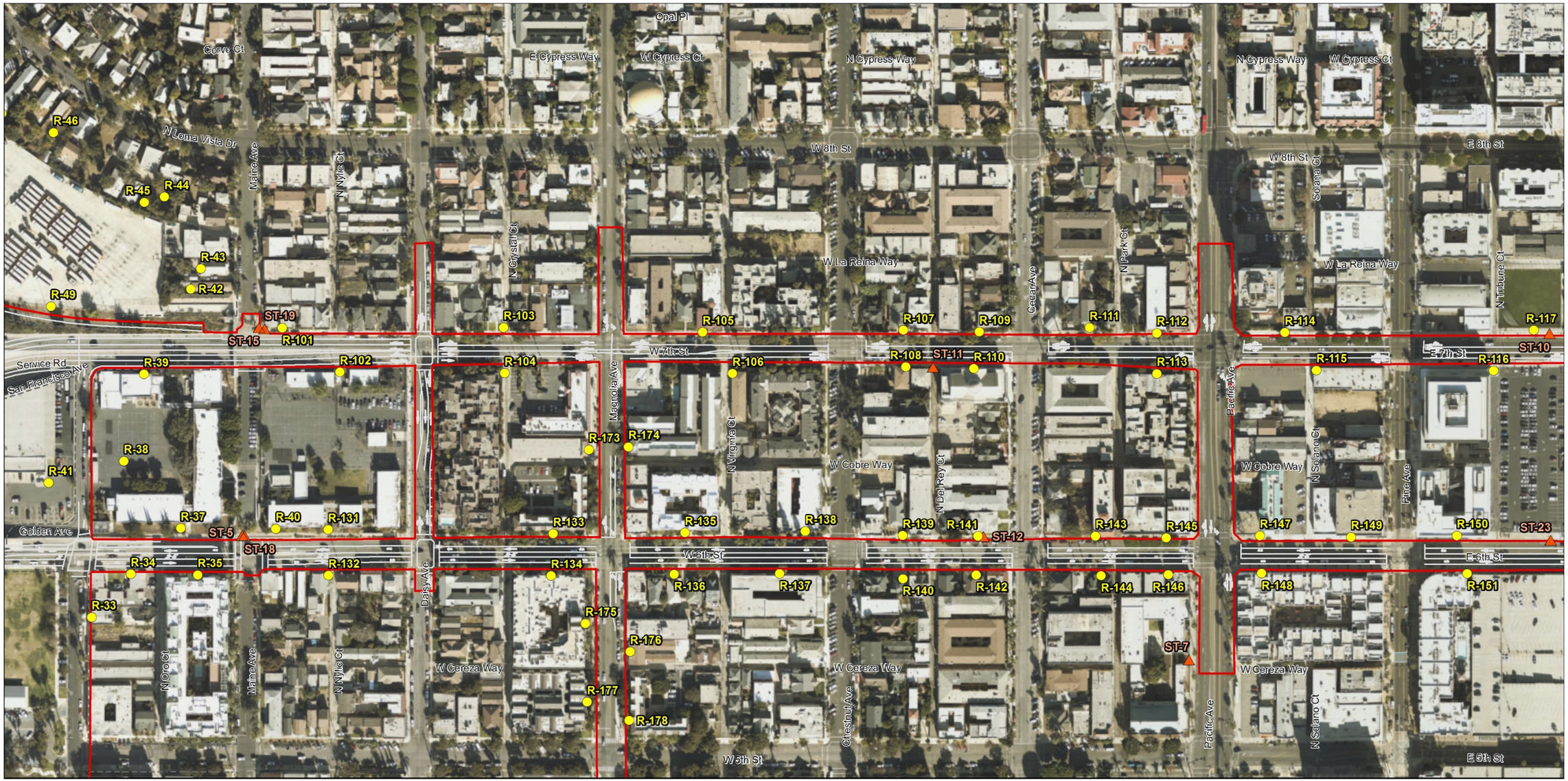


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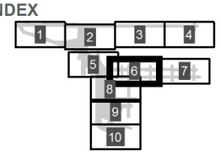
**LEGEND**

- Project Limits
- Modeled Noise Receptor Location
- Short-Term Monitoring Location
- Long-Term Monitoring Location
- Roadway Improvements
- Existing Right-of-Way

**MAP INDEX**

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*Shoemaker Bridge Replacement Project*

**Figure 2.14-2 Modeled Receptor Locations (Sheet 7 of 10)**

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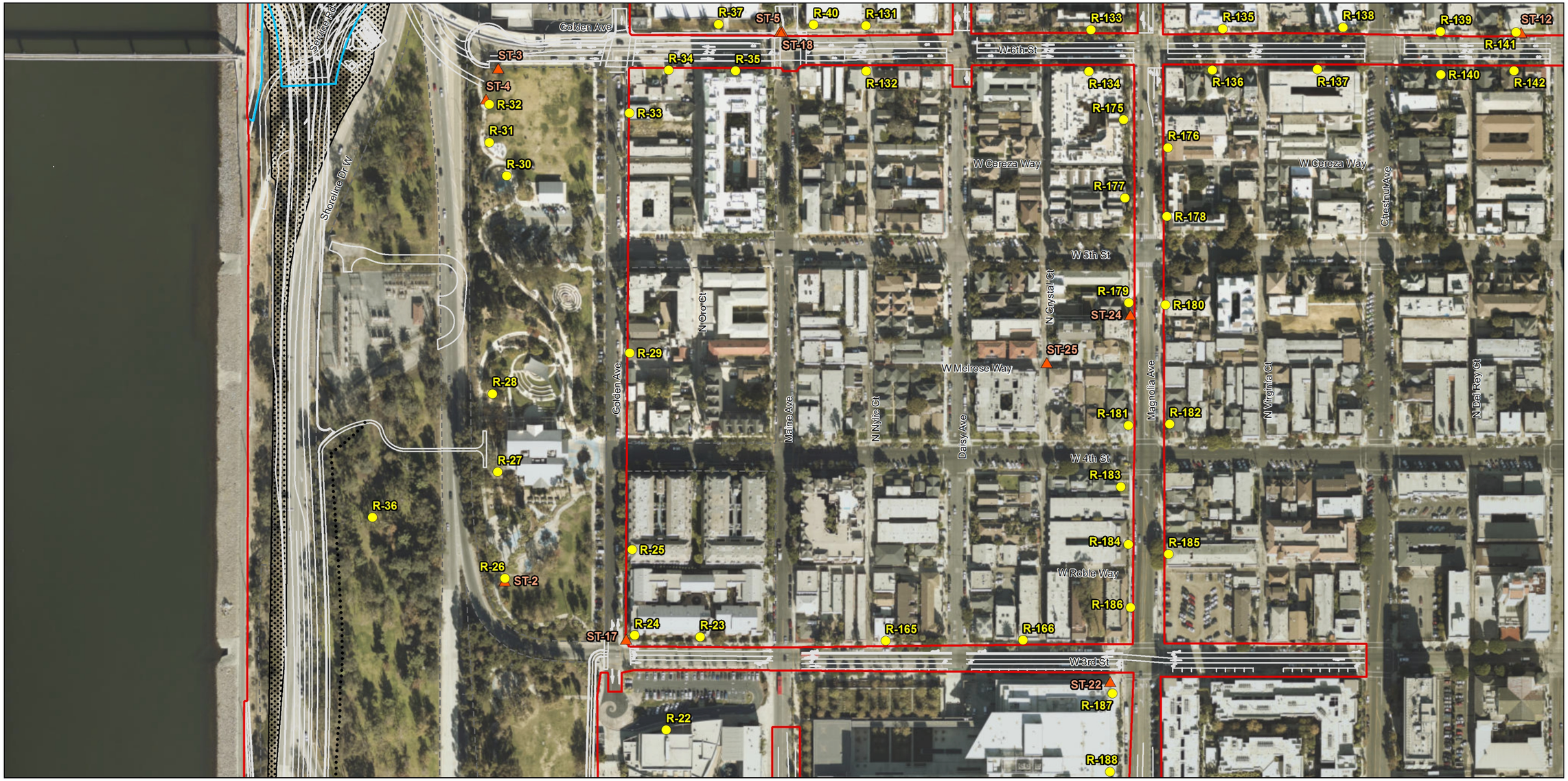


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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.14-2 Modeled Receptor Locations (Sheet 8 of 10)**

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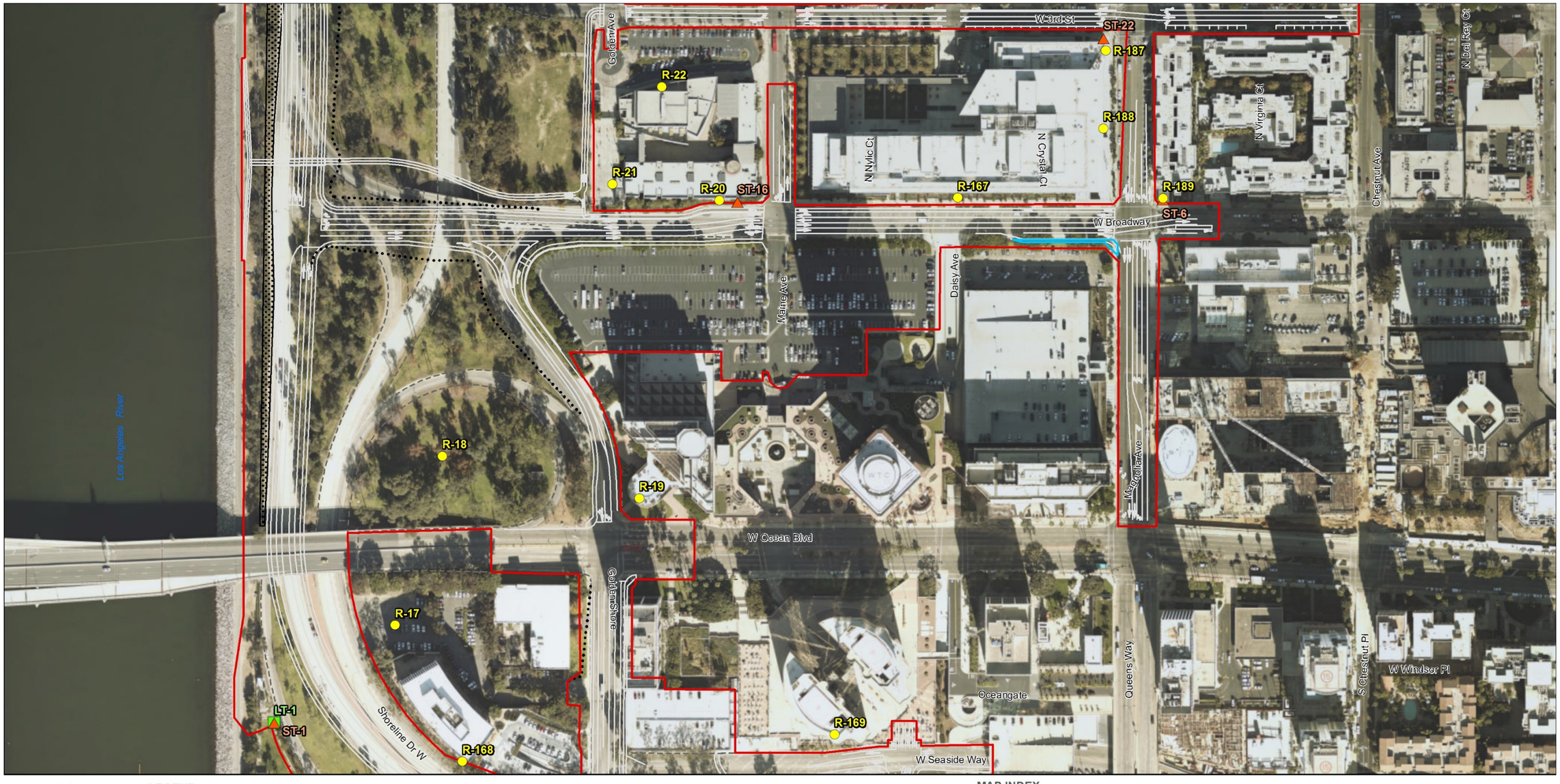


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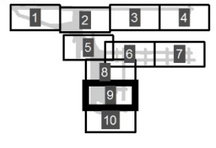
**LEGEND**

- Project Limits
- Modeled Noise Receptor Location
- Short-Term Monitoring Location
- Long-Term Monitoring Location
- Roadway Improvements
- Existing Right-of-Way
- Proposed Right-Of-Way
- Long Beach MUST Project
- Permanent Slope Easement

**MAP INDEX**




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.14-2 Modeled Receptor Locations (Sheet 9 of 10)**

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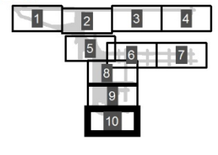
**LEGEND**

- Project Limits
- Modeled Noise Receptor Location
- Short-Term Monitoring Location
- Long-Term Monitoring Location
- Roadway Improvements
- Existing Right-of-Way

**MAP INDEX**




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.14-2 Modeled Receptor Locations (Sheet 10 of 10)**

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## Table 2.14-2. Short-Term Noise Measurement Results

| Position | Address | Land Use | Measured dBA $L_{eq}$ |
|---|---|---|---|
| ST-1 | Golden Shores RV Park | Recreational | 66.5 |
| ST-2 | Cesar E. Chaves Park | Recreational | 65.5 |
| ST-3 | Cesar E. Chaves Park | Recreational | 67.8 |
| ST-4 | Cesar E. Chaves Park | Recreational | 68.5 |
| ST-5 | W. 6th Street at Edison E.S. | School | 72.8 |
| ST-6 | 421 W. Broadway | Restaurant | 65.3 |
| ST-7 | 507 Pacific Street | Place of Worship | 64.5 |
| ST-8 | Atlantic Avenue, South of E 6t Street at Stevenson Robert Luis E.S. | School | 62.8 |
| ST-9 | 525 E. 7th Street | Place of Worship | 66.7 |
| ST-10 | E. 7th Street, west of Locust Avenue | School | 66.1 |
| ST-11 | 324 W. 7th Street | Multi-family Residential | 69.3 |
| ST-12 | W 6th Street, west of Cedar Avenue | Multi-family Residential | 61.9 |
| ST-13 | 200 E Anaheim Street | Multi-family Residential | 68.6 |
| ST-14 | Drake/Chavez Greenbelt Entrance. W. Anaheim Street/Daisy Avenue | Recreational | 71.6 |
| | | | 71.5 |
| | | | 72.4 |
| ST-15 | W. 7th Street at Maine Avenue | Single-family Residential | 69.9 |
| ST-16 | W. Broadway at Cesar Chaves E.S. | School | 66.8 |
| ST-17 | 745 W. 3rd Street | Multi-family Residential | 65.2 |
| ST-18 | W. 6th Street at Edison E.S. | School | 73.3 |
| ST-19 | W. 7th Street at Maine Avenue | Single-family Residential | 68.5 |
| ST-20 | W. 9th Street at Canal | Industrial | 70.4 |
| ST-21 | 1475 W. Anaheim Street | Industrial | 73.4 |
| ST-22 | W. 3rd Street, west of Broadway | Restaurant | 65.3 |
| ST-23 | E. 6th Street, west of Locust Avenue | Commercial | 65.5 |
| ST-24 | 429 Magnolia Avenue | Multi-family Residential | 59.7 |

**Table 2.14-2. Short-Term Noise Measurement Results**

| Position | Address | Land Use | Measured dBA $L_{eq}$ |
|---|---|---|---|
| ST-25 | W. Melrose Way at N. Crystal Court | Multi-family Residential | 48.7 |

Notes:
dBA=A-weighted decibel; $L_{eq}$=equivalent continuous sound level; NAC=Noise Abatement Criteria

*Long-Term Monitoring*

Long-term monitoring was conducted at two locations using a Larson Davis 820 Type 1 SLM. The purpose of these measurements was to describe variations in sound levels throughout the day. The long-term monitoring locations are shown on Figure 2.14-2.

Long term monitoring location LT-1 was conducted on Monday, April 17, 2017, to Tuesday, April 18, 2017, at Golden Shore RV Park, 101 Golden Shore Street, Long Beach, in the northern most corner of the pool area. The worst-hour noise level was 71 dBA hourly equivalent noise level ($L_{eq}$(h)) at 7:00 a.m.

Long-term monitoring location LT-2 was conducted on Wednesday, April 19, 2018, to Thursday, April 20, 2017, at the park in the southwest corner of Anaheim Street and Daisy Avenue. The worst-hour noise- level was 75 dBA Leq(h) during the 8:00 a.m. hour.

Table 2.14-3 and Table 2.14-4 summarize the results of the long-term monitoring.

**Table 2.14-3. Summary of Long-Term Monitoring at Location LT-1**

| Hour | Start Time | Date | Noise Level (dBA $L_{eq}$) |
|---|---|---|---|
| 1 | 8:00 p.m. | 4/17/2017 | 66 |
| 2 | 9:00 p.m. | 4/17/2017 | 65 |
| 3 | 10:00 p.m. | 4/17/2017 | 63 |
| 4 | 11:00 p.m. | 4/17/2017 | 59 |
| 5 | 12:00 a.m. | 4/18/2017 | 60 |
| 6 | 1:00 a.m. | 4/18/2017 | 57 |
| 7 | 2:00 a.m. | 4/18/2017 | 57 |
| 8 | 3:00 a.m. | 4/18/2017 | 59 |
| 9 | 4:00 a.m. | 4/18/2017 | 65 |
| 10 | 5:00 a.m. | 4/18/2017 | 70 |
| 11 | 6:00 a.m. | 4/18/2017 | 70 |
| 12 | 7:00 a.m. | 4/18/2017 | **71**[1] |
| 13 | 8:00 a.m. | 4/18/2017 | 70 |
| 14 | 9:00 a.m. | 4/18/2017 | 66 |
| 15 | 10:00 a.m. | 4/18/2017 | 64 |

### Table 2.14-3. Summary of Long-Term Monitoring at Location LT-1

| Hour | Start Time | Date | Noise Level (dBA $L_{eq}$) |
|---|---|---|---|
| 16 | 11:00 a.m. | 4/18/2017 | 65 |
| 17 | 12:00 p.m. | 4/18/2017 | 66 |
| 18 | 1:00 p.m. | 4/18/2017 | 65 |
| 19 | 2:00 p.m. | 4/18/2017 | 64 |
| 20 | 3:00 p.m. | 4/18/2017 | 64 |
| 21 | 4:00 p.m. | 4/18/2017 | 66 |
| 22 | 5:00 p.m. | 4/18/2017 | 67 |
| 23 | 6:00 p.m. | 4/18/2017 | 66 |
| 24 | 7:00 p.m. | 4/18/2017 | 66 |

Source: Caltrans 2019h
Notes:
[1] **Bold** number represents peak ambient noise hour.
dBA=A-weighted decibel; Leq=equivalent continuous sound level

### Table 2.14-4. Summary of Long-Term Monitoring at Location LT-2

| Hour | Start Time | Date | Noise Level (dBA $L_{eq}$) |
|---|---|---|---|
| 1 | 4:00 p.m. | 4/19/2017 | 72 |
| 2 | 5:00 p.m. | 4/19/2017 | 72 |
| 3 | 6:00 p.m. | 4/19/2017 | 72 |
| 4 | 7:00 p.m. | 4/19/2017 | 73 |
| 5 | 8:00 p.m. | 4/19/2017 | 73 |
| 6 | 9:00 p.m. | 4/19/2017 | 74 |
| 7 | 10:00 p.m. | 4/19/2017 | 72 |
| 8 | 11:00 p.m. | 4/19/2017 | 71 |
| 9 | 12:00 a.m. | 4/20/2017 | 72 |
| 10 | 1:00 a.m. | 4/20/2017 | 68 |
| 11 | 2:00 a.m. | 4/20/2017 | 68 |
| 12 | 3:00 a.m. | 4/20/2017 | 67 |
| 13 | 4:00 a.m. | 4/20/2017 | 66 |
| 14 | 5:00 a.m. | 4/20/2017 | 68 |
| 15 | 6:00 a.m. | 4/20/2017 | 71 |
| 16 | 7:00 a.m. | 4/20/2017 | 74 |
| 17 | 8:00 a.m. | 4/20/2017 | **75**[1] |

**Table 2.14-4. Summary of Long-Term Monitoring at Location LT-2**

| Hour | Start Time | Date | Noise Level (dBA $L_{eq}$) |
|---|---|---|---|
| 18 | 9:00 a.m. | 4/20/2017 | 74 |
| 19 | 10:00 a.m. | 4/20/2017 | 73 |
| 20 | 11:00 a.m. | 4/20/2017 | 73 |
| 21 | 12:00 p.m. | 4/20/2017 | 70 |
| 22 | 1:00 p.m. | 4/20/2017 | 71 |
| 23 | 2:00 p.m. | 4/20/2017 | 72 |
| 24 | 3:00 p.m. | 4/20/2017 | 73 |

Source: Caltrans 2019h
Notes:
[1] **Bold** number represents peak ambient noise hour.
dBA=A-weighted decibel; $L_{eq}$=equivalent continuous sound level

*Exterior to Interior Noise Level Measurements*

Exterior-to-interior noise level measurements were conducted at Cesar Chavez Elementary School and Edison Elementary School to determine the existing exterior to interior noise level reduction at the representative classrooms. These representative classrooms were used to evaluate two classrooms represented by Receptors R-21 and R-23 at Cesar Chavez Elementary School, and three classrooms represented by Receptors R-38, R-39, R-40, R-41, R-102, and R-131 at Edison Elementary School. Measurements were conducted at these locations to ensure that the interior noise levels would not approach or exceed the 52 dBA Leq NAC under future conditions with the proposed Project. Table 2.14-5 shows the results of the exterior-to-interior noise level reduction measurements at the representative classrooms.

**Table 2.14-5. Exterior to Interior Noise Monitoring Results**

| Receptor | Exterior (dBA $L_{eq}$) | Interior (dBA $L_{eq}$) | Exterior to Interior Noise Level Reduction | Land Use Description |
|---|---|---|---|---|
| EI-1 | 70.1 | 33.9 | 36.2 | Cesar Chavez Elementary School |
| EI-2 | 71.0 | 40.5 | 30.5 | Edison Elementary School |

Source: Caltrans 2019h
Notes:
dBA=A-weighted decibel; $L_{eq}$=equivalent continuous sound level

### Existing Noise Levels

The existing noise levels were evaluated using either the existing worst-case traffic conditions or the existing peak-hour traffic volumes obtained from the Project engineer (Caltrans 2019h) for the proposed Project, whichever is lower. The traffic volumes were entered into the Traffic Noise Model (TNM) 2.5 with existing roadway conditions. The results of the existing traffic noise modeling are shown in Table 2.14-6. Of the 189 modeled receptor locations, 76 receptors currently approach or exceed the 67 dBA $L_{eq}$ NAC under Activity Categories B, C, or E. Figure 2.14-2 shows the locations of the modeled receptors.

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**Table 2.14-6. Predicted Future Noise Levels**

| Receptor No. | Land Use Description | Existing Noise Level Leq(h), dBA | Future Worst Hour Noise Levels - Leq(h), dBA | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Design Year Noise Level without Project Leq(h), dBA | Design Year Noise Level with Project Leq(h), dBA | Design Year Noise Level without Project minus Existing Conditions Leq(h), dBA | Design Year Noise Level with Project Minus No Project Conditions Leq(h), dBA | NAC Activity Category | NAC Leq(h), dBA | Impact Type |
| 1 | RV Park | 60 | 61 | 64 | 1 | 3 | B | 67 | None |
| 2 | RV Park | 59 | 60 | 64 | 1 | 4 | B | 67 | None |
| 3 | RV Park | 59 | 60 | 63 | 1 | 3 | B | 67 | None |
| 4 | RV Park | 59 | 60 | 63 | 1 | 3 | B | 67 | None |
| 5 | RV Park | 63 | 64 | 63 | 1 | -1 | B | 67 | None |
| 6 | RV Park | 64 | 65 | 62 | 1 | -3 | B | 67 | None |
| 7 | RV Park | 65 | 65 | 62 | 0 | -3 | B | 67 | None |
| 8 | RV Park | 64 | 64 | 62 | 0 | -2 | B | 67 | None |
| 9 | RV Park/Recreational | 64 | 64 | 62 | 0 | -2 | C | 67 | None |
| 10 | RV Park | 59 | 60 | 61 | 1 | 1 | B | 67 | None |
| 11 | RV Park | 58 | 59 | 61 | 1 | 2 | B | 67 | None |
| 12 | RV Park | 59 | 60 | 60 | 1 | 0 | B | 67 | None |
| 13 | RV Park | 59 | 60 | 60 | 1 | 0 | B | 67 | None |
| 14 | RV Park | 60 | 61 | 60 | 1 | -1 | B | 67 | None |
| 15 | RV Park | 60 | 61 | 60 | 1 | -1 | B | 67 | None |
| 16 | RV Park | 59 | 60 | 59 | 1 | -1 | B | 67 | None |
| 17 | Office | 64 | 63 | 65 | -1 | 2 | E | 72 | None |
| 18 | Park/Trail | 62 | 62 | 62 | 0 | 0 | C | 67 | None |
| 19 | Hotel | 66 | 67 | 66 | 1 | -1 | E | 72 | None |
| 20 | School | 69 | 69 | 66 | 0 | -3 | C | 67 | A/E |
| 21 | School | 66 | 66 | 63 | 0 | -3 | C | 67 | None |
| 22 | School | 59 | 60 | 54 | 1 | -6 | C | 67 | None |
| 23 | Residential | 67 | 68 | 59 | 1 | -9 | B | 67 | None |
| 24 | Residential | 70 | 70 | 63 | 0 | -7 | B | 67 | None |
| 25 | Residential | 61 | 61 | 61 | 0 | 0 | B | 67 | None |
| 26 | Park | 68 | 68 | 58 | 0 | -10 | C | 67 | None |
| 27 | Park | 67 | 68 | 58 | 1 | -10 | C | 67 | None |
| 28 | Park | 67 | 68 | 59 | 1 | -9 | C | 67 | None |
| 29 | Residential | 61 | 61 | 61 | 0 | 0 | B | 67 | None |

**Table 2.14-6. Predicted Future Noise Levels**

| Receptor No. | Land Use Description | Existing Noise Level Leq(h), dBA | Future Worst Hour Noise Levels - Leq(h), dBA | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Design Year Noise Level without Project Leq(h), dBA | Design Year Noise Level with Project Leq(h), dBA | Design Year Noise Level without Project minus Existing Conditions Leq(h), dBA | Design Year Noise Level with Project Minus No Project Conditions Leq(h), dBA | NAC Activity Category | NAC Leq(h), dBA | Impact Type |
| 30 | Park | 58 | 59 | 55 | 1 | -4 | C | 67 | None |
| 31 | Park | 59 | 60 | 55 | 1 | -5 | C | 67 | None |
| 32 | Park | 63 | 64 | 57 | 1 | -7 | C | 67 | None |
| 33 | Residential | 63 | 64 | 63 | 1 | -1 | B | 67 | None |
| 34 | Residential | 66 | 66 | 55 | 0 | -11 | B | 67 | None |
| 35 | Residential | 66 | 67 | 57 | 1 | -10 | B | 67 | None |
| 36 | Park | 66 | 67 | 63 | 1 | -4 | C | 67 | None |
| 37 | School | 67 | 68 | 56 | 1 | -12 | C | 67 | None |
| 38 | School | 56 | 56 | 58 | 0 | 2 | C | 67 | None |
| 39 | School | 68 | 69 | 75 | 1 | 6 | C | 67 | A/E |
| 40 | School | 67 | 68 | 55 | 1 | -13 | C | 67 | None |
| 41 | Industrial/Bus Yard | 58 | 58 | 54 | 0 | -4 | F | None | None |
| 42 | Residential | 58 | 59 | 62 | 1 | 3 | B | 67 | None |
| 43 | Residential | 58 | 58 | 61 | 0 | 3 | B | 67 | None |
| 44 | Residential | 56 | 57 | 57 | 1 | 0 | B | 67 | None |
| 45 | Residential | 55 | 56 | 55 | 1 | -1 | B | 67 | None |
| 46 | Residential | 57 | 57 | 54 | 0 | -3 | B | 67 | None |
| 47 | Residential | 55 | 55 | 53 | 0 | -2 | B | 67 | None |
| 48 | Residential | 58 | 59 | 55 | 1 | -4 | B | 67 | None |
| 49 | Commercial/Retail | 64 | 65 | 67 | 1 | 2 | E | 72 | None |
| 50 | Industrial/Bus Mechanical Facility | 62 | 63 | 63 | 1 | 0 | F | None | None |
| 51 | Industrial | 73 | 73 | 74 | 0 | 1 | F | None | None |
| 52 | Industrial | 76 | 77 | 78 | 1 | 1 | F | None | None |
| 53 | Industrial | 75 | 75 | 77 | 0 | 2 | F | None | None |
| 54 | Industrial | 75 | 76 | 76 | 1 | 0 | F | None | None |
| 55 | Industrial | 74 | 75 | 76 | 1 | 1 | F | None | None |
| 56 | Industrial | 74 | 74 | 75 | 0 | 1 | F | None | None |
| 57 | Industrial | 76 | 77 | 78 | 1 | 1 | F | None | None |
| 58 | Industrial | 73 | 74 | 75 | 1 | 1 | F | None | None |

**Table 2.14-6. Predicted Future Noise Levels**

| Receptor No. | Land Use Description | Existing Noise Level Leq(h), dBA | Future Worst Hour Noise Levels - Leq(h), dBA | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Design Year Noise Level without Project Leq(h), dBA | Design Year Noise Level with Project Leq(h), dBA | Design Year Noise Level without Project minus Existing Conditions Leq(h), dBA | Design Year Noise Level with Project Minus No Project Conditions Leq(h), dBA | NAC Activity Category | NAC Leq(h), dBA | Impact Type |
| 59 | Industrial | 72 | 73 | 74 | 1 | 1 | F | None | None |
| 60 | Industrial | 73 | 74 | 75 | 1 | 1 | F | None | None |
| 61 | Industrial | 73 | 74 | 75 | 1 | 1 | F | None | None |
| 62 | Industrial | 66 | 67 | 68 | 1 | 1 | F | None | None |
| 63 | Industrial | 67 | 68 | 69 | 1 | 1 | F | None | None |
| 64 | Industrial | 62 | 62 | 60 | 0 | -2 | F | None | None |
| 65 | Industrial | 66 | 66 | 65 | 0 | -1 | F | None | None |
| 66 | Industrial | 65 | 65 | 61 | 0 | -4 | F | None | None |
| 67 | Industrial | 60 | 61 | 59 | 1 | -2 | F | None | None |
| 68 | Industrial | 61 | 62 | 59 | 1 | -3 | F | None | None |
| 69 | Industrial | 64 | 64 | 65 | 0 | 1 | F | None | None |
| 70 | Industrial | 73 | 74 | 75 | 1 | 1 | F | None | None |
| 71 | Industrial | 72 | 73 | 74 | 1 | 1 | F | None | None |
| 72 | Commercial/Retail | 72 | 72 | 73 | 0 | 1 | E | 72 | A/E |
| 73 | Commercial/Retail | 70 | 71 | 72 | 1 | 1 | E | 72 | A/E |
| 74 | Industrial | 71 | 71 | 72 | 0 | 1 | F | None | None |
| 75 | Park/Trail | 71 | 71 | 72 | 0 | 1 | C | 67 | A/E |
| 76 | Residential | 67 | 67 | 68 | 0 | 1 | B | 67 | A/E |
| 77 | Residential | 64 | 65 | 66 | 1 | 1 | B | 67 | A/E |
| 78 | Commercial/Retail | 72 | 73 | 74 | 1 | 1 | E | 72 | A/E |
| 79 | Commercial/Retail | 65 | 66 | 66 | 1 | 0 | E | 72 | None |
| 80 | Commercial/Indoor Restaurant | 69 | 70 | 70 | 1 | 0 | E | 72 | None |
| 81 | Commercial/Retail | 73 | 73 | 74 | 0 | 1 | E | 72 | A/E |
| 82 | Residential | 60 | 61 | 61 | 1 | 0 | B | 67 | None |
| 83 | Commercial/Indoor Restaurant | 67 | 67 | 68 | 0 | 1 | E | 72 | None |
| 84 | Commercial/Indoor Restaurant | 73 | 73 | 74 | 0 | 1 | E | 72 | A/E |
| 85 | Residential | 64 | 64 | 64 | 0 | 0 | B | 67 | None |
| 86 | Commercial/Retail | 74 | 74 | 74 | 0 | 0 | E | 72 | A/E |
| 87 | Residential | 72 | 72 | 72 | 0 | 0 | B | 67 | A/E |

**Table 2.14-6. Predicted Future Noise Levels**

| Receptor No. | Land Use Description | Existing Noise Level Leq(h), dBA | Future Worst Hour Noise Levels - Leq(h), dBA | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Design Year Noise Level without Project Leq(h), dBA | Design Year Noise Level with Project Leq(h), dBA | Design Year Noise Level without Project minus Existing Conditions Leq(h), dBA | Design Year Noise Level with Project Minus No Project Conditions Leq(h), dBA | NAC Activity Category | NAC Leq(h), dBA | Impact Type |
| 88 | Commercial/Retail | 72 | 72 | 72 | 0 | 0 | E | 72 | A/E |
| 89 | Residential | 65 | 65 | 66 | 0 | 1 | B | 67 | A/E |
| 90 | Commercial/Indoor Restaurant | 73 | 73 | 73 | 0 | 0 | E | 72 | A/E |
| 91 | Residential | 72 | 72 | 72 | 0 | 0 | B | 67 | A/E |
| 92 | Residential | 55 | 55 | 55 | 0 | 0 | B | 67 | None |
| 93 | Commercial/Indoor Restaurant | 72 | 72 | 72 | 0 | 0 | E | 72 | A/E |
| 94 | Residential | 58 | 58 | 59 | 0 | 1 | B | 67 | None |
| 95 | Residential | 59 | 59 | 59 | 0 | 0 | B | 67 | None |
| 96 | Industrial | 73 | 73 | 74 | 0 | 1 | F | None | None |
| 97 | Industrial | 70 | 71 | 71 | 1 | 0 | F | None | None |
| 98 | Industrial | 73 | 73 | 73 | 0 | 0 | F | None | None |
| 99 | Commercial/Indoor Restaurant | 73 | 74 | 74 | 1 | 0 | E | 72 | A/E |
| 100 | Residential | 61 | 62 | 62 | 1 | 0 | B | 67 | None |
| 101 | Residential | 70 | 71 | 75 | 1 | 4 | B | 67 | A/E |
| 102 | Elementary School | 69 | 69 | 76 | 0 | 7 | C | 67 | A/E |
| 103 | Residential | 69 | 69 | 75 | 0 | 6 | B | 67 | A/E |
| 104 | Residential | 70 | 70 | 76 | 0 | 6 | B | 67 | A/E |
| 105 | Residential | 65 | 65 | 68 | 0 | 3 | B | 67 | A/E |
| 106 | Residential | 67 | 67 | 69 | 0 | 2 | B | 67 | A/E |
| 107 | Residential | 67 | 68 | 69 | 1 | 1 | B | 67 | A/E |
| 108 | Residential/Community Garden | 71 | 71 | 73 | 0 | 2 | B | 67 | A/E |
| 109 | Residential | 68 | 68 | 70 | 0 | 2 | B | 67 | A/E |
| 110 | Place of Worship | 71 | 71 | 73 | 0 | 2 | C | 67 | A/E |
| 111 | Residential | 68 | 68 | 70 | 0 | 2 | B | 67 | A/E |
| 112 | Residential | 69 | 69 | 70 | 0 | 1 | B | 67 | A/E |
| 113 | Residential | 71 | 72 | 73 | 1 | 1 | B | 67 | A/E |
| 114 | Health Clinic | 68 | 68 | 70 | 0 | 2 | C | 67 | A/E |
| 115 | Residential | 70 | 70 | 71 | 0 | 1 | B | 67 | A/E |
| 116 | Office | 69 | 69 | 71 | 0 | 2 | E | 72 | A/E |

**Table 2.14-6. Predicted Future Noise Levels**

| Receptor No. | Land Use Description | Existing Noise Level Leq(h), dBA | Future Worst Hour Noise Levels - Leq(h), dBA | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Design Year Noise Level without Project Leq(h), dBA | Design Year Noise Level with Project Leq(h), dBA | Design Year Noise Level without Project minus Existing Conditions Leq(h), dBA | Design Year Noise Level with Project Minus No Project Conditions Leq(h), dBA | NAC Activity Category | NAC Leq(h), dBA | Impact Type |
| 117 | Playground | 67 | 67 | 69 | 0 | 2 | C | 67 | A/E |
| 118 | Elementary School | 69 | 69 | 71 | 0 | 2 | C | 67 | A/E |
| 119 | Commercial/Indoor Restaurant | 70 | 70 | 71 | 0 | 1 | E | 72 | A/E |
| 120 | Commercial/Indoor Restaurant | 68 | 68 | 70 | 0 | 2 | E | 72 | None |
| 121 | Commercial/Indoor Restaurant | 65 | 66 | 67 | 1 | 1 | E | 72 | None |
| 122 | Residential | 67 | 67 | 69 | 0 | 2 | B | 67 | A/E |
| 123 | Residential | 71 | 71 | 72 | 0 | 1 | B | 67 | A/E |
| 124 | Residential | 66 | 66 | 68 | 0 | 2 | B | 67 | A/E |
| 125 | Residential | 70 | 71 | 72 | 1 | 1 | B | 67 | A/E |
| 126 | Place of Worship/Office | 67 | 67 | 68 | 0 | 1 | C | 67 | A/E |
| 127 | Residential | 71 | 71 | 73 | 0 | 2 | B | 67 | A/E |
| 128 | Office | 67 | 67 | 68 | 0 | 1 | E | 72 | None |
| 129 | Residential | 71 | 71 | 73 | 0 | 2 | B | 67 | A/E |
| 130 | Commercial/Indoor Restaurant | 70 | 70 | 72 | 0 | 2 | E | 72 | A/E |
| 131 | Elementary School | 67 | 67 | 56 | 0 | -11 | C | 67 | None |
| 132 | Residential | 67 | 68 | 58 | 1 | -10 | B | 67 | None |
| 133 | Residential | 67 | 67 | 61 | 0 | -6 | B | 67 | None |
| 134 | Residential | 70 | 70 | 62 | 0 | -8 | B | 67 | None |
| 135 | Residential | 65 | 65 | 61 | 0 | -4 | B | 67 | None |
| 136 | Residential | 68 | 68 | 63 | 0 | -5 | B | 67 | None |
| 137 | Residential | 68 | 68 | 63 | 0 | -5 | B | 67 | None |
| 138 | Residential | 65 | 65 | 60 | 0 | -5 | B | 67 | None |
| 139 | Residential | 64 | 64 | 59 | 0 | -5 | B | 67 | None |
| 140 | Residential | 68 | 68 | 62 | 0 | -6 | B | 67 | None |
| 141 | Residential | 64 | 65 | 60 | 1 | -5 | B | 67 | None |
| 142 | Residential | 67 | 67 | 62 | 0 | -5 | B | 67 | None |
| 143 | Residential | 64 | 64 | 61 | 0 | -3 | B | 67 | None |
| 144 | Residential | 67 | 68 | 64 | 1 | -4 | B | 67 | None |
| 145 | Residential | 65 | 65 | 62 | 0 | -3 | B | 67 | None |

**Table 2.14-6. Predicted Future Noise Levels**

| Receptor No. | Land Use Description | Existing Noise Level Leq(h), dBA | Future Worst Hour Noise Levels - Leq(h), dBA | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Design Year Noise Level without Project Leq(h), dBA | Design Year Noise Level with Project Leq(h), dBA | Design Year Noise Level without Project minus Existing Conditions Leq(h), dBA | Design Year Noise Level with Project Minus No Project Conditions Leq(h), dBA | NAC Activity Category | NAC Leq(h), dBA | Impact Type |
| 146 | Residential | 68 | 68 | 65 | 0 | -3 | B | 67 | None |
| 147 | Place of Worship | 66 | 66 | 62 | 0 | -4 | C | 67 | None |
| 148 | Residential | 68 | 68 | 64 | 0 | -4 | B | 67 | None |
| 149 | Office | 65 | 66 | 62 | 1 | -4 | E | 72 | None |
| 150 | Office | 65 | 66 | 62 | 1 | -4 | E | 72 | None |
| 151 | Residential | 67 | 68 | 64 | 1 | -4 | B | 67 | None |
| 152 | Commercial/Retail | 66 | 66 | 62 | 0 | -4 | E | 72 | None |
| 153 | Commercial/Indoor Restaurant | 67 | 67 | 63 | 0 | -4 | E | 72 | None |
| 154 | Commercial/Retail | 67 | 67 | 63 | 0 | -4 | E | 72 | None |
| 155 | Commercial/Retail | 67 | 67 | 63 | 0 | -4 | E | 72 | None |
| 156 | Residential | 67 | 67 | 63 | 0 | -4 | B | 67 | None |
| 157 | Residential | 70 | 70 | 66 | 0 | -4 | B | 67 | A/E |
| 158 | Residential | 69 | 69 | 65 | 0 | -4 | B | 67 | None |
| 159 | Residential | 66 | 66 | 62 | 0 | -4 | B | 67 | None |
| 160 | Residential | 65 | 65 | 61 | 0 | -4 | B | 67 | None |
| 161 | Residential | 69 | 70 | 65 | 1 | -5 | B | 67 | None |
| 162 | Commercial/Indoor Restaurant | 65 | 66 | 61 | 1 | -5 | E | 72 | None |
| 163 | Commercial/Indoor Restaurant | 64 | 65 | 61 | 1 | -4 | E | 72 | None |
| 164 | Elementary School | 67 | 70 | 64 | 3 | -6 | C | 67 | None |
| 165 | Residential | 64 | 65 | 61 | 1 | -4 | B | 67 | None |
| 166 | Residential | 65 | 65 | 62 | 0 | -3 | B | 67 | None |
| 167 | Office | 67 | 67 | 67 | 0 | 0 | E | 72 | None |
| 168 | Office | 66 | 68 | 69 | 2 | 1 | E | 72 | None |
| 169 | Office | 62 | 63 | 66 | 1 | 3 | E | 72 | None |
| 170 | Office | 57 | 58 | 57 | 1 | -1 | E | 72 | None |
| 171 | Office | 68 | 69 | 67 | 1 | -2 | E | 72 | None |
| 172 | Office | 69 | 69 | 67 | 0 | -2 | E | 72 | None |
| 173 | Residential | 64 | 64 | 67 | 0 | 3 | B | 67 | A/E |
| 174 | Residential | 65 | 65 | 68 | 0 | 3 | B | 67 | A/E |

**Table 2.14-6. Predicted Future Noise Levels**

| Receptor No. | Land Use Description | Existing Noise Level Leq(h), dBA | Future Worst Hour Noise Levels - Leq(h), dBA | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Design Year Noise Level without Project Leq(h), dBA | Design Year Noise Level with Project Leq(h), dBA | Design Year Noise Level without Project minus Existing Conditions Leq(h), dBA | Design Year Noise Level with Project Minus No Project Conditions Leq(h), dBA | NAC Activity Category | NAC Leq(h), dBA | Impact Type |
| 175 | Residential | 65 | 66 | 66 | 1 | 0 | B | 67 | A/E |
| 176 | Residential | 62 | 63 | 65 | 1 | 2 | B | 67 | None |
| 177 | Residential | 65 | 65 | 66 | 0 | 1 | B | 67 | A/E |
| 178 | Residential | 64 | 65 | 67 | 1 | 2 | B | 67 | A/E |
| 179 | Residential | 67 | 67 | 68 | 0 | 1 | B | 67 | A/E |
| 180 | Residential | 66 | 66 | 68 | 0 | 2 | B | 67 | A/E |
| 181 | Residential | 67 | 68 | 69 | 1 | 1 | B | 67 | A/E |
| 182 | Residential | 66 | 66 | 69 | 0 | 3 | B | 67 | A/E |
| 183 | Residential | 66 | 66 | 68 | 0 | 2 | B | 67 | A/E |
| 184 | Residential | 67 | 68 | 69 | 1 | 1 | B | 67 | A/E |
| 185 | Residential | 65 | 66 | 69 | 1 | 3 | B | 67 | A/E |
| 186 | Residential | 69 | 69 | 70 | 0 | 1 | B | 67 | A/E |
| 187 | Restaurant/Outdoor Eating Area | 69 | 69 | 70 | 0 | 1 | E | 72 | None |
| 188 | Office | 70 | 70 | 71 | 0 | 1 | E | 72 | A/E |
| 189 | Restaurant/Outdoor Eating Area | 69 | 69 | 69 | 0 | 0 | E | 72 | None |

Source: Ambient 2017

Notes:
A/E= approach/exceed; dBA=A-weighted decibel; $L_{eq}$(h)=hourly equivalent noise level; NAC=Noise Abatement Criteria; RV=recreational vehicle

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## 2.14.3 Environmental Consequences

The proposed Project is considered a Type I project because it would use federal aid to substantially alter the horizontal and vertical alignment of Shoemaker Bridge. A noise analysis is required for all Type I projects. The noise impacts of the Project are analyzed below.

### 2.14.3.1 Temporary Impacts

#### Alternative 1 (No Build)

There would be no construction activities under Alternative 1 (No Build). Therefore, there would be no temporary noise impacts.

#### Alternatives 2 and 3 (Design Options A and B)

Two types of short-term noise impacts would occur during Project construction. The first type would be from construction crew commutes and the transport of construction equipment and materials to the Project site and would incrementally raise noise levels on access roads leading to the site. The pieces of heavy equipment for grading and construction activities would be moved on site, would remain for the duration of each construction phase, and would not add to the daily traffic volume in the Project vicinity. A high single-event noise exposure potential at a maximum level of 87 dBA Lmax from trucks passing at 50 feet would occur. However, the projected construction traffic would be short-term. Therefore, short-term construction-related worker commutes and equipment transport noise impacts would not be adverse.

The second type of short-term noise impact is related to noise generated during roadway construction. Construction is performed in discrete steps, each of which has its own mix of equipment and consequently its own noise characteristics. These various sequential phases would change the character of the noise generated and the noise levels along the Project alignment as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 2.14-7 lists typical construction equipment $L_{max}$ recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor.

**Table 2.14-7. Typical Construction Equipment Noise Levels**

| Type of Equipment | Range of Maximum Sound Levels (dBA $L_{max}$ at 50 feet) | Suggested Maximum Sound Levels for Analysis (dBA $L_{max}$ at 50 feet) |
|---|---|---|
| Pile drivers | 81–96 | 93 |
| Rock drills | 83–99 | 96 |
| Jackhammers | 75–85 | 82 |
| Pneumatic tools | 78–88 | 85 |
| Pumps | 74–84 | 80 |
| Scrapers | 83–91 | 87 |
| Haul trucks | 83–94 | 88 |
| Cranes | 79–86 | 82 |

## Table 2.14-7. Typical Construction Equipment Noise Levels

| Type of Equipment | Range of Maximum Sound Levels (dBA $L_{max}$ at 50 feet) | Suggested Maximum Sound Levels for Analysis (dBA $L_{max}$ at 50 feet) |
|---|---|---|
| Portable generators | 71–87 | 80 |
| Rollers | 75–82 | 80 |
| Dozers | 77–90 | 85 |
| Tractors | 77–82 | 80 |
| Front-end loaders | 77–90 | 86 |
| Hydraulic backhoe | 81–90 | 86 |
| Hydraulic excavators | 81–90 | 86 |
| Graders | 79–89 | 86 |
| Air compressors | 76–89 | 86 |
| Trucks | 81–87 | 86 |

Source: Caltrans 2019h

Notes:
dBA=A-weighted decibel; $L_{max}$=maximum noise levels

Typical noise levels at 50 feet from an active construction area range up to 91 dBA Leq during the noisiest construction phases. The site preparation phase, which includes grading and paving, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as excavators, backfillers, bulldozers, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

Construction of the proposed Project is expected to require the use of earthmovers, bulldozers, water trucks, and pickup trucks. Noise associated with the use of construction equipment is estimated between 79 and 89 dBA Lmax at a distance of 50 feet from the active construction area for the grading phase. As shown in Table 2.14-7, the $L_{max}$ generated by each scraper is assumed to be approximately 87 dBA $L_{max}$ at 50 feet from the scraper in operation. Each bulldozer would generate approximately 85 dBA $L_{max}$ at 50 feet. The $L_{max}$ generated by water trucks and pickup trucks is approximately 86 dBA Lmax at 50 feet from these vehicles. Each doubling of the sound source would increase the noise level by 3 decibels (dB). Each piece of construction equipment operates as an individual point source. The worst-case composite noise level at the nearest residence during this phase of construction would be 91 dBA Leq (at a distance of 50 feet from an active construction area).

The closest sensitive receptors are located within 50 feet of the Project construction area. These receptor locations would be exposed to short-term noise higher than 91 dBA Leq generated by construction activities along the Project alignment. Construction noise impacts on sensitive land uses adjacent to the Project site, would be minimized with the inclusion of the following Project features:

The following Project features will assist in reducing potential construction noise impacts:

**PF-75** During construction, the City's Resident Engineer will ensure that the contractor will use an alternative warning method instead of a sound signal unless required by safety laws.

**PF- 76** During construction, the City's Resident Engineer will ensure that the contractor will equip all internal combustion engines with the manufacturer-recommended muffler and will not operate any internal combustion engine on the job site without the appropriate muffler.

**PF-77** During construction, the City's Resident Engineer or designated contractor will ensure that all construction equipment, fixed or mobile, will be equipped with properly operating and maintained mufflers consistent with manufacturers' standards during all Project site excavation and grading on site.

**PF-78** During construction, the City of Long Beach's Resident Engineer or designated contractor will ensure that all stationary construction equipment will be placed so that emitted noise is directed away from noise-sensitive locations nearest the Project site.

**PF-79** During construction, the City of Long Beach's Resident Engineer or designated contractor will ensure that construction vehicle staging areas and equipment maintenance areas will be located as far as possible from sensitive receptor locations.

Mitigation measure N-1, which requires compliance with the construction hours specified in the City of Long Beach Municipal Code, would also be implemented. With the inclusion of Project Features PF-75 through PF-80 identified above, and the implementation of Mitigation Measure N-1, the short- term noise impacts during Project construction would not be substantially adverse.

### 2.14.3.2 Permanent Impacts

#### Alternative 1 (No Build)

Under Alternative 1 (No Build), long-term noise impacts would be from traffic noise. Future no build alternative noise levels are shown in Table 2.14-6. Of the 189 receptors, 79 receptors would continue to approach or exceed the NAC under the No Build 2035 conditions.

#### Alternatives 2 and 3 (Design Options A and B)

*Long-Term Exterior Noise Impacts*

Potential long-term noise associated with Project operations would be solely from traffic noise. Traffic noise impacts result from one or more of the following occurrences: (1) an increase of 12 dB or more over their corresponding existing noise levels, or (2) predicted noise levels approach or exceed the NAC. When traffic noise impacts occur, noise abatement measures must be considered.

Future traffic noise levels for all 189 receptor locations were determined with existing walls using either the peak-hour traffic volumes or future worst-case traffic, whichever was lower.

Table 2.14-6 summarizes the traffic noise modeling results for existing conditions and 2035 conditions with and without the Project. Predicted 2035 traffic noise levels with the Project are compared to existing conditions and to 2035 no Project conditions. The comparison to existing conditions is included in the analysis to identify traffic noise impacts under 23 CFR 772. The comparison to no Project conditions indicates the direct effect of the Project.

Of the 189 modeled receptor locations, 60 receptors for future Alternatives 2 and 3 (Design Options A and B) would "approach or exceed" the NAC under Activity Categories B, C, or E. The proposed

Project would result in fewer traffic noise impacts at receptor locations within the Project limits compared to the No Build Alternative because the existing northbound Shoreline Drive would be realigned farther away from the receptors. Also, of the 189 modeled receptor locations, no receptors under Alternatives 2 and 3 (Design Options A and B) would experience a "substantial increase" in noise of 12 dB or more over their corresponding modeled existing noise level.

Many of the receptors are located in areas with numerous physical constraints included limited right of way and residential and commercial buildings that have been built directly adjacent to existing sidewalks. Appendix B of the NSR includes photographs of the receptor locations showing these constraints.

The following receptor locations would be exposed to noise levels that approach or exceed the 67 dBA Leq NAC.

- **Receptor R-20:** This receptor location represents the Cesar Chavez Elementary School. Currently, there are no existing walls that shield this school. The sidewalk along the ROW has a width of approximately 6 feet and contains existing utilities. Therefore, it is not feasible to abate traffic noise with noise barriers. The interior noise levels within the school buildings are discussed under the Interior Noise Impacts section below.
- **Receptor R-39 and R-102:** These receptor locations represent the Edison Elementary School. Currently, there are no existing walls that shield this school. The sidewalk along the ROW has a width of approximately 4 feet. A potential noise wall at this receptor would potentially impede ADA access. Therefore, it is not feasible to abate traffic noise with noise barriers. The interior noise levels within the school buildings are discussed under the Interior Noise Impacts section below.
- **Receptors R-72 and R-73:** These receptor locations represent existing commercial spaces. These buildings does not include outdoor seating areas and does not have outdoor areas of frequent human use. Therefore, no abatement measures are required.
- **Receptor R-75:** This receptor location represents an existing residential park. Currently, there are no existing walls that shield this park. This park/trail is surrounded by residential, commercial use, and by City ROW. A noise wall would impede access to this trail, which terminates at this street corner. In addition, utility poles/wires are located in the ROW immediately east of this receptor. Therefore, it is not feasible to abate traffic noise with noise barriers.
- **Receptors R-76 and R-77:** These receptor locations represent existing multi-family residences. Currently, there are no existing walls that shield these residences. Utility poles are located at this receptor along the ROW (parkway). Therefore, it is not feasible to abate traffic noise with noise barriers.
- **Receptor R-78:** This receptor location represents an existing commercial space. This building does not include outdoor seating areas and does not have outdoor areas of frequent human use. Therefore, no abatement measures are required.
- **Receptor R-81:** This receptor location represents an existing commercial space. This building does not include outdoor seating areas and does not have outdoor areas of frequent human use. Therefore, no abatement measures are required.

- **Receptor R-84**: This receptor location represents an existing restaurant. This indoor restaurant does not include outdoor seating areas and does not have outdoor areas of frequent human use. Therefore, no abatement measures are required.
- **Receptor R-86:** This receptor location represents an existing commercial space. This building does not include outdoor seating areas and does not have outdoor areas of frequent human use. Therefore, no abatement measures are required.
- **Receptor R-87:** This receptor location represents existing multi-family residences. Currently, there are no existing walls that shield these residences. The ROW along Anaheim Street include an approximately 8foot-wide sidewalk from property line to roadway ROW, with no parkway. A noise wall would interfere with pedestrian access along Anaheim St, which is predominately comprised of commercial uses in the vicinity of Anaheim Street at Pine Avenue. Therefore, it is not feasible to abate traffic noise with noise barriers.
- **Receptor R-88:** This receptor location represents an existing commercial space. This building does not include outdoor seating areas and does not have outdoor areas of frequent human use. Therefore, no abatement measures are required.
- **Receptor R-89:** This receptor location represents the rear of a multi-family residential building. This receptor is not located within an outdoor common use area within this multi-family residential property, as the building rear includes storage facilities/units used by residents. Therefore, noise abatement is not required.
- **Receptor R-90**: This receptor location represents an existing restaurant. Currently, there are no outdoor active use areas associated with this development. Therefore, no abatement measures are required.
- **Receptor R-91:** This receptor location represents existing multi-family residences. Currently, there are no existing walls that shield these residences. A pedestrian crossing intersects this residential use and includes an ADA-compliant pedestrian walkway. Therefore, it is not feasible to abate traffic noise with noise barriers.
- **Receptor R-93**: This receptor location represents an existing restaurant. Currently, there are no outdoor active use areas associated with this development. Therefore, no abatement measures are required.
- **Receptor R-99**: This receptor location represents an existing restaurant. Currently, there are no outdoor active use areas associated with this development. Therefore, no abatement measures are required.
- **Receptors R-101 and R-103 through R-109:** These receptor locations represent existing multi-family residences. Currently, there are no existing walls that shield these residences. Utility poles/wires are located along the ROW, thus prohibiting the placement of noise walls at this receptor. Therefore, it is not feasible to abate traffic noise with noise barriers.
- **Receptors R-110 and R-126**: These receptor locations represent existing churches. Currently, there are no existing walls that shield these churches. Currently, there are no outdoor active use areas associated with these churches. Therefore, no abatement measures are required. The interior noise levels within the church buildings are discussed under the Interior Noise Impacts section below.

- **Receptors R-111 through R-113 and R-115**: These receptor locations represent existing multi-family residences. Currently, there are no existing walls that shield these residences. A barrier at this location would impede ADA access to the property. Therefore, it is not feasible to abate traffic noise with noise barriers.
- **Receptor R-114**: This receptor location represents an existing health clinic. Currently, there are no outdoor active use areas associated with this development. Therefore, no abatement measures are required.
- **Receptor R-116**: This receptor location represents an existing office. Currently, there are no outdoor active use areas associated with this development. Therefore, no abatement measures are required.
- **Receptors R-117 and R-118:** These receptor locations represent the International Elementary School and playground. Currently, there are no existing walls that shield these uses. As there is existing pedestrian access to the street and utilities that must be maintained, it is not feasible to abate traffic noise with noise barriers. The interior noise levels within the school buildings are discussed under the Interior Noise Impacts section below.
- **Receptor R-119**: This receptor location represents an existing restaurant. Currently, there are no outdoor active use areas associated with this development. Therefore, no abatement measures are required.
- **Receptors R-122 through R-125, R-127, and R-129**: These receptor locations represent existing multi-family residences. Currently, there are no existing walls that shield these residences. A barrier at this location would impede ADA access to the property. Therefore, it is not feasible to abate traffic noise with noise barriers.
- **Receptor R-130**: This receptor location represents an existing restaurant. Currently, there are no outdoor active use areas associated with this development. Therefore, no abatement measures are required.
- **Receptors R-157**: This receptor location represents existing multi-family residences. Currently, there are no existing walls that shield these residences. Existing improvements in the ROW include street trees, dual-parking meters, and sewer/storm drain infrastructure. Therefore, it is not feasible to abate traffic noise with noise barriers.
- **Receptors R-173, R-174, R-175, and R-177 through R-186:** These receptor locations represent existing multi-family residences with adjacent narrow sidewalks and landscaped parkways. A potential noise wall at these receptors would potentially impede ADA access. Currently, there are no existing walls that shield these residences. As there is existing pedestrian access to the street that must be maintained, it is not feasible to abate traffic noise with noise barriers.
- **Receptor R-188**: This receptor location represents an existing office. Currently, there are no outdoor active use areas associated with this development. Therefore, no abatement measures are required.

*Interior Noise Impacts*

Two classrooms represented by Receptors R-20 through R-22 for Cesar Chavez Elementary School, three classrooms represented by Receptors R-37, R-39, R-40, R-102, and R131 for Edison

Elementary School, one classroom represented by Receptor R-188 for the International Elementary School, and four churches represented by Receptors R-110, R-126, R-128, and R-147 were evaluated under Activity Category D, which has an interior NAC of 52 dBA Leq. Figure 2.14-1 shows the locations of the interior noise evaluation. Table 2.14-8 shows the existing exterior-to-interior noise level reduction, the predicted future worst-case traffic noise level, and the calculated future interior noise level for each location. As shown in Table 2.14-8, noise levels in the classrooms at Cesar Chavez, Edison Elementary, and the International Elementary School, or within the four churches would not approach or exceed the 52 dBA Leq NAC under Alternatives 2 and 3 (Design Options A and B). Therefore, noise abatement measures would not be required.

**Table 2.14-8. Predicted Future Interior Noise Levels**

| Receptor No. | Land Use Description | Exterior to Interior Reduction (dB)[1] | Alternative 2 | |
|---|---|---|---|---|
| | | | Exterior (dBA Leq) | Interior (dBA Leq) |
| R-20 | Cesar Chavez Elementary School | 36 | 66[2] | 30 |
| R-21 | Cesar Chavez Elementary School | 36 | 63 | 27 |
| R-22 | Cesar Chavez Elementary School | 36 | 54 | 18 |
| R-37 | Edison Elementary School | 30 | 56 | 26 |
| R-38 | Edison Elementary School | 30 | 58 | 28 |
| R-39 | Edison Elementary School | 30 | 75 | 45 |
| R-40 | Edison Elementary School | 30 | 55 | 25 |
| R-102 | Edison Elementary School | 30 | 76 | 46 |
| R-110 | Church | 24 | 71 | 47 |
| R-118 | International Elementary School | 24 | 71 | 47 |
| R-126 | Church | 24 | 68 | 44 |
| R-128 | Office | 24 | 62 | 38 |
| R-131 | Edison Elementary School | 30 | 56 | 26 |
| R-147 | Church | 24 | 62 | 38 |

Source: Caltrans 2019h

Notes:

The exterior-to-interior noise level reduction was calculated based on noise level measurements shown in Table 7-1 of the NSR.

[1] No outdoor activity areas; not considering/evaluating abatement.

dB=decibels; dBA=A-weighted decibel; $L_{eq}$=equivalent continuous sound level

## 2.14.4 Avoidance, Minimization, and/or Mitigation Measures

### 2.14.4.1 Noise Abatement Consideration

In accordance with 23 CFR 772, noise abatement is considered where noise impacts are predicted in areas of frequent human use that would benefit from a lowered noise level. Potential noise abatement measures identified in the protocol include the following:

- Avoiding the impact by using design alternatives, such as altering the horizontal and vertical alignment of the Project
- Constructing noise barriers
- Acquiring property to serve as a buffer zone
- Using traffic management measures to regulate types of vehicles and speeds
- Acoustically insulating public use or nonprofit institutional structures

All of these abatement options have been considered for receptors located within the Project limits that would be, or would continue to be, exposed to traffic noise levels approaching or exceeding the NAC. As discussed in Section 2.14.3.2 receptors with traffic noise levels approaching or exceeding the NAC requiring abatement were deemed not feasible due to the following limitations:

- Lack of available ROW
- Design constructability
- The presence of existing utilities
- Access to adjacent properties

With the constraints identified by each receptor in Section 2.14.3.2, it was not possible to evaluate any noise barriers that would effectively reduce the traffic noise levels. Therefore, abatement in any form is not considered feasible, and did not require evaluation as a part of the Project.

Although the Project fully fulfills the basic requirements of 23 CFR 772, additional design features may be incorporated during final design of the bridge to further reduce potential noise impacts. With the implementation of Mitigation Measure N-2, no adverse effects from noise are anticipated.

The following abatement measure will be implemented by the City to reduce potential construction noise impacts:

**N-1** During construction, the City of Long Beach's (City) Resident Engineer or designated contractor will ensure that all heavy construction activities that will potentially exceed 86 A-weighted decibels (dBA) maximum sound level ($L_{max}$) at 50 feet will be conducted between 6 a.m. and 9 p.m.

**N-2** During final design, the City of Long Beach's (City) Resident Engineer will ensure that the designated design contractor evaluate acoustic methods developed by Caltrans' Division of Environmental Analysis (DEA) in order to locate and quantify potential noise impacts as a result of the bridge replacement associated with the Project. Design elements identified within the DEA Draft Noise Notes for Bridge Projects will be implemented within the bridge design to the extent feasible.

# 2.15 Energy

Information provided in this section is based on the *Energy Analysis Technical Memorandum* prepared for the Project (Caltrans 2019i). This section evaluates the impacts in energy consumption associated with the Project located at the southern end of SR-710 in the City.

## 2.15.1 Regulatory Setting

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

The California Environmental Quality Act (CEQA) Guidelines section 15126.2(b) and Appendix F, Energy Conservation, require an analysis of a project's energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources.

### 2.15.1.1 California's Renewable Portfolio Standard

Established in 2002 under SB 1078, California's Renewables Portfolio Standard (RPS) applies to all electricity retailers in the state including publicly owned utilities (POU), investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities were required to adopt the new RPS goals of 20 percent of retails sales from renewables by the end of 2013, 25 percent by the end of 2016, and the 33 percent requirement being met by the end of 2020. The California Public Utilities Commission (CPUC) and California Energy Commission (CEC) jointly implement the RPS.

### 2.15.1.2 Senate Bill 350

Signed on October 7, 2015, SB 350, also known as the Clean Energy and Pollution Reduction Act of 2015, includes objectives to: (1) increase the procurement of the state's electricity from renewable sources from 33 percent to 50 percent by December 31, 2030; and (2) double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation by 2030. SB 350 establishes annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas final end uses by January 1, 2030.

## 2.15.2 Affected Environment

### 2.15.2.1 Transportation Energy

Transportation energy is generally described in terms of direct and indirect energy. Direct energy is the energy consumed in the actual propulsion (e.g., automobiles, trains, airplanes). This energy consumption is a function of traffic characteristics such as VMT, speed, vehicle mix, and thermal value of the fuel being used. Some projects may also include features such as new or replacement roadway lighting or other features requiring electricity, which is an ongoing and permanent source of direct energy consumption. The one-time energy expenditure involved in constructing a project is also considered direct energy. Indirect energy is defined as all of the remaining energy consumed to run a transportation system, including construction energy, maintenance energy, and any substantial impacts on energy consumption related to project-induced land use changes and mode shifts, as well as any substantial changes in energy associated with vehicle operation, manufacturing, or maintenance due to increased automobile use.

### Transportation Fuels

Petroleum and natural gas are the two main fuel sources for California's energy system. Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles. In 2015, 15.1 billion gallons of gasoline were sold (CEC n.d. a). Diesel fuel is the second largest transportation fuel used in California, representing 17 percent of total fuel sales behind gasoline. In 2015, 4.2 billion gallons of diesel, including off-road diesel, was sold (CEC n.d. b). This has resulted in the estimated emission of more than 169 million metric tons of GHG equivalence. According to the latest inventory of statewide GHG emissions values, in 2015, the transportation sector represented 39 percent of statewide GHG emissions (ARB 2018).

### Traffic Analysis

Information for this section is taken from the TOAR prepared for the Project (Caltrans 2019a), which presents traffic analysis and results for the proposed Project. The traffic study area consists of 30 intersections and 29 arterials within the vicinity of the Project limits. Due to insufficient capacity for the forecast volumes, bottlenecks and queues would develop at certain intersections in the traffic study area. Low travel speeds and long delays would be prevalent during peak hours. Such congested traffic conditions contribute to inefficient energy consumption, as vehicles use extra fuel while idling in stop-and-go traffic or moving at slow speeds on a congested roadway. By 2035, without improvements to facilities, including freeway segments, weaving segments, and ramp junction areas, congested traffic conditions would prevail in the traffic study area, as traffic congestion increases on SR-710.

Alternatives 2 and 3 under Design Options A and B would include modifications to local streets, including West Shoreline Drive, Ocean Boulevard, Golden Shore/Golden Avenue, West Broadway, 3rd Street, 6th Street, 7th Street, 9th Street, 10th Street, and Anaheim Street. Alternative 2 includes the replacement of the ramp structures that connect to the downtown Long Beach roadway system and would evaluate both the roundabout design option (Design Option A) and the "Y" interchange design option (Design Option B) at the east end of the proposed bridge.

## 2.15.2.2 Electricity and Natural Gas

SCE provides electricity service to the City. The production of electricity requires the consumption of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources. Most of these resources are used as heat sources for steam turbines that drive electric generators. The electricity generated is distributed via a network of transmission and distribution lines, commonly known as a power grid.

### California Public Utilities Commission

CPUC regulates privately owned electric, telecommunications, natural gas, water, and transportation companies, as well as household goods movers. It also oversees rail safety. In addition, CPUC regulates local natural gas distribution facilities and services, natural gas procurement, intrastate pipelines, and intrastate production and gathering. It works to provide opportunities for competition when in the interest of consumers, takes the lead in the environmental review of natural gas-related projects, recognizes the growing interaction of electric and gas markets, and monitors gas energy efficiency and other public-purpose programs. Natural gas is California's preferred fuel because of its clean-burning capabilities. Natural gas is also used to generate electricity. The CPUC's Energy Division works to set electric rates, protect consumers, and promote energy efficiency, electric system reliability, and utility financial integrity.

## 2.15.3 Environmental Consequences

### 2.15.3.1 Temporary Impacts

#### Alternative 1 (No Build)

No construction would occur under Alternative 1 (No Build). Alternative 1(No Build) would not involve any construction energy impacts. Therefore, no impact on energy consumption would occur.

#### Alternatives 2 and 3 (Design Options A and B)

*Temporary Direct Energy Use*

Construction of Alternatives 2 and 3 (Design Options A and B) would involve temporary fuel usage associated with construction vehicles and equipment. Project construction would involve grubbing/land clearing, grading/excavation, drainage/utilities/sub-grade, paving, and striping. The Project's construction emissions under Alternatives 2 and 3 (Design Options A and B) were estimated using the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, Version 9.0.0. Default equipment assumptions for the Road Construction Emissions Model were used in developing the emissions estimates. The emissions assume that the schedule for all improvements is anticipated to begin in 2022 and end in 2024. Table 2.15-1 provides the peak daily diesel fuel consumption for Alternative 2 (Design Options A and B), and Table 2.15-2 provides the peak daily diesel fuel consumption for Alternative 3 (Design Options A and B).

**Table 2.15-1. Construction Fuel Consumption for Alternative 2 (Design Options A and B)**

| Project Phase | | Diesel Fuel Consumption (gallons/day) |
|---|---|---|
| Grubbing/land clearing | | 326.4 |
| Grading/excavation | | 932.9 |
| Drainage/utilities/sub-grade | | 701.9 |
| Paving | | 323.1 |
| Maximum daily or average daily | | 932.9 |
| Project total (gallons) | | 375,670 |

Source: Caltrans 2019i

**Table 2.15-2. Construction Fuel Consumption for Alternative 3 (Design Options A and B)**

| Project Phase | | Diesel Fuel Consumption (gallons/day) |
|---|---|---|
| Grubbing/land clearing | | 359.1 |
| Grading/excavation | | 932.9 |
| Drainage/utilities/sub-grade | | 701.9 |

| | | |
|---|---|---|
| Paving | | 323.1 |
| Maximum daily or average daily | | 932.9 |
| Project total (gallons) | | 377,398 |

Source: Caltrans 2019i

The grading and excavation phase during construction activities would result in maximum daily fuel consumption and be the most energy intensive. As indicated above, energy use associated with proposed Project construction under Alternatives 2 and 3 (Design Options A and B) is estimated to result in the short-term consumption of 375,670 to 377,398 gallons of diesel fuel from construction equipment. This represents a small demand on local and regional fuel supplies that would be easily accommodated, and this demand would cease once construction is complete. Moreover, construction-related energy consumption would be temporary and not a permanent new source of energy demand, and demand for fuel would have no noticeable effect on peak or baseline demands for energy.

The Project would comply with all SCAQMD regulations regarding use of construction vehicles and equipment. During construction activities, construction traffic would be scheduled and reduce congestion caused by idling vehicles along local roads during peak travel times (Caltrans 2019g), as provided by Project Feature PF-71 identified in Section 2.13, Air Quality, and listed below.

**PF-71** During construction, the City's Resident Engineer or designated contractor will ensure, to the extent feasible, that construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.

This Project feature would reduce construction-related energy consumption by idling vehicles. As construction activities would last approximately 3 years, construction-related energy consumption would be temporary and not a permanent new source of energy demand, and demand for fuel would have no noticeable effect on energy resources. In addition, energy minimization measures would reduce energy use during construction activities. With implementation of Project Feature PF-71 and minimization measures to reduce construction-related vehicle and equipment energy consumption, the Project under Alternatives 2 and 3 (Design Options A and B) would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction.

### Temporary Indirect Energy Use

Construction indirect energy consumption would result from traffic delays due to construction. The Project's TMP, discussed in Section 2.5, Traffic and Transportation, and implemented as PF-3, would reduce construction related traffic impacts.

**PF-3** The TMP will include, but is not limited to, the following measures:

- A MOT plan will be established that provides at least one lane of traffic in each direction on roads during construction.
- Local access will be maintained to businesses and residential properties at all times.

- Pedestrian access points to businesses, parks, and schools within the construction area will be maintained throughout the construction period, where feasible. If usual access points are lost, provisions for alternative access to the affected parcels will be made. Appropriate signage will be placed to inform pedestrians and bicyclists of the alternative access to local businesses. Disabled access will be maintained during construction where feasible.
- During construction, appropriate signage and advanced warning will be developed and displayed to direct pedestrian, bicycle, and vehicular traffic alternate routes.
- During construction, the City will establish an information field office near the construction site. The field office will serve the following purposes:
    - Provide information pertaining to construction and lane closures
    - Notify property owners, residences, and businesses of major construction activities (e.g., utility relocation/disruption, rerouting of delivery trucks)
    - Provide information via the City website

The TMP would assist in managing traffic congestion and provide signage to affected residents and businesses in the event temporary closures or detours are warranted during construction activities. Compared with direct energy use by construction vehicles and equipment, indirect energy use due to construction-related traffic delays would be minimal and would be reduced with implementation of the TMP.

### 2.15.3.2 Permanent Impacts

#### Alternative 1 (No Build)

No construction would occur under Alternative 1 (No Build). Therefore, no impact on energy consumption would occur.

#### Alternatives 2 and 3 (Design Options A and B)

*Vehicle Energy Consumption*

Alternatives 2 and 3 (Design Options A and B) would result in the replacement and either the non-transportation reuse (Alternative 2) or demolition (Alternative 3) of the Shoemaker Bridge and construction of the roundabout design option (Design Option A) or the “Y” interchange design option (Design Option B). For purposes of this analysis, it is assumed that the operational energy impacts of Alternatives 2 and 3 would be equal.

Alternatives 2 and 3 (Design Options A and B) would not generate new vehicular traffic trips, as it would not construct new homes or businesses. Based on the TOAR (Caltrans 2019a), Alternative 2 under Design Option A yields superior LOS results compared with Alternative 2 under Design Option B under 2035 build conditions. As a result, energy savings are associated with Alternative 2 (Design Option A) compared with Alternative 1 (No Build). With regards to VMT, regional VMT data for the existing, no build, and build alternatives, along with the CT-EMFAC2017 emission rates, were used to calculate the gasoline and diesel fuel consumptions for the existing (2015), 2025, and 2035 conditions. As shown in Table 2.15-3, some traffic currently utilizing other routes may use the new facilities, resulting in increased VMT and fuel consumption within the Project limits.

**Table 2.15-3. Modeled Annual Fuel Consumption and Vehicle Miles Traveled by Alternative**

| Alternative | Annual VMT[1] | Annual Diesel Fuel Consumption (gallons) | Annual Gasoline Fuel Consumption (gallons) |
|---|---|---|---|
| **Existing/Baseline (2015)** | 17,785,832 | 146,132 | 1,094,403 |
| **Open to Traffic (2025)** | | | |
| Alternative 1 | 18,548,538 | 172,372 | 908,411 |
| Alternative 2 and 3 | 19,620,768 | 171,973 | 909,730 |
| **Horizon/Design-Year (2035)** | | | |
| Alternative 1 | 19,502,094 | 188,282 | 829,320 |
| Alternative 2 and 3 | 20,579,529 | 187,831 | 838,248 |

Source: Caltrans 2019h
Notes:
[1] Annual VMT values derived from daily VMT values multiplied by 347, per ARB methodology (ARB 2008).
VMT=vehicle miles traveled

Although there is a modeled increase in VMT, during operation of the Project over the long term, newer and more fuel-efficient vehicles would enter the fleet, resulting in an overall lower potential for an increase in energy consumption due to vehicle traffic. When compared with Alternative 1 (No Build), Alternatives 2 and 3 (Design Options A and B) would result in a minimal increase in fuel consumption. Compared with Alternative 1 (No Build), the Project's proposed improvements under Alternatives 2 and 3 (Design Options A and B) would improve roadway operations and reduce traffic delay in ramp junction areas, interchanges, and intersections within the Project limits. Thus, vehicle delay and congestion within the Project limits would decrease compared with Alternative 1 (No Build).

*Increased Pedestrian and Bicycle Access*

Alternatives 2 and 3 (Design Options A and B) propose to build a replacement bridge within the Queensway Bay District. Under Alternative 2 (Design Options A and B), the deck of the new bridge would accommodate two through ramp lanes in each direction, shoulders, barriers, and a bicycle and pedestrian path on the south side of the bridge. This new bicycle path would extend from the new 6$^{th}$ Street terminus, providing connections to the LARIO Trail and the new Shoemaker Bridge. In addition, bicycle, pedestrian, and street enhancements would be provided on adjacent thoroughfares. As a result, Alternatives 2 and 3 (Design Options A and B) would increase pedestrian and bicycle access, decrease reliance on automobile use, and reduce consumption of transportation-related energy within the Project limits.

*Electricity Consumption during Project Operation*

SCE provides electricity service to the City. Operational direct energy-use would include electricity usage associated with highway and street lighting as part of proposed Project improvements. As identified in Section 2.6, Visual/Aesthetics, during PS&E phase, the proposed Project will implement Minimization Measure VIS-4 to develop a lighting plan to utilize LED lights throughout the Project limits. In addition, the Project will incorporate energy-efficient LED traffic signals and street lights, as provided in Project Feature PF-88.

**PF-88** The Project will incorporate the use of energy-efficient lighting, such as LED traffic signals and street lights, to the extent feasible. LED lights consume 10 percent of the electricity of traditional lights.

Implementation of PF-88 and Minimization Measure VIS-4 will reduce electricity consumption associated with the Project's operational energy impacts.

Indirect energy-use involving maintenance activities on roadways would result in long-term indirect energy consumption by equipment required to operate and maintain the roadway. However, this long-term indirect energy use would be minimal compared with the direct energy use by vehicles on roadways within the Project limits.

### 2.15.3.3 Total Energy Impacts

The proposed improvements may include additional street lighting, restriping, turn lanes, bicycle, pedestrian, and streetscape improvements. Alternatives 2 and 3 (Design Options A and B) would accommodate the projected increase in demand for the City's non-motorized transportation facilities, thus promoting transportation energy efficiency. Based on the TOAR (Caltrans 2019a), Alternative 2 under Design Option A yields superior LOS results compared with Alternative 2 under Design Option B under 2035 build conditions. As a result, energy savings are associated with Alternative 2 (Design Option A) compared with Alternative 1 (No Build). As Alternatives 2 and 3 (Design Options A and B) do not increase capacity and traffic using the bridge and associated downtown connectors, a net increase in energy consumption is not anticipated. In addition, with implementation of Project Features PF-3, PF-71, and PF-88, as well as short-term construction minimization identified in Minimization Measure E-1, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would reduce impacts on energy resources. Therefore, when balancing energy used during construction and operation against energy saved by relieving congestion and other transportation efficiencies, Alternatives 2 and 3 (Design Options A and B) would not have substantial energy impacts.

### 2.15.3.4 Consistency with Plans and Policies

Implementation of Alternatives 2 and 3 (Design Options A and B) would provide consistency with the improvements proposed as part of the I-710 Corridor Project and the City's General Plan Mobility Element (City of Long Beach 2013). Alternatives 2 and 3 (Design Options A and B) would increase pedestrian and bicycle access and be consistent with the following strategy and policy identified in the Mobility Element of the City's General Plan:

- **Strategy No. 1**: Establish a network of complete streets that complements the related street type
- **Policy 1-1:** To improve the performance and visual appearance of Long Beach's streets, design streets holistically using the "complete streets approach," which considers walking, those with mobility constraints, bicyclists, public transit users, and various other modes of mobility in parallel

The proposed Project under Alternatives 2 and 3 (Design Options A and B) is included in the SCAG 2016 RTP for Los Angeles County, which was found to be conforming by FHWA/FTA on June 1, 2016. The Project is also in the 2019 FTIP, which was found to be conforming by the FHWA/FTA on December 17, 2018 (Caltrans 2019g).

The Project limits do not currently contain any generators of renewable energy. The Project would not obstruct or conflict with a state or local plan for renewable energy. The Project's implementation of Project Feature PF-88 regarding use of LED lighting is consistent with state and local policies with regards to energy efficiency (CPUC n.d.). Therefore, the Project would not conflict with or obstruct plans or policies related to energy efficiency.

## 2.15.4 Avoidance, Minimization, and/or Mitigation Measures

The following minimization measure will be implemented during construction activities.

**E-1** As part of the plans, specifications, and estimates (PS&E) phase, the City of Long Beach's (City) Resident Engineer will prepare a construction efficiency plan, which may include the following:

- Reuse of existing rail, steel, and lumber, wherever possible, such as for falsework, shoring, and other applications during the construction process
- Recycling of asphalt taken up from roadways, if practicable and cost-effective
- Use of newer, more energy-efficient equipment, where feasible, and maintenance of older construction equipment to keep in good working order
- Promoting of scheduling of construction operations to efficiently use construction equipment (i.e., only haul waste when haul trucks are full and combine smaller dozer operations into a single comprehensive operation, where possible)
- Promotion of construction employee carpooling

# Biological Environment

## 2.16 Natural Communities

### 2.16.1 Regulatory Setting

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors, fish passage, and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Maintenance of fish passage is important for migration for the purposes of spawning, rearing of young or for finding suitable habitat essential to survival. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Habitats are considered to be of special concern based on (1) Federal, State, and/or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status plants or animals occurring on site. The California Department of Fish and Wildlife (CDFW) considers habitats with state or global rarity ranks of 1-3 as sensitive. Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in the Threatened and Endangered Species Section 2.20. Wetlands and other waters are also discussed below in Section 2.17.

### 2.16.2 Affected Environment

This section is based on the NES (Caltrans 2019c) prepared for the Project.

#### 2.16.2.1 Biological Study Area

The area within the proposed Project that is assessed for biological resources is referred to as the biological study area (BSA). The BSA is shown on Figure 2.16-1. The BSA was determined by incorporating design files into a geographic information system (GIS) layout, which included areas of potential direct impact. The BSA limits were extended beyond the maximum extent of potential direct impact where necessary to identify sensitive biological resources within and immediately adjacent to the Project limits but were limited because of lack of access permission or safety. This provided for a survey area larger than the area of potential direct impact in some areas.

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**Figure 2.16-1. Biological Study Area**

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### 2.16.2.2 Natural Communities

The vegetation communities within the BSA consist of a mosaic of several habitat types typical in an urban setting. Four vegetation communities were identified within the BSA and are discussed below. Because the majority of land within the BSA is developed or disturbed with little or no vegetation, many of these communities have been combined into a single classification for discussion, Developed/Disturbed/Ruderal, as these areas provide little or no benefit for plants and wildlife. Two other vegetation communities that provide some benefit to plants and wildlife were identified. These were classified as estuarine subtidal waters (deepwater aquatic) and ornamental. All vegetation communities within the Project BSA are shown on Figure 2.16-2. Table 2.16-1 lists the acreage of each of the vegetation communities present within the BSA.

**Table 2.16-1. Vegetation Communities Occurring within the Biological Study Area**

| Vegetation Community | Total Acres |
|---|---|
| Estuarine subtidal waters (deepwater aquatic) | 10.29 |
| Freshwater emergent marsh | <0.01 |
| Developed/disturbed/ruderal | 152.48 |
| Park (ornamental) | 28.09 |
| **Total** | **190.86** |

Source: Caltrans 2019j

#### Estuarine Subtidal Waters (Deepwater Aquatic)

The deepwater aquatic habitat within the BSA only occurs in the LA River. Deepwater aquatic habitats are permanently inundated areas that typically do not support rooted-emergent (above water) or woody plant species but may support submergent (below water) plant species. Deepwater aquatic waters are recognized as having a high habitat value because of their use as a fish and wildlife resource and limited distribution in the arid west.

#### Freshwater Emergent Marsh

Freshwater emergent marsh occurs in the LA River on the south side of the Anaheim Street Bridge within the BSA. Within the BSA, this community is dominated by California bulrush (*Schoenoplectus californicus*) growing in sediment that has accumulated along the toe of the riprap banks. Freshwater emergent marsh is a wetland habitat that, in larger quantities, provides high habitat value for fish and wildlife.

#### Developed/Disturbed/Ruderal

This vegetation community consists predominantly of developed land (existing buildings, paved roads, ornamental landscaping, and commercial and residential properties) and associated bare ground or disturbed areas with small amounts of ruderal and unmaintained or escaped ornamental vegetation. Plants observed include single or small clusters of ornamental trees (Palms [*Washingtonia* sp. and *Phoenix dactylifera*]), and herbaceous species including telegraph weed (*Heterotheca grandiflora*), bristly ox-tongue (*Picris echioides*), Mediterranean rocket (*Sisymbrium erysimoides*), common wild oat (*Avena fatua*), and Bermuda grass (*Cynodon dactylon*).

### Park (Ornamental)

This habitat type occurs in Cesar E. Chavez Park, which is located in the southern portion of the BSA, east of the LA River. Cesar E. Chavez Park is dominated by mature ornamental trees and shrubs, as well as grassy fields. This area is distinguished from other developed areas because the park comprises a large, open-space area adjacent to the LA River and provides potential suitable habitat for urban adapted nesting birds.

## 2.16.3 Environmental Consequences

### 2.16.3.1 Temporary Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not result in the construction of any of the proposed improvements to the Shoemaker Bridge and, therefore, would not result in temporary impacts on natural communities in the BSA.

#### Alternatives 2 and 3 (Design Options A and B)

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in direct temporary impacts on deepwater aquatic habitat through the construction of the new Shoemaker Bridge and the demolition of the existing bridge (Figure 2.16-3). The existing Shoemaker Bridge would be wholly or partly removed in Alternative 3 and Alternative 2, respectively. Four support structures would be removed below the invert of the channel in Alternative 2 and five support structures would be removed below the invert of the channel in Alternative 3. Alternative 2 (Design Option A) and Alternative 3 (Design Option A) result in up to 7.53 acres of temporary impacts on deep water aquatic habitat. Alternative 2 (Design Option B) and Alternative 3 (Design Option B) result in up to 7.56 acres of temporary impacts on deep water aquatic habitat.

In addition to direct temporary impacts, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in temporary indirect impacts from construction-related impacts, such as the temporary reduction in benthic invertebrate fauna (i.e., food sources), an increased level of suspended solids from disruption of the soft-bottom, debris, potential fuel spills from construction equipment, and activities of equipment or personnel outside designated construction areas, as well as operation impacts including those on adjacent habitats caused by storm water runoff, traffic, and litter.

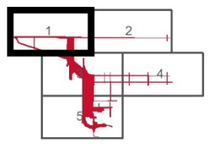
In addition, construction may indirectly impact deepwater aquatic habitat permanently through enhancing the germination and proliferation of nonnative invasive plant species. Indirect impacts are difficult to quantify because they are a result of normal activities and can vary day to day.

LEGEND

- Biological Study Area
- Developed/Disturbed/Ornamental
- Freshwater Emergent Marsh
- Intertidal Waters

0 Feet 400

MAP INDEX

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*Shoemaker Bridge Replacement Project*

**Figure 2.16-2. Plant Communities within the Biological Study Area**
**Sheet 1 of 5**

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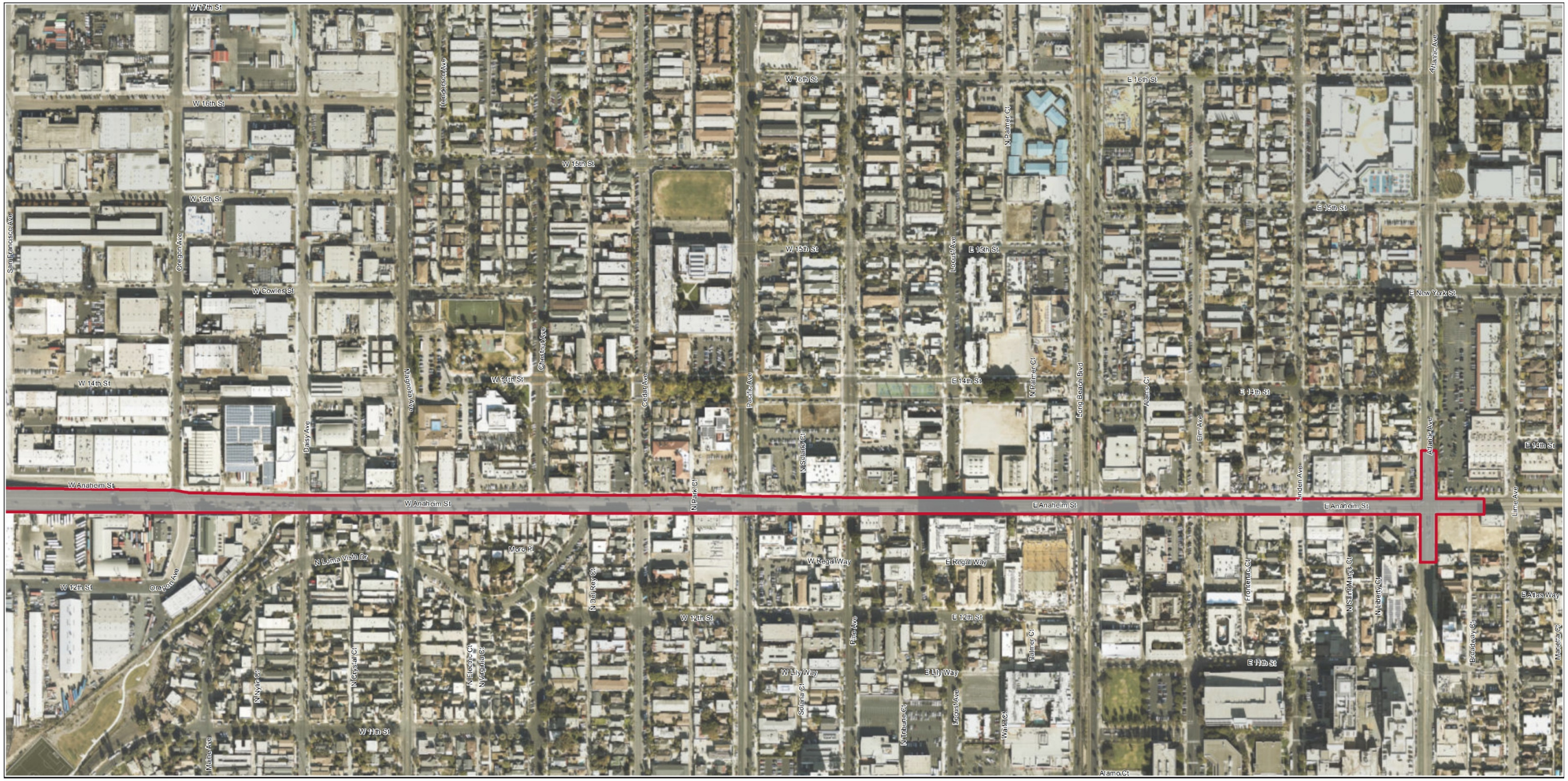


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*Shoemaker Bridge Replacement Project*

**Figure 2.16-2. Plant Communities within the Biological Study Area**
**Sheet 2 of 5**

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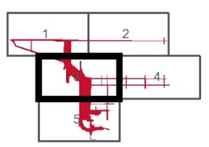
**LEGEND**

- Biological Study Area
- Developed/Disturbed/Ornamental
- Intertidal Waters
- Park

0 Feet 400

**MAP INDEX**

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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.16-2. Plant Communities within the Biological Study Area**
**Sheet 3 of 5**

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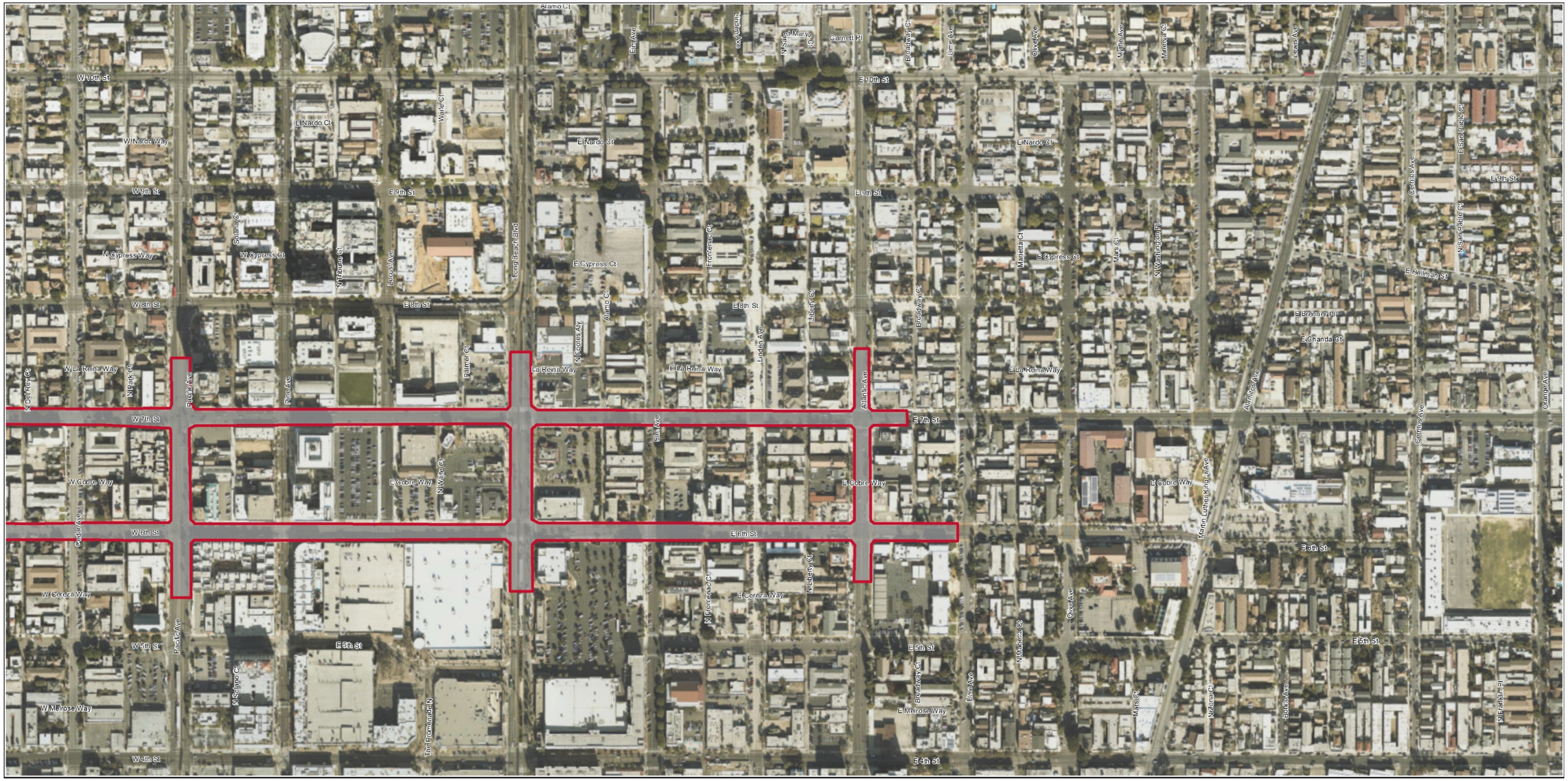


**LEGEND**

- Biological Study Area
- Developed/Disturbed/Ornamental

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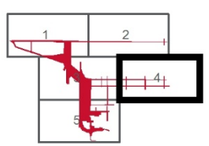
**MAP INDEX**

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*Shoemaker Bridge Replacement Project*

**Figure 2.16-2. Plant Communities within the Biological Study Area**
**Sheet 4 of 5**

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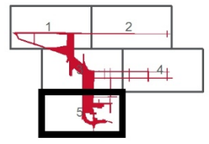
**LEGEND**

- Biological Study Area
- Developed/Disturbed/Ornamental
- Park

0 Feet 400

**MAP INDEX**

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*Shoemaker Bridge Replacement Project*

**Figure 2.16-2. Plant Communities within the Biological Study Area**
**Sheet 5 of 5**

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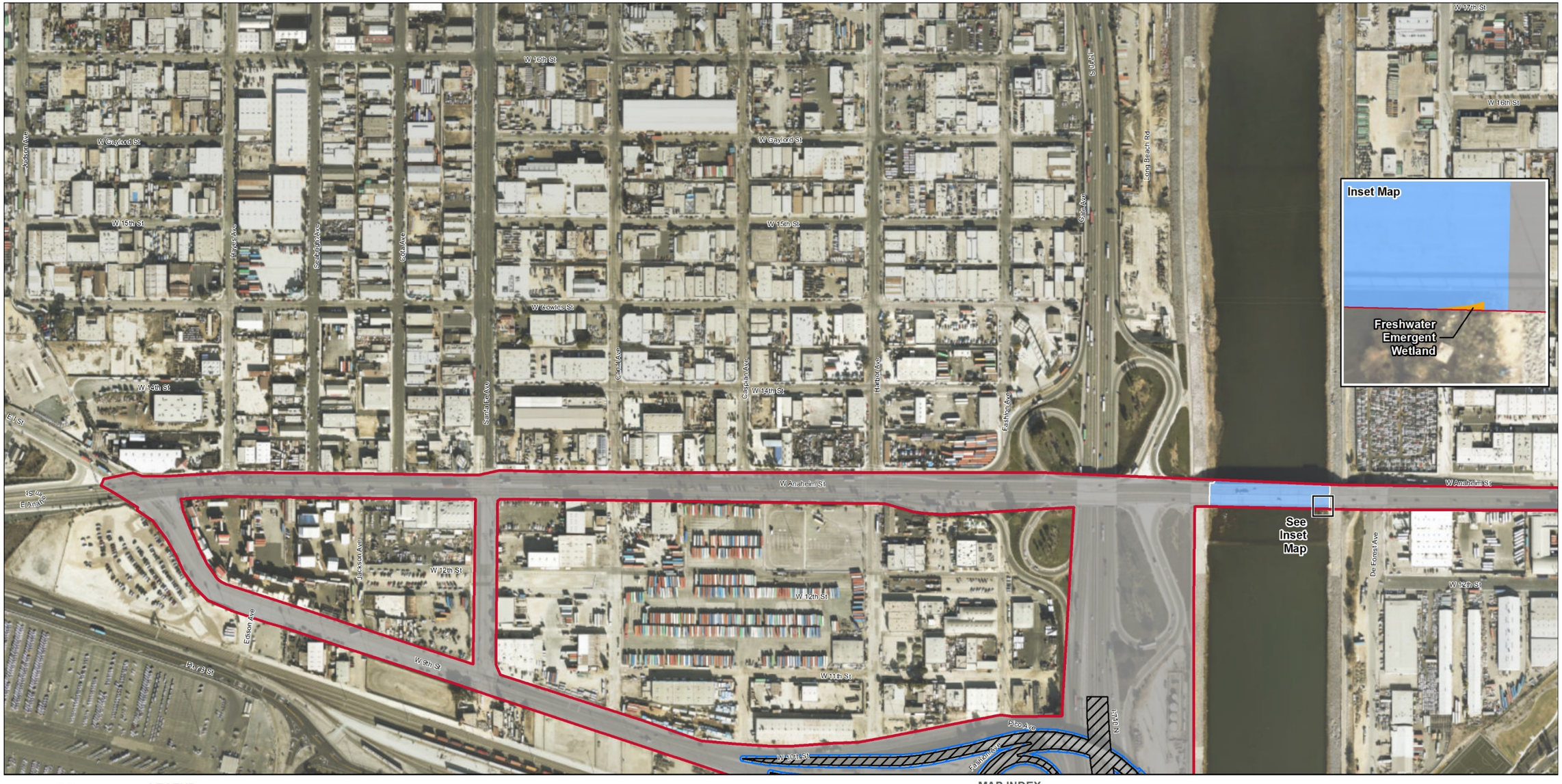


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*Shoemaker Bridge Replacement Project*

**Figure 2.16-3. Proposed Impacts on Plant Communities**
**Sheet 1 of 5**

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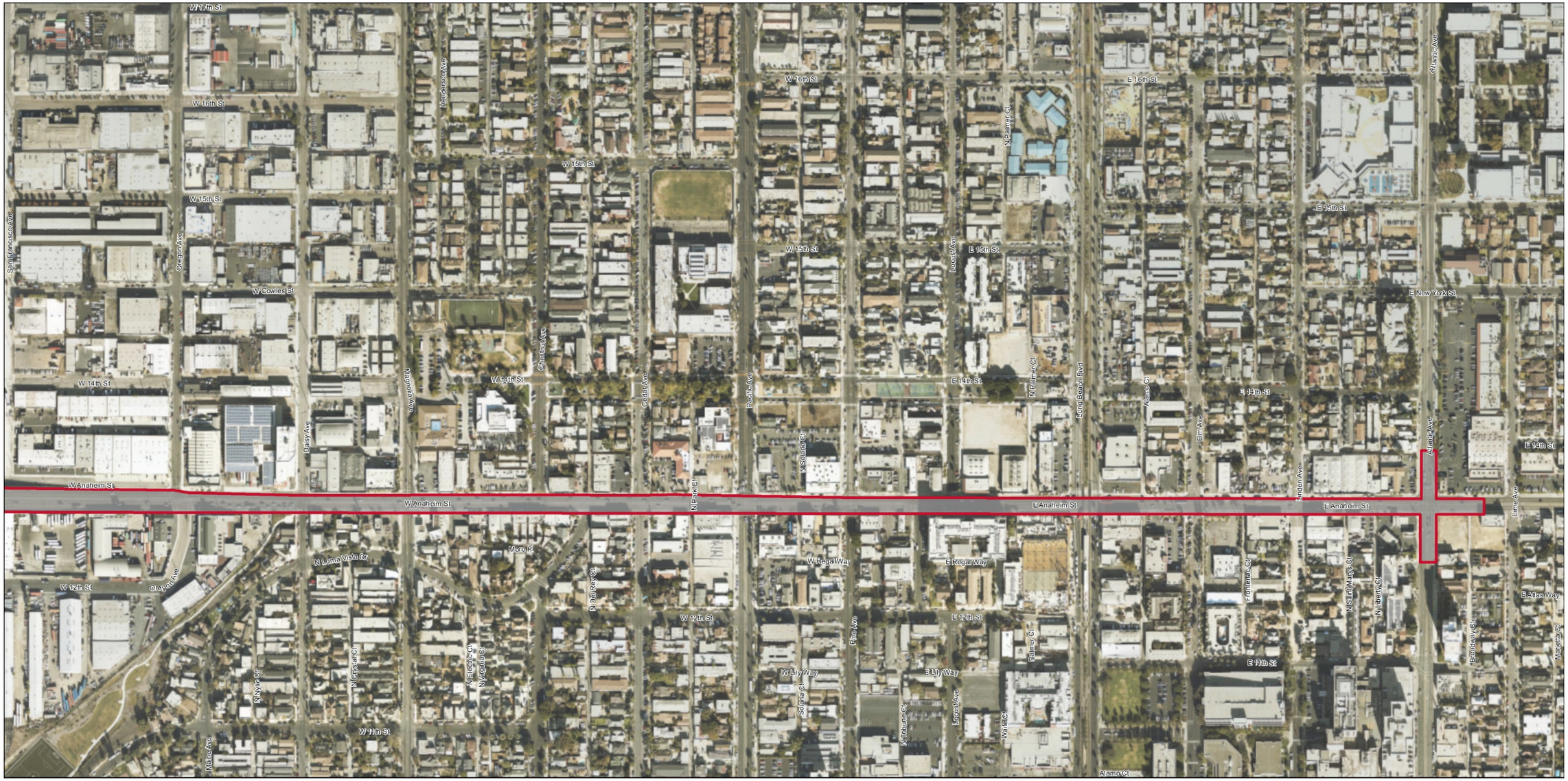
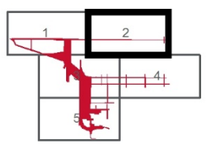



**LEGEND**

- Biological Study Area
- Permanent Impacts
- Temporary Impacts
- Removal of Existing Shoemaker Bridge
- Repurpose of Existing Shoemaker Bridge under Alternative 2
  Removal of Existing Shoemaker Bridge under Alternative 3
- Pier to be removed
- Pier to remain in place
- Developed/Disturbed/Ornamental

0 Feet 400

**MAP INDEX**

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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.16-3. Proposed Impacts on Plant Communities**
**Sheet 2 of 5**

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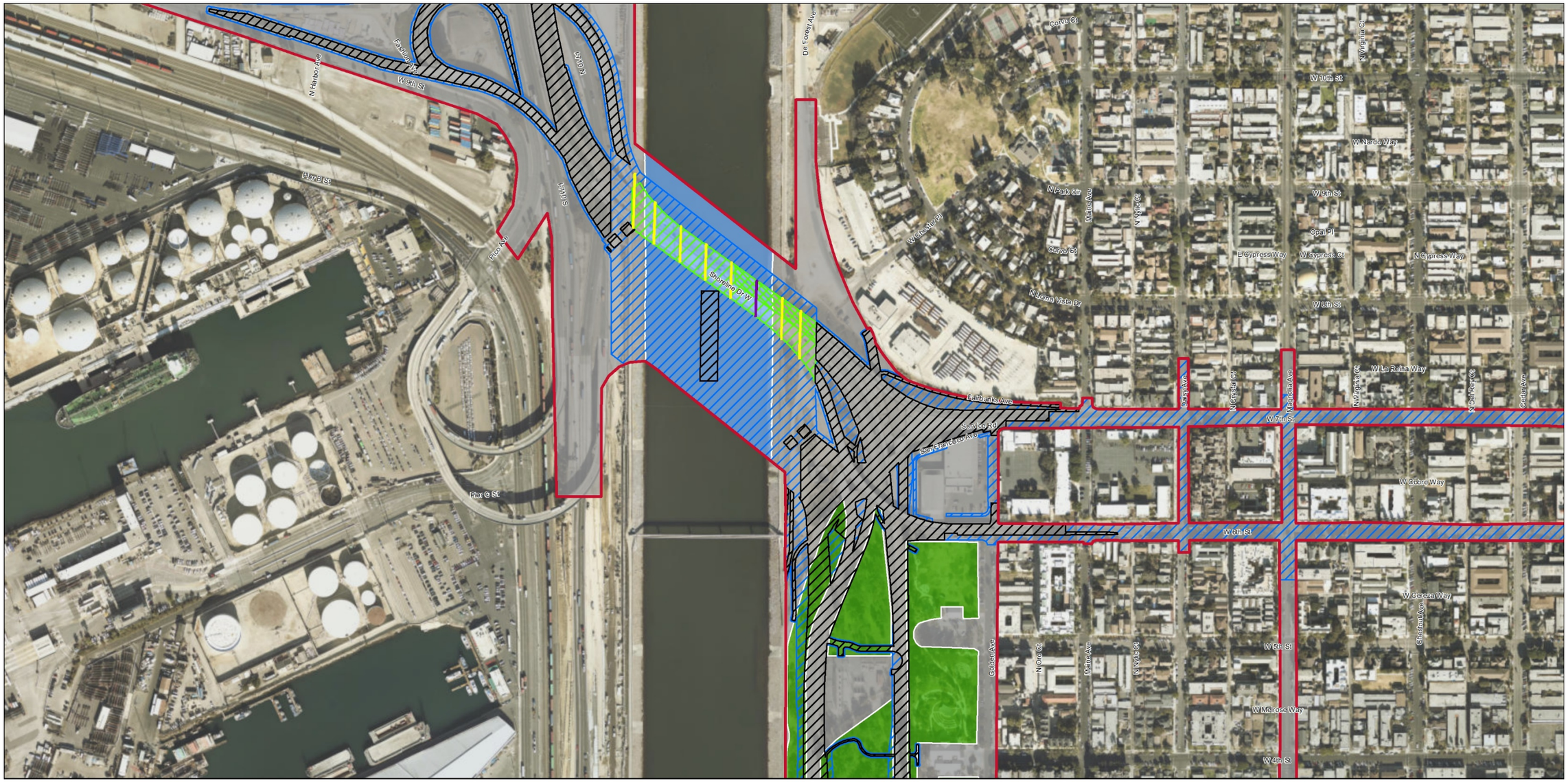
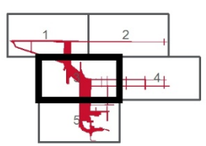



0 Feet 400

**LEGEND**

- Biological Study Area
- Permanent Impacts
- Temporary Impacts
- Removal of Existing Shoemaker Bridge
- Repurpose of Existing Shoemaker Bridge under Alternative 2
  Removal of Existing Shoemaker Bridge under Alternative 3
- Pier to be removed
- Pier to remain in place
- Developed/Disturbed/Ornamental
- Intertidal Waters
- Park

**MAP INDEX**

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*Shoemaker Bridge Replacement Project*

**Figure 2.16-3. Proposed Impacts on Plant Communities**
**Sheet 3A of 5**

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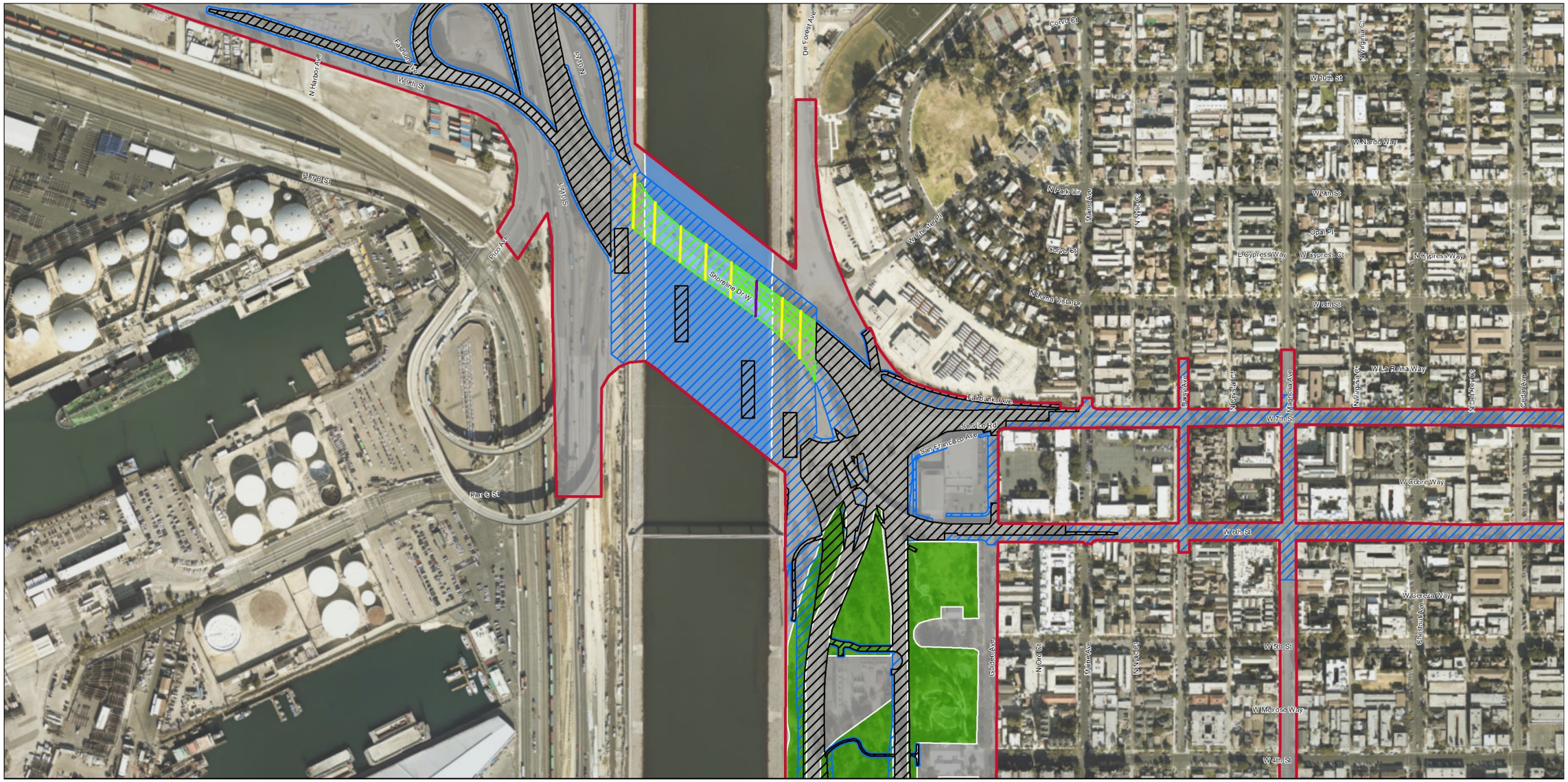
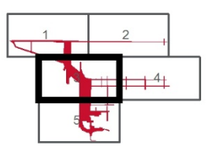



**LEGEND**

- Biological Study Area
- Permanent Impacts
- Temporary Impacts
- Removal of Existing Shoemaker Bridge
- Repurpose of Existing Shoemaker Bridge under Alternative 2
  Removal of Existing Shoemaker Bridge under Alternative 3
- Pier to be removed
- Pier to remain in place
- Developed/Disturbed/Ornamental
- Intertidal Waters
- Park

0 Feet 400

MAP INDEX

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*Shoemaker Bridge Replacement Project*

**Figure 2.16-3. Proposed Impacts on Plant Communities**
**Sheet 3B of 5**

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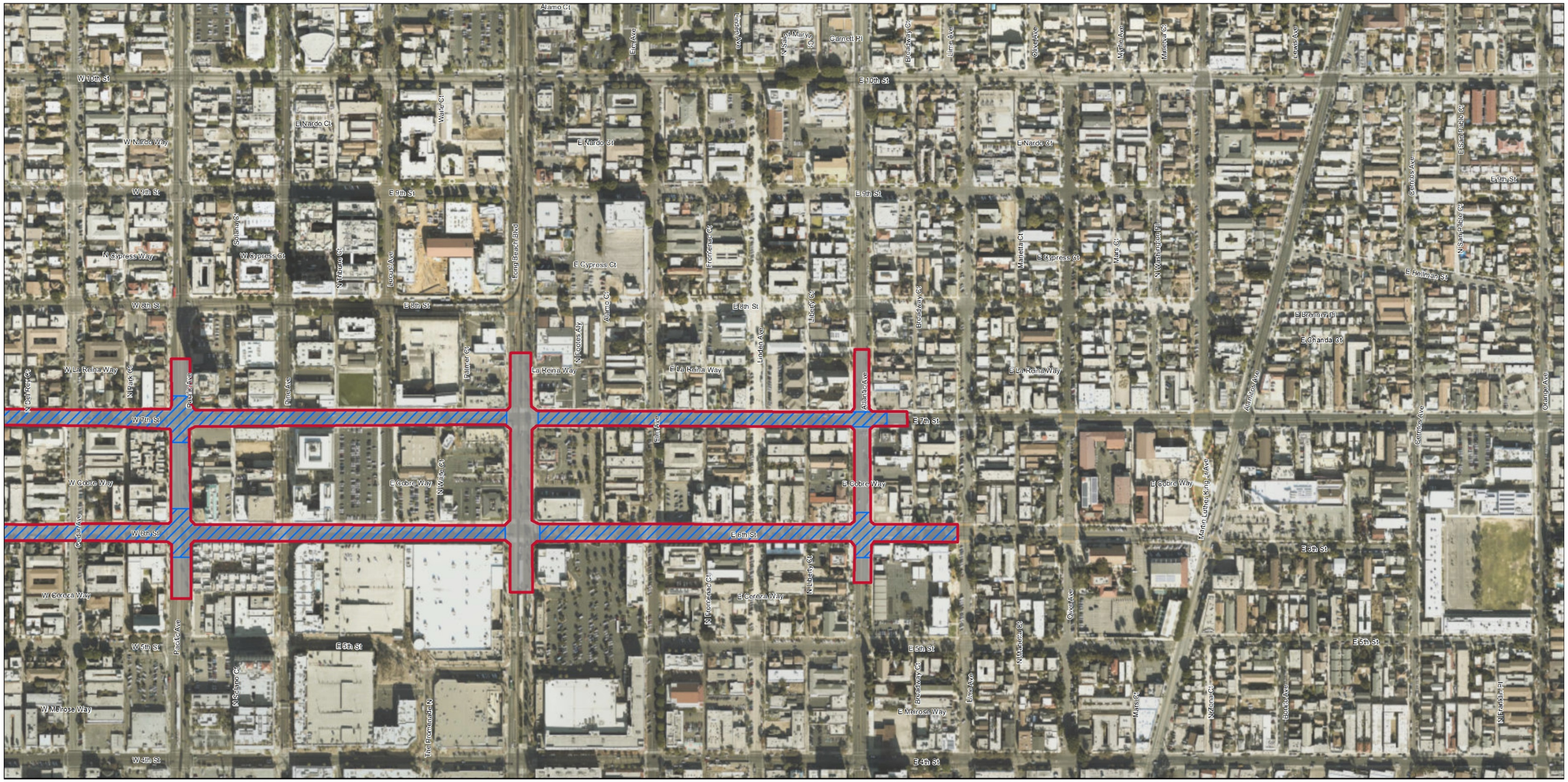
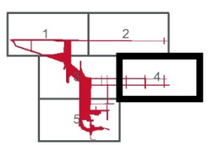



**LEGEND**

- Biological Study Area
- Permanent Impacts
- Temporary Impacts
- Removal of Existing Shoemaker Bridge
- Repurpose of Existing Shoemaker Bridge under Alternative 2
  Removal of Existing Shoemaker Bridge under Alternative 3
- Pier to be removed
- Pier to remain in place
- Developed/Disturbed/Ornamental

0 Feet 400

**MAP INDEX**

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*Shoemaker Bridge Replacement Project*

**Figure 2.16-3. Proposed Impacts on Plant Communities**
**Sheet 4 of 5**

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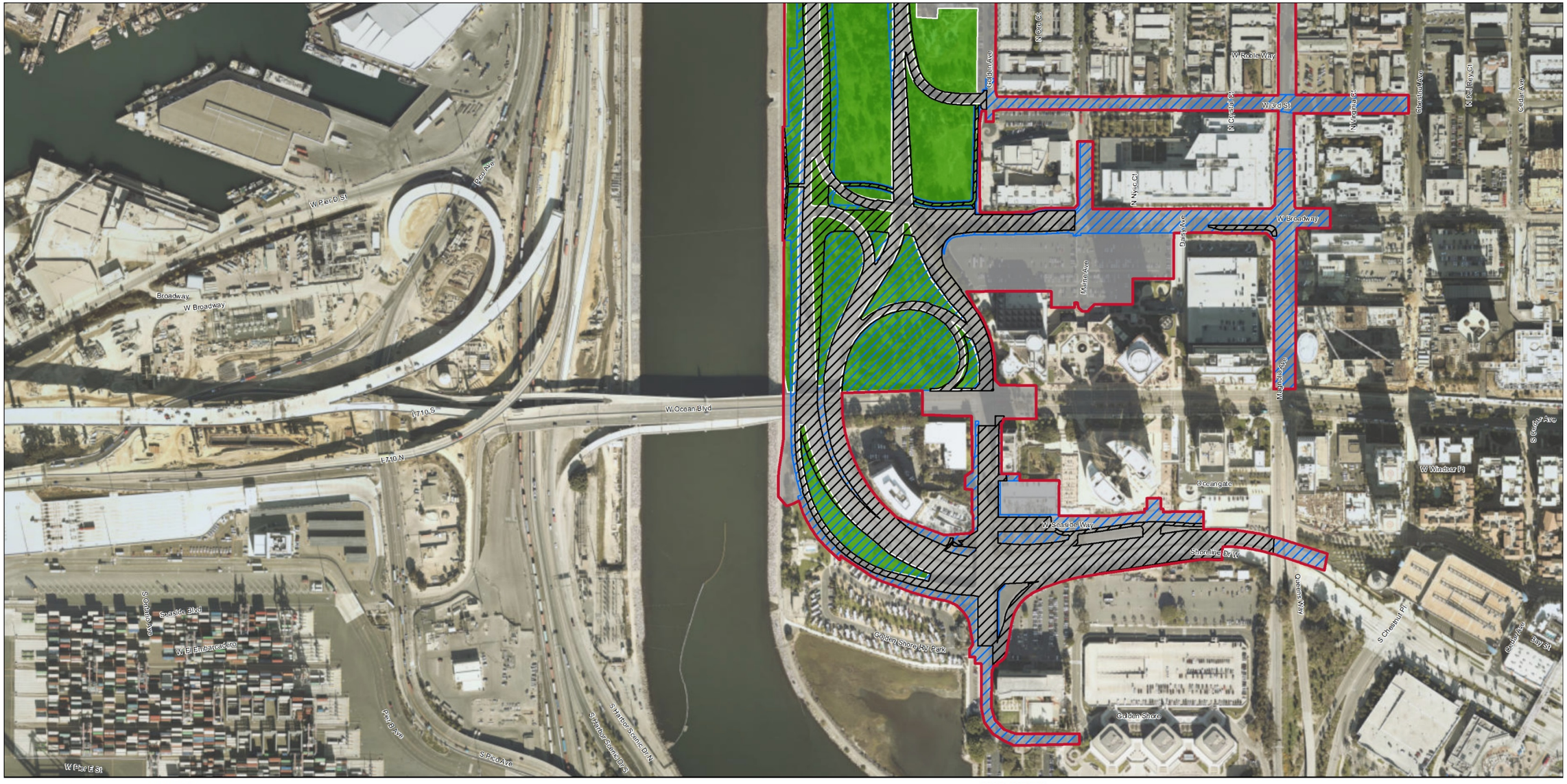


**LEGEND**

- Biological Study Area
- Permanent Impacts
- Temporary Impacts
- Removal of Existing Shoemaker Bridge
- Repurpose of Existing Shoemaker Bridge under Alternative 2
- Removal of Existing Shoemaker Bridge under Alternative 3
- Pier to be removed
- Pier to remain in place
- Developed/Disturbed/Ornamental
- Park

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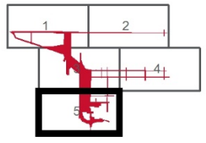
**MAP INDEX**

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*Shoemaker Bridge Replacement Project*

**Figure 2.16-3. Proposed Impacts on Plant Communities**
**Sheet 5 of 5**

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Project Features PF-10, PF-24, PF-25, PF-28 through PF-31, and PF-43, included under Section 2.9, Water Quality and Storm Water Runoff, require preparation and implementation of a SWPPP and implementation of BMPs during construction to prevent resuspension of contaminated sediment and debris in the LA River. In addition, the following Project Features PF-80 through PF-84 (referenced in Table 1-5, Chapter 1, and identified below) included as a part of the Project would apply to sensitive natural communities within the approved Project limits.

**PF-80** During construction, the City of Long Beach (City) will ensure that a biologist approved by the Carlsbad Fish and Wildlife Office (CFWO) and National Marine Fisheries Service (NMFS) (Project Biologist) will be on site weekly during Project construction within 200 feet of Environmentally Sensitive Areas (ESAs) and habitat for listed species with the potential to occur in the area (i.e. western snowy plover and California least tern) in order to ensure compliance with all conservation measures. The Project Biologist will be familiar with the habitats, plants, and wildlife in the Project area and will maintain communications with the contractor to ensure that issues relating to biological resources are appropriately and lawfully managed. The Project Biologist will review final plans, designate areas that need temporary fencing (e.g. ESA fencing), and monitor construction. The biologist's name and contact information will be submitted to the CFWO prior to initiating project construction. The contract of the biologist will allow direct communication with the CFWO at any time regarding the proposed project. The Project Biologist will meet the qualifications defined under SSP 14 6.03D(1) Contractor Supplied Biologist.

**PF-81** After the completion of construction, the City of Long Beach (City) will ensure that the Project Biologist will submit a final report to the CFWO within 120 days of project completion, including photographs of impact areas and adjacent habitat, documentation that authorized impacts were not exceeded, and documentation that general compliance with all conservation measures was achieved. The report will specify numbers and locations of listed species (if observed); observed listed species behavior (especially in relation to project activities); and remedial measures employed to avoid and minimize impacts to listed species. Raw field notes will be provided upon request by the CFWO.

**PF-82** The City's Resident Engineer will ensure that prior to clearing or construction, highly visible barriers (such as orange construction fencing) will be installed around sensitive habitats adjacent to the Project footprint to designate ESAs to be preserved. No grading or fill activity of any type will be permitted within these ESAs. The requirement to install highly visible barriers to designate ESAs will be done in accordance with SSP 14-6.03D(2) Natural Resource Protection Plan.

**PF-83** The City's Resident Engineer will ensure that heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental damage to nearby preserved areas. All equipment maintenance, staging, and dispensing of fuel, oil, or any other, such activities will occur in developed or designated nonsensitive upland habitat areas. The designated upland areas will be located in such a manner as to prevent the runoff from any spills from entering waters of the U.S. Provisions to protect ESAs from heavy equipment, including motor vehicle access, will be done in accordance with SSP 14-6.03D(2) Natural Resource Protection Plan.

**PF-84** During construction, the (City's Resident Engineer or designated contractor will ensure that turbidity curtains be used in lieu of silt curtains, which are less effective at trapping sediment in tidal channels.

### 2.16.3.2 Permanent Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not result in the construction of any of the proposed improvements to the Shoemaker Bridge and, therefore, would not result in adverse permanent impacts on natural communities in the BSA.

#### Alternatives 2 and 3 (Design Options A and B)

Table 2.16-2 shows the amount of deepwater aquatic habitat that would be permanently impacted by the proposed Project under Alternatives 2 and 3 (Design Options A and B). Alternative 2 would result in a permanent net loss of 0.47 or 0.44 acre of waters of the U.S. under Design Options A and B, respectively. Alternative 3 would result in a permanent net loss of 0.45 or 0.42 acre of waters of the U.S. under Design Options A and B, respectively. Four support structures would be removed below the invert of the LA River Flood Channel under Alternative 2 (Design Options A and B) and five support structures would be removed below the invert of the LA River Flood Channel under Alternative 3 (Design Options A and B).

**Table 2.16-2. Summary of Impacts on Deepwater Aquatic Habitat**

| | Alternative 2 | | Alternative 3 | |
|---|---|---|---|---|
| **Type of Impact** | **Design Option A (acres)** | **Design Option B (acres)** | **Design Option A (acres)** | **Design Option B (acres)** |
| Permanent decrease in habitat from new bridge construction | 0.54 | 0.51 | 0.54 | 0.51 |
| Permanent increase in habitat from existing bridge demolition | 0.07 | 0.07 | 0.09 | 0.09 |
| **Total net change in deepwater aquatic habitat** | **0.47** | **0.44** | **0.45** | **0.42** |

Source: Caltrans 2019j

Estuarine habitat would be subject to an increase in permanent shade impacts as a result of the new Shoemaker Bridge under Alternatives 2 and 3 (Design Options A and B), and the repurposed portion of the existing Shoemaker Bridge under Alternative 2 (Design Options A and B). As shown in Table 2.16-3, a permanent shade increase of 0.73 acre would occur under Alternative 2 (Design Option A) and 0.68 acre under Alternative 2 (Design Option B). A permanent shade increase of 0.50 acre would occur under Alternative 3 (Design Option A) and 0.45 acre under Alternative 3 (Design Option B). However, given that the bridge is oriented in a northeast-southwest direction and well above the water's surface, the increase in shading impacts would still be considered minimal. Additionally, species utilizing the habitat are adapted to large ranges in salinity, temperature, and dissolved oxygen, as indicated by their ability to utilize a wide range of habitats from open ocean to shallow estuaries.

**Table 2.16-3. Summary of Shade Impacts**

| Type of Impact | Alternative 2 | | Alternative 3 | |
|---|---|---|---|---|
| | Design Option A (acres) | Design Option B (acres) | Design Option A (acres) | Design Option B (acres) |
| Existing shading of estuarine habitat from existing Shoemaker Bridge | 1.66 | 1.66 | 1.66 | 1.66 |
| Shading of estuarine habitat from new Shoemaker Bridge | 2.16 | 2.11 | 2.16 | 2.11 |
| Decrease in existing shading of estuarine habitat from partial/full removal of existing Shoemaker Bridge | 1.43 | 1.43 | 1.66 | 1.66 |
| **Net change in shading of estuarine habitat** | **0.73** | **0.68** | **0.50** | **0.45** |

Source: Caltrans 2019j

With the implementation of Avoidance, Minimization, and/or Mitigation Measures NC-1 though NC-5, no substantial adverse impacts on estuarine habitat or deepwater aquatic habitat are anticipated.

## 2.16.4 Avoidance, Minimization, and/or Mitigation Measures

Minimization Measure IS-2, presented in Section 2.21, Invasive Species, requires preconstruction surveys for the invasive seaweed *Caulerpa taxifolia*. In addition to this measure, the following avoidance, minimization, and/or mitigation measures would be implemented to avoid and/or minimize temporary and permanent impacts on estuarine habitat.

**NC-1** Prior to construction, the City of Long Beach (City) will ensure that an employee education program be developed and implemented by the Shoemaker Bridge Replacement Project (Project) Biologist. Each employee (including temporary, contractors, and subcontractors) will receive a training/awareness program prior to working on the proposed Project. They will be advised of the potential impact to the listed species and the potential penalties for taking such species. At a minimum, the program will include the following topics: (1) responsibilities of the biological monitor; (2) delineation and flagging of adjacent sensitive habitat; (3) limitations on all movement of those employed on site, including ingress and egress of equipment and personnel, to designated construction zones (personnel will not be allowed access to adjacent sensitive habitats); (4) occurrence of the listed and sensitive species in the area (including photographs), their general ecology, sensitivity of the species to human activities, legal protection afforded these species, (5) penalties for violations of federal and state laws, reporting requirements, (6) on-site pet prohibitions; (7) use of trash containers for disposal and removal of trash; and (8) Shoemaker Bridge Replacement Project (Project) features designed to reduce the impacts on listed species and habitat and promote continued successful occupation of adjacent habitat areas.

**NC-2** The City of Long Beach's (City) Resident Engineer will ensure that the use of rodenticides, herbicides, insecticides, or other chemicals that could potentially harm listed species will be prohibited in and around the Los Angeles River (LA River).

**NC-3** During construction, the City of Long Beach's (City) Resident Engineer or designated contractor will ensure that any deliberate feeding of wildlife will be prohibited.

**NC-4** Prior to construction, the City of Long Beach's Resident Engineer (City) will ensure that a Habitat Mitigation and Monitoring Plan (HMMP) will be developed in coordination with the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW) and will ensure no net loss of estuarine habitat value or acreage. The HMMP will comply with all terms and conditions set forth in the permits and opinions issued by the resource agencies and will typically include the following provisions:

- Permanent impacts on the Los Angeles River (LA River) will be mitigated on or off site at a minimum 2:1 ratio. Temporary direct impacts on the LA River will be replaced at a minimum 1:1 ratio with in-kind habitat restored in place within the biological study area (BSA). If off-site restoration is conducted, it will be undertaken within the LA River watershed, if feasible.
- Further criteria specified in the HMMP will include an establishment period for the replacement habitat, if applicable; regular trash removal; and regular maintenance and monitoring activities to ensure the success of the mitigation plan. After construction, annual summary reports of biological monitoring will be provided to USACE, RWQCB, and CDFW that document the monitoring effort. The duration of the monitoring and reporting will be established by resource agency permit conditions.

**NC-5** During construction, the City of Long Beach's (City) Resident Engineer or designated contractor will ensure that all soils and material, including contaminated topsoil and lead-based paint (LBP) from demolished bridges, will be removed from the biological study area (BSA) and disposed of properly. Floating booms will be used to contain debris discharged, and any debris discharged will be removed no later than the end of each day.

# 2.17 Wetlands and Other Waters

## 2.17.1 Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [USC] 1344), is the primary law regulating wetlands and surface waters. One purpose of the CWA is to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. The lateral limits of jurisdiction over non-tidal water bodies extend to the ordinary high water mark (OHWM), in the absence of adjacent wetlands. When adjacent wetlands are present, CWA jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils formed during saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the U.S. Environmental Protection Agency (U.S. EPA).

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (40 Code of Federal Regulations [CFR] Part 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a "least environmentally damaging practicable alternative" (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, EO 11990 states that a federal agency, such as FHWA and/or the Department, as assigned, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to the construction and (2) the proposed project includes all practicable measures to minimize harm. A Wetlands Only Practicable Alternative Finding must be made.

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCBs) and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or the Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFW.

The RWQCBs were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDR) and may be required even when the discharge is already permitted or exempt under the CWA. In compliance with Section 401 of the CWA, the RWQCBs also issue water quality certifications for activities which may result in a discharge to waters of the U.S. This is most frequently required in tandem with a Section 404 permit request. Please see the Section 2.9, Water Quality and Storm Water Runoff, for more details.

## 2.17.2 Affected Environment

This section is based on the NES (Caltrans 2019c) and the *Jurisdictional Delineation* (JD) (Caltrans 2018l) prepared for the Project. The findings and conclusions of the JD are considered preliminary until verified by USACE, CDFW, and the RWQCB. Preliminary jurisdictional determination is ongoing with USACE. This information will be updated upon verification from USACE and prior to the approval of the Final EIR/EA.

The BSA, described in detail in Section 2.16, Natural Communities, is the area assessed for jurisdictional waters. The LA River is the only drainage feature located in the BSA. On July 6, 2010, the U.S. EPA designated the LA River as a traditional navigable water (TNW). The LA River parallels SR-710 in the BSA and is a historically natural drainage that is currently an unvegetated, concrete- and riprap-lined trapezoidal channel along most of its length. It serves as a flood control channel for the highly urbanized surrounding areas. Within the BSA, the LA River is subject to tidal influence. It has a natural bottom and riprap sides. A small amount of wetland habitat occurs within the BSA at Anaheim Street Bridge. Sediment that has accumulated on the toe of the riprap banks supports two small patches of California bulrush (*Schoenoplectus californicus*), a plant species identified as almost always occurring in wetlands. No other areas supporting hydrophytic vegetation occur in the BSA. Runoff from adjacent commercial, industrial, and residential developments is likely conveyed into the LA River via a storm drain system. There are no other potentially jurisdictional drainage features in the BSA.

### 2.17.2.1 United States Army Corps of Engineers Jurisdictional Areas

The LA River connects directly to the Pacific Ocean approximately 1 mile south of the BSA. The part of the LA River in the BSA has a tidal influence from the Pacific Ocean. Since the LA River is a TNW, USACE will assert jurisdiction under Section 404 of the CWA. In addition, because the part of the LA River in the Shoemaker BSA has tidal influence, it is also subject to jurisdiction by USACE under

Section 10 of the Rivers and Harbors Act of 1899. Figure 2.17-1 shows the location and limits of the potential jurisdictional areas at Shoemaker Bridge and Anaheim Street Bridge, respectively.

The limits of USACE jurisdiction were determined based on the OHWM, indicated by the presence of concrete staining, which extended to the outer limits of the channel. The BSA includes a total of 10.29 acres of waters subject to USACE jurisdiction, pursuant to Section 404 of the CWA.

The BSA also includes less than 0.01 acre of wetland waters associated with the freshwater emergent marsh habitat on the south side of the Anaheim Street Bridge. A soil pit was not conducted for this location because of lack of access. However, vegetation consists entirely of California bulrush, which is listed as obligate on the USACE National Wetland Plant List (USACE 2018), indicating that this species almost always occurs in wetlands. Because of this, Freshwater emergent marsh within the BSA is considered wetlands pursuant to the USACE definition and shown on Figure 2.17-2.

The BSA includes a total of 9.94 acres of earthen-bottom tidally influenced waters subject to USACE jurisdiction pursuant to Section 10 of the Rivers and Harbors Act.

### 2.17.2.2 California Department of Fish and Wildlife Jurisdictional Areas

Typically, all of the areas satisfying USACE jurisdictional criteria for waters of the U.S., as described above, are also often subject to CDFW jurisdiction pursuant to Section 1602 of the California Fish and Game Code. In addition, streambed banks and adjacent riparian vegetation areas extending beyond the limits of USACE jurisdiction are considered subject to CDFW jurisdiction.

Because there is no riparian vegetation in the BSA, river banks were used to determine the limits of CDFW jurisdiction. The total acreage of CDFW jurisdiction within the BSA is 11.84 acres. CDFW jurisdiction is depicted on Figure 2.17-1.

### 2.17.2.3 Regional Water Quality Control Board Jurisdictional Areas

RWQCB jurisdiction was determined based on the federal definition of waters of the U.S. OHWM as recommended by the SWRCB's *Workplan: Filling the Gaps in Wetland Protection* (SWRCB 2004). The total area of potential RWQCB jurisdiction in the Project BSA is 10.29 acres.

### 2.17.2.4 California Coastal Commission Jurisdiction

Areas within the coastal zone satisfying USACE jurisdictional criteria for waters and wetlands of the U.S., as described above, or exhibiting wetland hydrology, a predominance of hydrophytic vegetation or hydric soils would also be subject to CCC jurisdiction as wetlands pursuant to the CCA. The portion of the BSA south of Anaheim Street and west of the LA River is located within the coastal zone. However, it is not part of an LCP and does not contain CCC jurisdictional waters or wetlands. The portion of the BSA south of Ocean Boulevard and east of the LA River is also within the Coastal Zone and is within the City of Long Beach LCP. However, this portion of the BSA does not contain CCC jurisdictional wetlands.

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**LEGEND**

- Biological Study Area
- Section 10 Jurisdiction
- Section 4040\401 and CDFW Jurisdiction
- CDFW Jurisdiction

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*Shoemaker Bridge Replacement Project*

**Figure 2.17-1. Potential Jurisdictional Areas**
**Shoemaker Bridge**
**Sheet 1 of 2**

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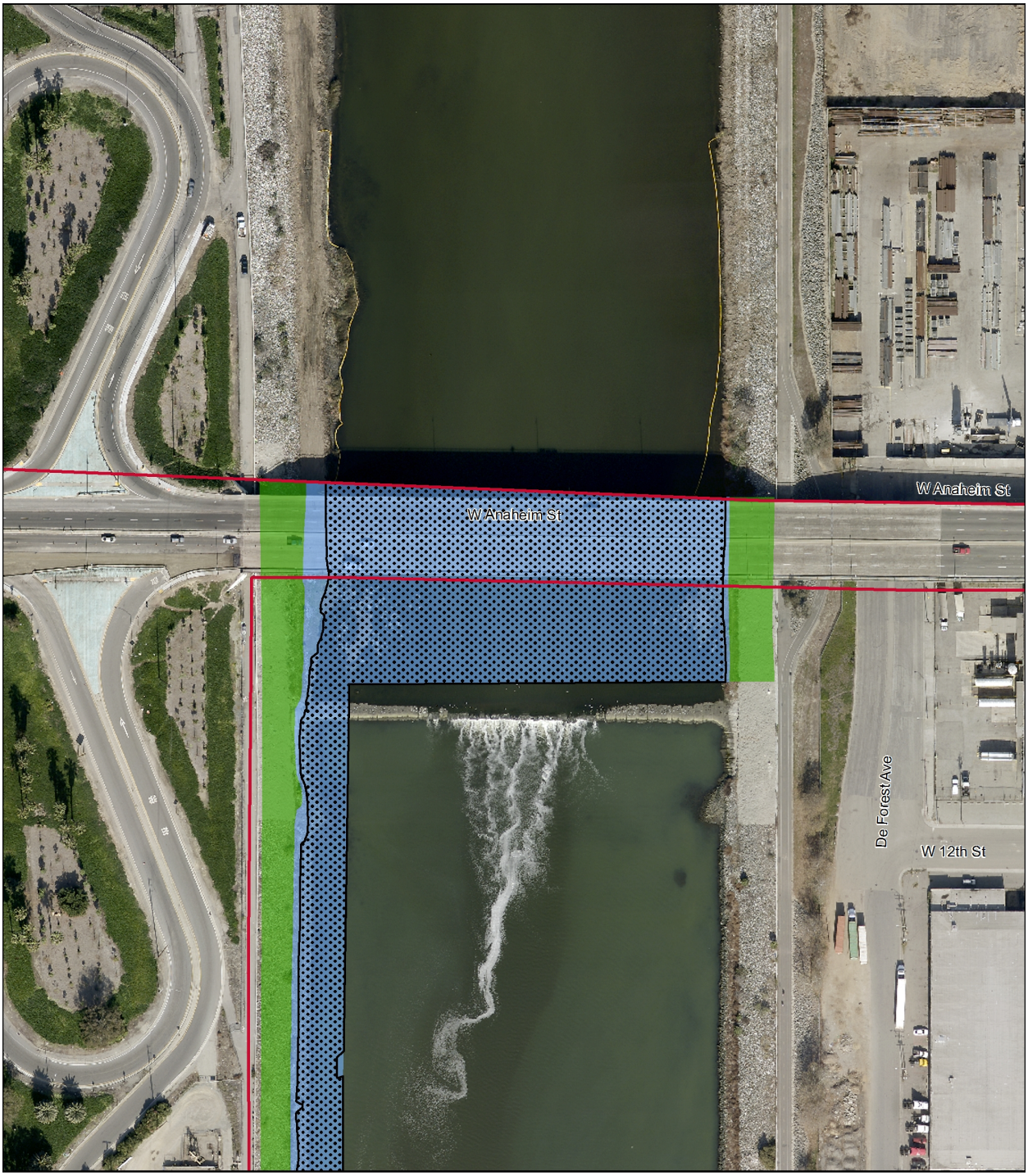


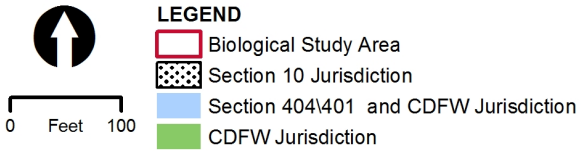


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*Shoemaker Bridge Replacement Project*

**Figure 2.17-1. Potential Jurisdictional Areas**
**Anaheim Street Bridge**
**Sheet 2 of 2**

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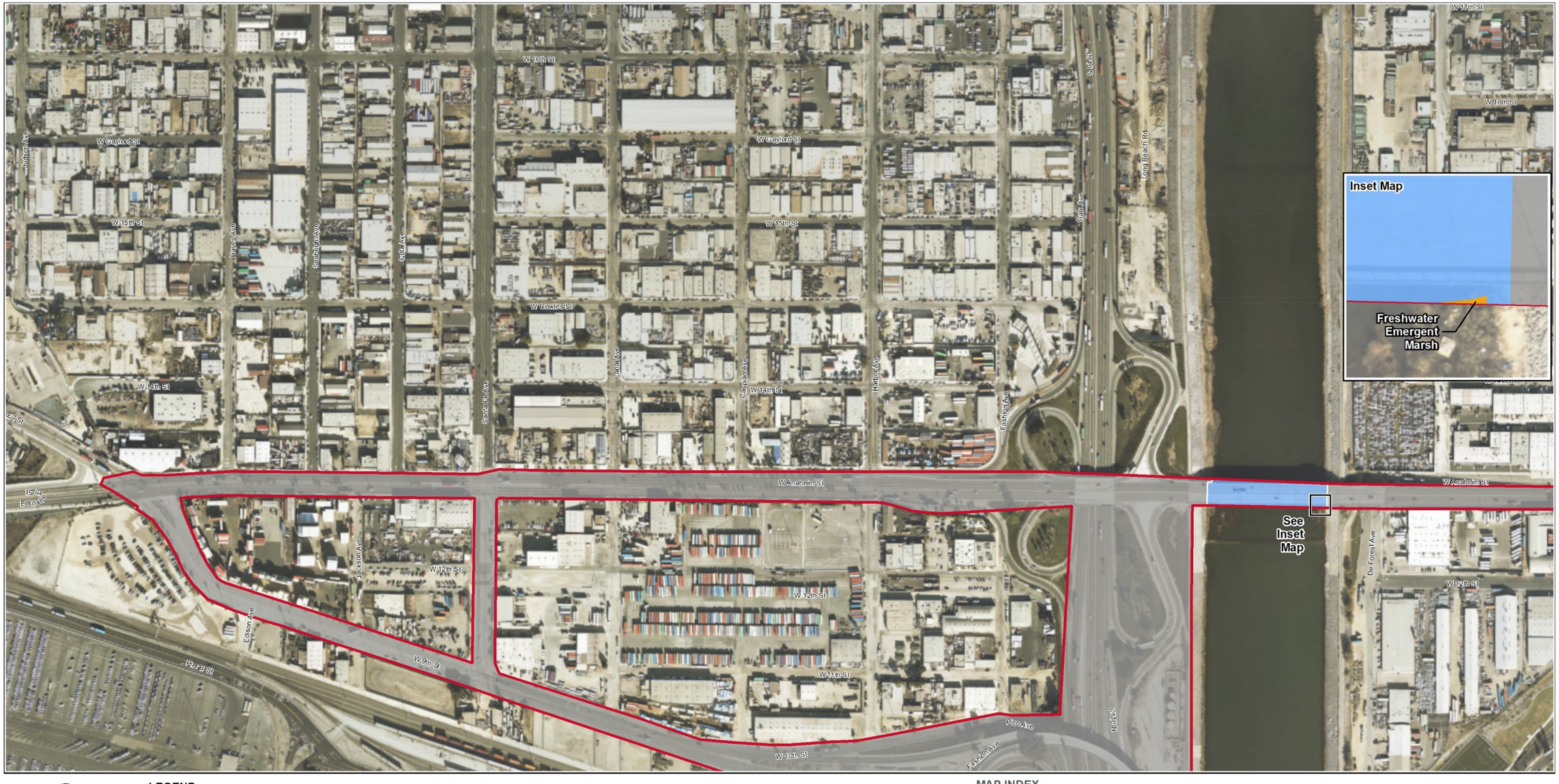


**LEGEND**

- Biological Study Area
- Developed/Disturbed/Ornamental
- Freshwater Emergent Marsh
- Intertidal Waters

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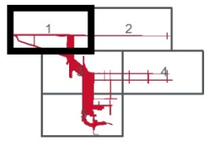
**MAP INDEX**

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*Shoemaker Bridge Replacement Project*

**Figure 2.17-2. Plant Communities within the BSA**
**Sheet 1 of 5**

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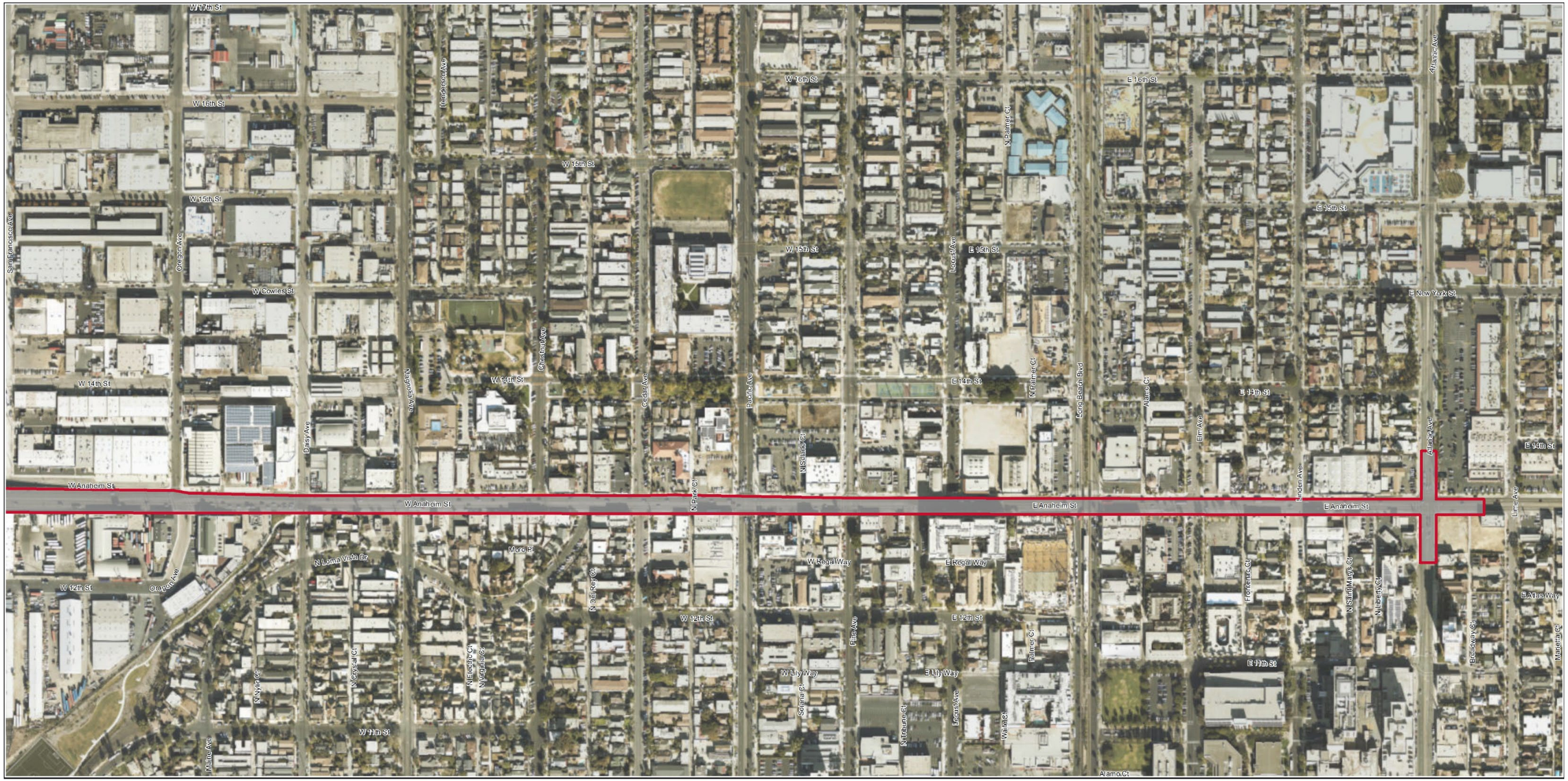


**LEGEND**

- Biological Study Area
- Developed/Disturbed/Ornamental

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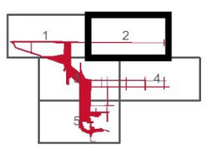
**MAP INDEX**

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*Shoemaker Bridge Replacement Project*

**Figure 2.17-2. Plant Communities within the BSA**
**Sheet 2 of 5**

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**LEGEND**

- Biological Study Area
- Developed/Disturbed/Ornamental
- Intertidal Waters
- Park

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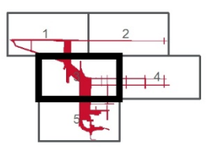
**MAP INDEX**

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*Shoemaker Bridge Replacement Project*

**Figure 2.17-2. Plant Communities within the BSA**
**Sheet 3 of 5**

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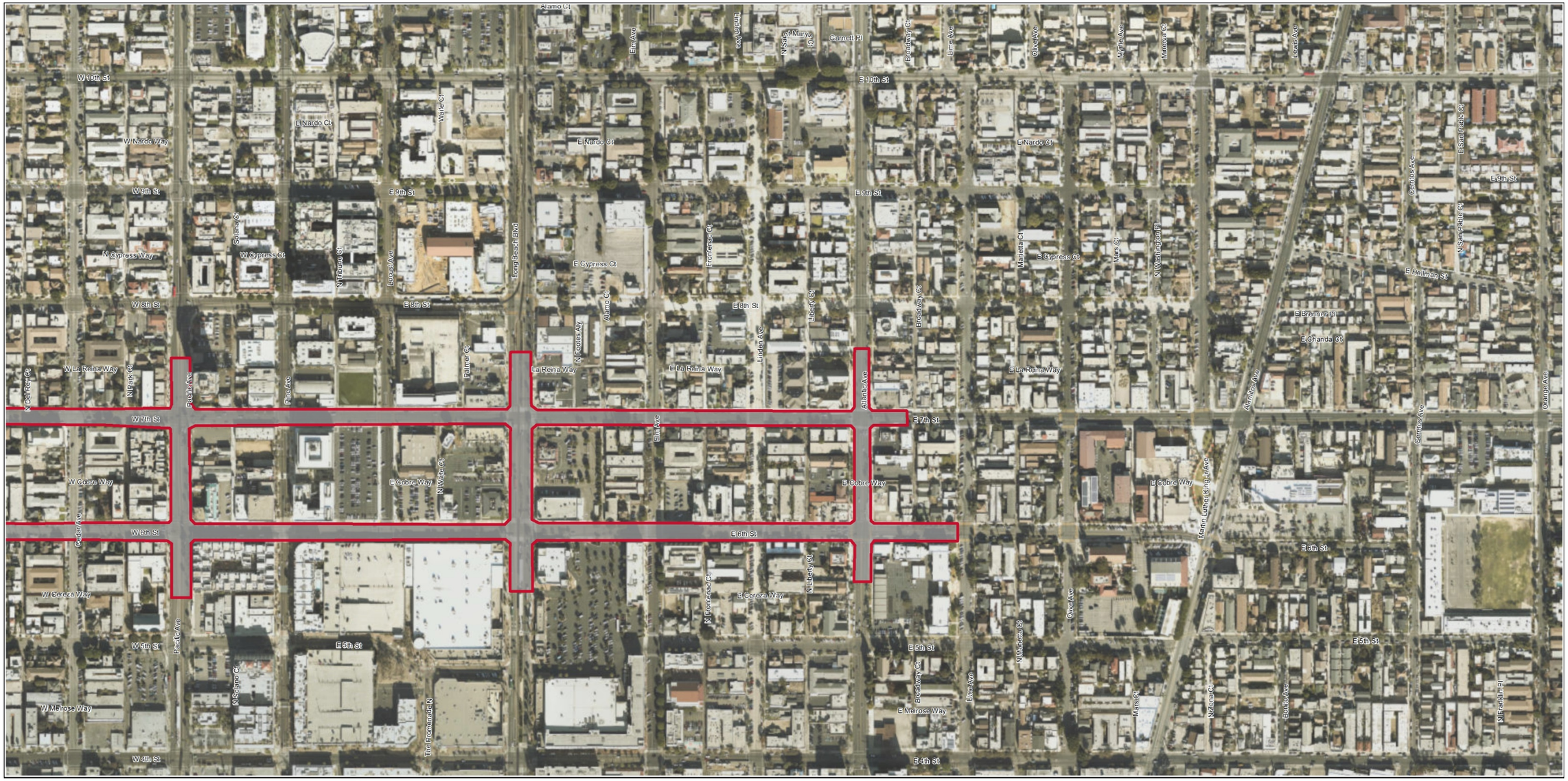


**LEGEND**

Biological Study Area

Developed/Disturbed/Ornamental

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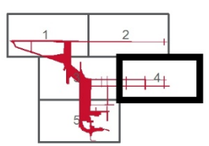
**MAP INDEX**

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*Shoemaker Bridge Replacement Project*

**Figure 2.17-2. Plant Communities within the BSA**
**Sheet 4 of 5**

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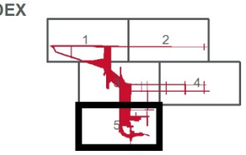
**LEGEND**

- Biological Study Area
- Developed/Disturbed/Ornamental
- Park

0 Feet 400

MAP INDEX

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*Shoemaker Bridge Replacement Project*

**Figure 2.17-2. Plant Communities within the BSA**
**Sheet 5 of 5**

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## 2.17.3 Environmental Consequences

### 2.17.3.1 Temporary Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not involve construction activities associated with Alternatives 2 and 3; therefore, no temporary impacts on wetlands and other waters would occur.

#### Alternatives 2 and 3 (Design Options A and B)

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in direct temporary impacts on non-wetland waters (deepwater aquatic habitat) through the construction and placement of support structures for the proposed new bridge and the demolition of the old bridge. The existing Shoemaker Bridge would be wholly or partly removed in Alternative 3 and Alternative 2, respectively, and four support structures would be removed below the invert of the channel in both alternatives. Areas of temporary impacts would only be impacted during construction.

Alternatives 2 and 3 (Design Option A) would result in up to 7.53 acres of temporary impacts on non-wetland waters of the U.S. Alternatives 2 and 3 (Design Option B) would result in up to 7.56 acres of temporary impacts on non-wetland waters of the U.S. Temporary impacts are slightly less for Section 10 waters, including 7.28 acres for Alternatives 2 and 3 (Design Option A) and 7.31 acres for Alternatives 2 and 3 (Design Option B). Although there would be a temporary increase the area of impacts as a result of the demolition of the existing bridge, new waters of the U.S. would become available upon Project completion. Areas of temporary jurisdictional impacts on waters regulated by USACE and RWQCB are summarized in Table 2.17-1 and shown on Figure 2.17-3. As shown in Table 2.17-1, temporary impacts on RWQCB jurisdiction would be the same as impacts on USACE jurisdiction.

**Table 2.17-1. Temporary Project Impacts on Non-wetland Waters of the United States and Section 10 Waters**

| | Alternative 2 | | Alternative 3 | |
|---|---|---|---|---|
| **Type of Impact** | **Design Option A (acres)** | **Design Option B (acres)** | **Design Option A (acres)** | **Design Option B (acres)** |
| **Temporary:** Non-wetland waters of the U.S. | 7.53 | 7.56 | 7.53 | 7.56 |
| **Temporary:** Section 10 waters | 7.28 | 7.31 | 7.28 | 7.31 |

Source: Caltrans 2018l

Notes:
U.S.=United Sates

As shown in Table 2.17-2, Alternative 2 (Design Option A) and Alternative 3 (Design Option A) result in up to 8.45 acres of temporary impacts on CDFW streambed. Alternative 2 (Design Option B) and Alternative 3 (Design Option B) result in up to 8.48 acres of temporary impacts on CDFW streambed.

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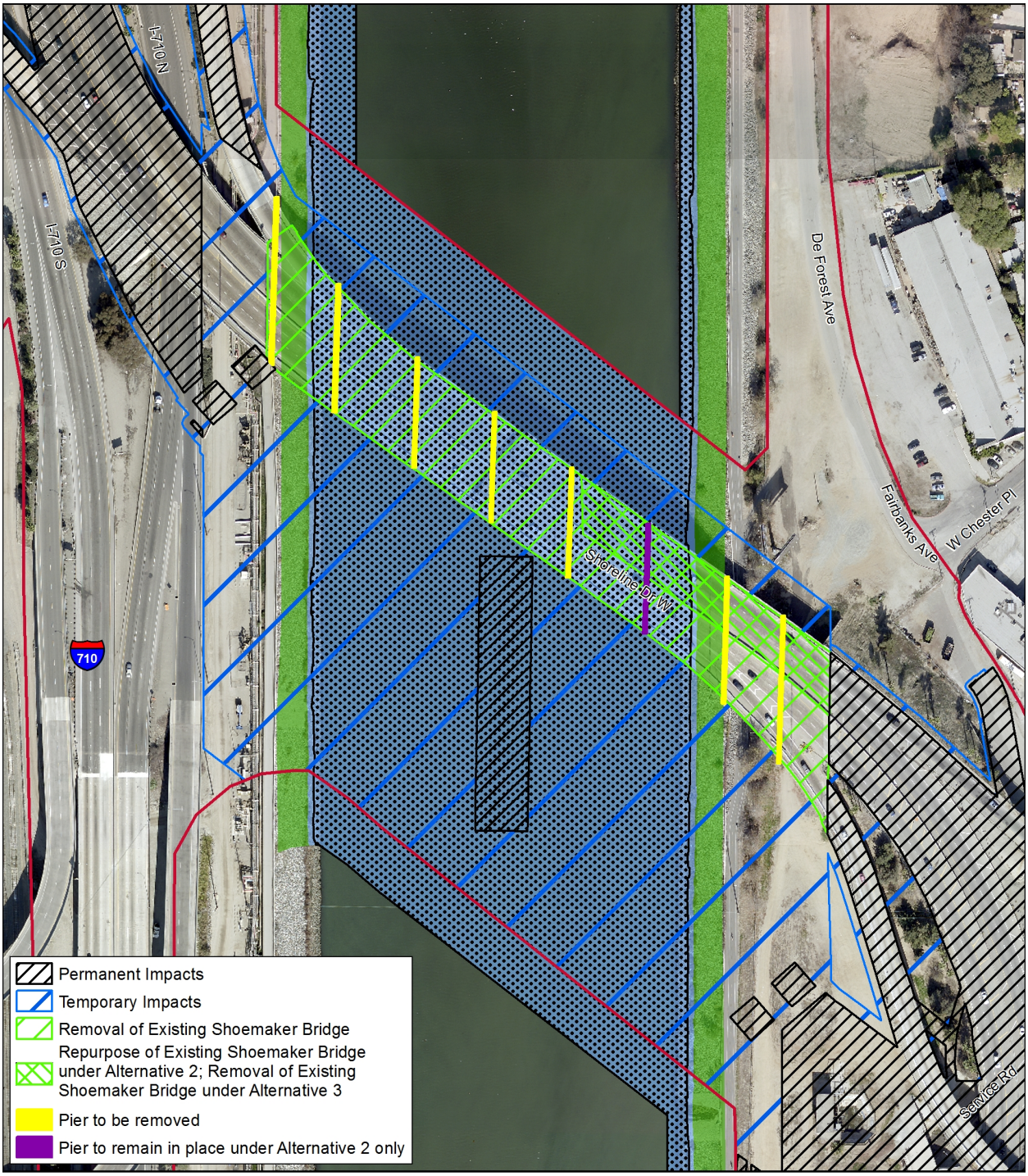


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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.17-3. Proposed Impacts on Jurisdictional Waters Alternatives 2 and 3 (Design Option A) Sheet 1 of 2**

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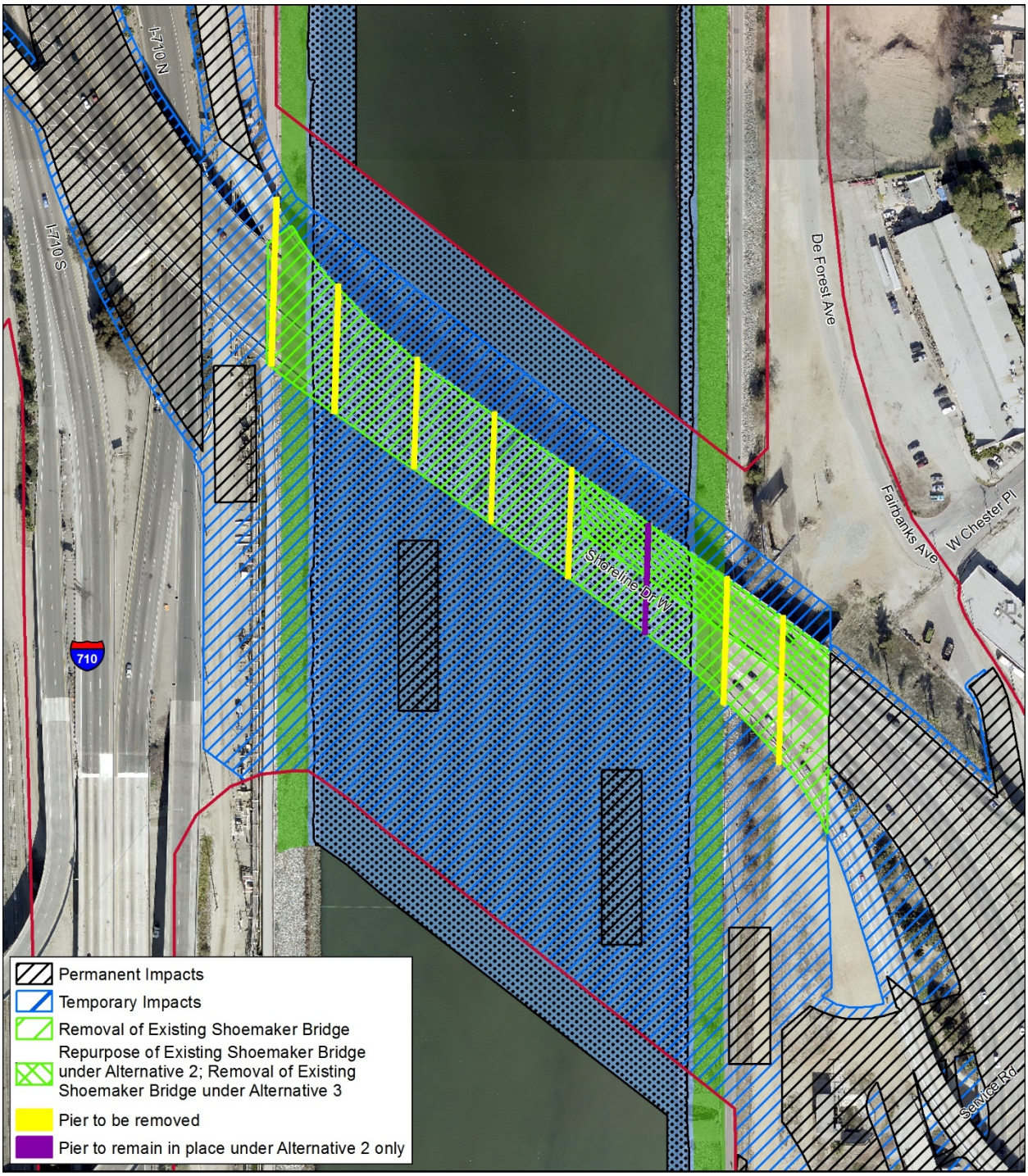


**Figure 2.17-3. Proposed Impacts on Jurisdictional Waters Alternatives 2 and 3 (Design Option B) Sheet 2 of 2**

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**Table 2.17-2. Temporary Project Impacts on California Department of Fish and Wildlife Jurisdictional Streambed**

| | Alternative 2 | | Alternative 3 | |
|---|---|---|---|---|
| **Type of Impact** | **Design Option A (acres)** | **Design Option B (acres)** | **Design Option A (acres)** | **Design Option B (acres)** |
| **Temporary** | 8.45 | 8.48 | 8.45 | 8.48 |

Source: Caltrans 2018l

### 2.17.3.2 Permanent Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not result in the construction of a new Shoemaker Bridge over the LA River; therefore, it would not result in permanent impacts on wetlands and other waters or their functions and values.

#### Alternatives 2 and 3 (Design Options A and B)

*Impacts on United States Army Corps of Engineers and Regional Water Quality Control Board Jurisdictional Areas*

Under Alternatives 2 and 3 (Design Options A and B), direct permanent impacts would result from the installation of structures to support the new Shoemaker Bridge (i.e., columns). The existing Shoemaker Bridge would be wholly removed under Alternative 3 or partly removed in Alternative 2. Four support structures would be removed below the invert of the LA River Flood Channel under Alternative 2 (Design Options A and B) and five support structures would be removed below the invert of the LA River Flood Channel under Alternative 3 (Design Options A and B).

As shown in Table 2.17-3, Alternative 2 would result in a permanent net loss of 0.47 or 0.44 acre of non-wetland waters of the U.S. under Design Options A and B, respectively. Alternative 3 would result in a permanent net loss of 0.45 or 0.42 acre of non-wetland waters of the U.S. under Design Options A and B, respectively. Table 2.17-3 shows the amount of waters of the U.S. that would be permanently impacted by the proposed Project and the net loss of waters of the U.S. expected after Project completion. Neither Alternative 2 (Design Options A or B) nor Alternative 3 (Design Options A or B) would result in permanent or temporary impacts on wetland waters of the U.S. Permanent impacts on RWQCB jurisdiction would be the same as impacts on USACE jurisdiction.

**Table 2.17-3. Permanent Project Impacts on Non-wetland Waters of the United States**

| Type of Impact | Alternative 2 | | Alternative 3 | |
|---|---|---|---|---|
| | Design Option A (acres) | Design Option B (acres) | Design Option A (acres) | Design Option B (acres) |
| **Permanent**: Decrease in habitat from new bridge construction | 0.54 | 0.51 | 0.54 | 0.51 |
| **Permanent:** Increase in habitat from existing bridge demolition | 0.07 | 0.07 | 0.09 | 0.09 |
| **Total Permanent net change in Section 404 waters (decrease)** | **0.47** | **0.44** | **0.45** | **0.42** |

Source: Caltrans 2018l

*Impacts on California Department of Fish and Wildlife Jurisdictional Areas*

As shown in Table 2.17-4, Alternative 2 would result in a permanent net loss of 0.47 or 0.44 acre of CDFW streambed under Design Options A and B, respectively. Alternative 3 would result in a permanent net loss of 0.45 or 0.42 acre of CDFW streambed under Design Options A and B, respectively.

**Table 2.17-4. Permanent Project Impacts on California Department of Fish and Wildlife Jurisdictional Streambed**

| Type of Impact | Alternative 2 | | Alternative 3 | |
|---|---|---|---|---|
| | Design Option A (acres) | Design Option B (acres) | Design Option A (acres) | Design Option B (acres) |
| **Permanent:** Decrease in habitat from new bridge construction | 0.54 | 0.51 | 0.54 | 0.51 |
| **Permanent:** Increase in habitat from existing bridge demolition | 0.07 | 0.07 | 0.09 | 0.09 |
| **Total Permanent: net change in CDFW waters (decrease)** | **0.47** | **0.44** | **0.45** | **0.42** |

Source: Caltrans 2018l

Notes:
CDFW=California Department of Fish and Wildlife

*Impacts on Functions and Values*

The following discussion describes permanent impacts of Alternatives 2 and 3 (Design Options A and B) to the functions and values of wetlands and other waters in the BSA.

*Hydrologic Regime*

Proposed Project impacts within the LA River include expanded bridge footings with a small footprint that would not substantially affect the existing hydrologic regime. Following implementation of the Project, the portion of the LA River within the BSA would continue to function at the existing level with regard to hydrologic regime.

*Flood Storage and Flood Flow Modification*

Proposed Project impacts within the LA River would not substantially alter flood storage or flood flow modification.

*Sediment Retention*

Proposed Project impacts under Alternatives 2 and 3 (Design Options A and B) within the LA River include expanded bridge footings with a small footprint that would not substantially affect the existing sediment retention capabilities of this drainage.

*Nutrient Retention and Transformation*

Proposed Project impacts within the LA River are small and would not substantially affect the existing level of nutrient retention capabilities of this drainage.

*Toxicant Trapping*

Proposed Project impacts under Alternatives 2 and 3 (Design Options A and B) within the LA River are small and would not substantially affect the existing moderate level of toxicant trapping capabilities of this drainage.

*Social Significance*

Proposed Project impacts under Alternatives 2 and 3 (Design Options A and B) within the LA River are small and all social uses would be retained.

*Wildlife Habitat*

Proposed Project under Alternatives 2 and 3 (Design Options A and B) impacts on wildlife habitat within the LA River are small and would not substantially alter wildlife habitat values of this drainage.

*Aquatic Habitat*

Proposed Project impacts under Alternatives 2 and 3 (Design Options A and B) within the LA River are small and would not substantially affect the existing aquatic habitat values of this drainage.

### 2.17.3.3 Agency Coordination

No coordination with USACE, CDFW, or RWQCB has been conducted for the proposed Project at this time. However, agency coordination was conducted with USACE and Caltrans in 2008 and 2009 for the I-710 Corridor Project. Portions of the BSA are located within the I-710 Corridor Project BSA.

Coverage under the USACE Nationwide Permit 14 for Linear Transportation Projects would likely be appropriate for the Project because it is expected to permanently impact less than 0.5 acre of waters of the U.S. In addition, USACE may require coverage under Nationwide Permit 33 for temporary construction access to the LA River. A Streambed Alteration Notification (SAN) from CDFW is expected to be required for the Project. Upon receipt of a jurisdictional determination (concurrence) from USACE, a Section 401 Water Quality Certification from RWQCB is expected to be required for this Project.

Prior to construction, the City will submit a Preconstruction Notification form to USACE to obtain coverage under a Nationwide Permit pursuant to Section 404 of the CWA, a certification of water quality or waiver from the Los Angeles RWQCB pursuant to Section 401 of the CWA and obtain a Streambed Alteration Agreement from CDFW.

### 2.17.4 Avoidance, Minimization, and/or Mitigation Measures

Appropriate maintenance and monitoring procedures would be discussed and agreed upon with the resource agencies via the permit processes. Avoidance, Minimization, and Mitigation Measures NC-1 through NC-5, as specified previously in Section 2.16, Natural Communities, would also apply to Section 2.17.

# 2.18 Plant Species

## 2.18.1 Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Please see the Threatened and Endangered Species Section 2.20 in this document for detailed information about these species.

This section of the document discusses all other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act (CEQA), found at California Public Resources Code, Sections 21000-21177.

## 2.18.2 Affected Environment

This section is based on the NES prepared for the Project (Caltrans 2019c).

A literature review and records search were conducted in 2009 and updated most recently in March 2018 to identify the existence or potential occurrence of sensitive or special-interest plant species in or within the vicinity of Project BSA. In addition to a literature review, focused surveys for special-status plant species within the I-710 Corridor BSA were conducted August 11, 12, and 28; September 4, 8, 9, 10, and 23; and November 11, 2009. A follow-up reconnaissance-level survey of the I-710 Corridor BSA was conducted January 21, 2011. Focused surveys were conducted within the BSA for southern tarplant (*Centromadia parryi* ssp. *australis*) August 11, 2011, and July 9, 2013. Southern tarplant is listed as a CNPS List 1B species.

Based on the literature review, 33 special-status plant species have the potential to occur on or within the vicinity of the BSA. Eight of the 33 special-status plant species are federally and/or state-listed endangered or threatened species and are discussed in Section 2.20, Threatened and Endangered Species.

The BSA was not considered to support suitable southern tarplant habitat during the 2009-focused surveys conducted as part of the I-710 Corridor Project. However, it was noted during the January 21, 2011, site visit that conditions within the BSA had changed, and a small portion of the Project site supported wheel ruts that may pond during rain events. This type of habitat may be suitable for southern tarplant. As a result, a focused survey was conducted August 11, 2011, during the blooming period for southern tarplant (May through November). No southern tarplants were observed in the

BSA. During the July 2016 site visit, it was evident that the suitable habitat had been recently mowed, and no vegetation occurred in these areas. While southern tarplant tolerates disturbed conditions within or adjacent to an urban environment, the marginally suitable habitat for this species within the BSA is regularly maintained by weed removal, which indicates that even if this species was to occur in the BSA, the population would not be considered sustainable. Therefore, this species is considered absent from the BSA.

All other special-status plant species are considered absent from the Project BSA and are, therefore, not discussed further.

## 2.18.3 Environmental Consequences

### 2.18.3.1 Temporary Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not result in the construction of any of the proposed improvements to the Shoemaker Bridge and, therefore, would not result in temporary impacts on special-status plant species.

#### Alternatives 2 and 3 (Design Options A and B)

As stated above, southern tarplant is considered absent from the BSA; therefore, there would be no temporary impact on this species under Alternatives 2 and 3 (Design Options A and B).

### 2.18.3.2 Permanent Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not result in the replacement of the Shoemaker Bridge and, therefore, would not result in permanent impacts on special-status plant species.

#### Alternatives 2 and 3 (Design Options A and B)

As stated above, southern tarplant is considered absent from the BSA; therefore, Alternatives 2 and 3 (Design Options A and B) would not permanently impact this species.

## 2.18.4 Avoidance, Minimization, and/or Mitigation Measures

No temporary or permanent adverse impacts on plant species are anticipated. Therefore, no avoidance, minimization, and/or mitigation measures are required.

# 2.19 Animal Species

## 2.19.1 Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries), and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in the Threatened and Endangered Species Section 2.20 below. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

- California Environmental Quality Act
- Sections 1600 – 1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

NMFS is the federal agency with jurisdiction over marine mammals protected under the Marine Mammal Protection Act (MMPA). This act protects marine mammals, such as harbor seals and California sea lions (*Zalophus californianus*), from take. Take under the MMPA is defined as "harass, hunt, capture, kill, or attempt to harass, hunt, capture, or kill a marine mammal." It is necessary for federal agencies (such as FHWA) to consult with NMFS regarding possible take of marine mammals during otherwise legal activities.

U.S. citizens engaged in otherwise lawful activity (other than commercial fishing) may request authorization for incidental harassment of small numbers of marine mammals within a specified geographic region. The MMPA defines two levels of "harassment" as:

> Any act of pursuit, torment, or annoyance that (1) has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (2) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment)

If a given otherwise lawful activity could result in harassment (as defined above) to marine mammals, an incidental harassment authorization (IHA) from NMFS is required before the commencement of the activity. Since the Project would not inhibit the movement of marine mammals along the LA River, and

they are capable of moving away from direct Project activities during Project construction, the Project is not expected to result in the “harassment” of any marine mammals, as defined in the MMPA.

## 2.19.2 Affected Environment

This section is based on the NES (Caltrans 2019c) prepared for the Project.

A literature review and records search were conducted in 2009 and most recently updated in March 2018 to identify the existence or potential occurrence of sensitive or special-interest animal species in or within the vicinity of the BSA. In addition to a literature review, focused surveys for special-status animal species within the I-710 Corridor Project limits were conducted September 4, 2009. Follow-up reconnaissance-level surveys of the BSA for the proposed Project were conducted January 21, 2011, August 11, 2011, July 9, 2013, and July 19, 2016 to confirm that conditions found during earlier surveys remained consistent over the elapsed time.

A total of 31 special-status wildlife species have the potential to occur within the BSA. These species are listed as federally and/or state-listed endangered or threatened or are considered California fully protected (CFP) species or species of special concern (SSC) by the state. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.20, Threatened and Endangered Species.

Table 2.19-1 identifies all other special-status animal species, including CDFW SSC. All other special-status animal species are considered absent from the BSA and, are, therefore, not discussed further.

The proposed Project is located within an area designated as EFH for Coastal Pelagic Species (CPS) and Pacific Coast Groundfish Species (PCGS). It is also located within a Habitat Area of Particular Concern (HAPC) for PCGS. HAPCs are considered high priority areas for conservation, management, or research because they are rare, sensitive, stressed by development, or important to ecosystem function. The HAPC designation does not necessarily mean additional protections or restrictions upon an area, but they help to prioritize and focus conservation efforts. Estuarine habitat within the BSA is stressed by development and provides an important but degraded migratory route for fish, including species that once inhabited the LA River but are now extirpated from the area due to upstream habitat loss, such as southern steelhead trout (*Oncorhynchus mykiss*). While the BSA at this time does not provide high quality habitat, preservation of the HAPC area within the BSA would be important to future restoration efforts in other areas of the LA River.

Since tidal influence extends to the BSA, some members of the estuarine fish community and the demersal and pelagic fish community are expected to be present, but none of the fish species are estuarine resident species. The diversity and abundance of these groups are expected to be low compared to Queensway Bay. The BSA supports suitable estuarine habitat within the LA River to support one (1) CPS; northern anchovy foraging and nursery. The BSA does not provide spawning habitat or shelter habitat for these species. Northern anchovy are documented to occur in the LA River; however, the most recent documented occurrence available occurred as a result of birds dropping the fish to surveyors, not as a result of catch from the LA River. The northern anchovy is further discussed in in Section 2.20, Threatened and Endangered Species. The remainder of the CPS and PCGS are not expected to occur within the BSA due to the distance away from Queensway Bay and open ocean, the highly fluctuating salinity levels, and/or lack of suitable substrate.

The California sea lion has the potential to occur in the BSA. The California sea lion is one of the most common and widespread marine mammals along the California coast. The California sea lion is not a

federally listed species or California SSC; however, it is protected under the MMPA and, therefore, is addressed in regard to potential harassment from the proposed Project. The California sea lion is occasionally found in and adjacent to the BSA in the lower reaches of the LA River, primarily south of Ocean Boulevard. Individuals occasionally stray upstream as far north as Willow Street (e.g., one was seen by survey team north of Pacific Coast Highway September 4, 2009). However, the generally shallow depth and lack of suitable sites sea lions can use to haul themselves out of the water (e.g., low-lying docks, piers, platforms, or sandy shoreline beaches) limit their occurrence. These "haul-out" sites are necessary for seals for mating and giving birth, but not all haul-out sites are for reproduction. Other benefits of haul-out sites may include predator avoidance, thermal regulation, social activity, parasite reduction, and rest. There are no suitable "haul-out" sites in the BSA.

As shown in Table 2.19-1, foraging habitat for the black skimmer (*Rynchops niger)* is present in the BSA. Birds were observed well upstream in the City of Paramount (around Rosecrans) in July 2002 and July 2006.

**Table 2.19-1. Special-Status Animal Species Observed or with Suitable Habitat Present in the Biological Study Area**

| Common Name | Scientific Name | Status Federal/State | General Habitat Description | Habitat Present or Absent/ Species | Rationale |
|---|---|---|---|---|---|
| ***Birds*** | | | | | |
| Black skimmer | *Rynchops niger* | —/SSC (nesting) | Nests primarily on sandy beaches, shell banks, and small islands in coastal areas locally from the southern U.S. to South America; more widespread otherwise, extending to bays, lagoons, and mudflats. Nests at Terminal Island in Los Angeles Harbor and forages regularly in estuarine portions of the LA River. | Present | No suitable nesting habitat in BSA, but foraging habitat is present. Birds were seen well upstream in the City of Paramount (around Rosecrans) in July 2002 and July 2006. |

## Table 2.19-1. Special-Status Animal Species Observed or with Suitable Habitat Present in the Biological Study Area

| Common Name | Scientific Name | Status Federal/State | General Habitat Description | Habitat Present or Absent/ Species | Rationale |
|---|---|---|---|---|---|
| ***Mammals*** | | | | | |
| Western mastiff bat | *Eumops perotis californicus* | —/SSC | Ranged historically throughout much of the southwestern U.S. and northwestern Mexico. In California, most records are from rocky areas at low elevations. Occurs in many open, semi- arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.; roosts in crevices in vertical cliff faces, high buildings, trees, and tunnels. Numerous historic roosting areas exist in the LA Basin. | Present | Marginally suitable roosting habitat is present in the BSA. In addition, foraging habitat is present along the LA River. |
| Pocketed free- tailed bat | *Nyctinomops femorosaccus* | —/SSC | Varied habitats but usually associated with high cliffs or rocky areas. Spotty distribution, ranging from Southern California and southwestern Arizona through central Mexico. Roosts primarily in cliffs/rock crevices; may use buildings for roosting. Rarely roosts in bridges. | Present | Although roosting is unlikely within the BSA, foraging habitat is present along the LA River, and this species is known to forage over large distances from roost sites. Recorded from Harbor City and Inglewood. |

**Table 2.19-1. Special-Status Animal Species Observed or with Suitable Habitat Present in the Biological Study Area**

| Common Name | Scientific Name | Status Federal/State | General Habitat Description | Habitat Present or Absent/ Species | Rationale |
|---|---|---|---|---|---|
| Big free-tailed bat | *Nyctinomops macrotis* | —/SSC | Mainly inhabits rugged, rocky habitats in arid southwestern North America. Feeds principally on large moths. Roosts primarily in cliffs/rock crevices, and rarely in buildings, caves, and tree cavities. Not known to use bridges for roosting. | Present | Although roosting is unlikely within the BSA, foraging habitat is present along the LA River, and this species is known to forage over large distances from a roost site. Recorded from Long Beach and Los Angeles. |
| California sea lion | *Zalophus californianus* | MMPA/— | Occasionally found in the lower reaches of the LA River, primarily south of Ocean Boulevard. Require haul out sites (e.g., low-lying docks, piers, platforms, or sandy shoreline beaches) for mating and giving birth, predator avoidance, thermal regulation, social activity, parasite reduction, and rest. | Present | This species may occur near BSA but would not stay in BSA due to lack of haul out sites and no suitable habitat upstream. |

Source: Caltrans 2019j

Notes:
BSA=biological study area; MMPA=Marine Mammal Protection Act; LA Basin=Los Angeles Basin; LA River=Los Angeles River; SSC=species of special concern; U.S.=United States

Special-status bridge and crevice dwelling animal species (i.e., bats) with the potential to occur in the BSA include western mastiff bat, pocketed free-tailed bat, and big free-tailed bat. A bat habitat suitability assessment was conducted in 2009 for the I-710 Corridor Project. It was determined at that time that there is a low probability of bats utilizing the Shoemaker Bridge for day and/or night-roosting. Night surveys were not conducted at locations with low potential for bat roosting, including Shoemaker Bridge. However, none of the species listed above were observed in the I-710 Corridor Project limits during the 2009 surveys. No signs of bats were observed under Shoemaker Bridge during follow-up reconnaissance surveys conducted in July 2016.

## 2.19.3 Environmental Consequences

### 2.19.3.1 Temporary Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not result in the construction of any of the proposed improvements to the Shoemaker Bridge and, therefore, would not result in temporary impacts on special-status animal species.

#### Alternatives 2 and 3 (Design Options A and B)

The proposed Project under Alternatives 2 and 3 (Design Options A and B) is not expected to result in direct temporary impacts on California sea lions. No haul-out sites for California sea lions would be impacted. However, the Project may have indirect and temporary impacts through incidental harassment through the temporary loss of potential foraging habitat during construction activities. As discussed in Section 2.16, Natural Communities, the proposed Project would result in direct temporary impacts on estuarine subtidal (deepwater aquatic) habitat through the construction of the new bridge and demolition of the old bridge. Areas of temporary impacts would only be impacted during construction. In addition to Project features identified in Section 2.16, Natural Communities, Avoidance, Minimization, and Mitigation Measures NC-1 through NC-5, presented in Section 2.16, would avoid and/or minimize potential indirect temporary impacts on California sea lions; thus, impacts would not be considered adverse.

Construction activities within the LA River are not expected to result in direct temporary impacts on riparian/aquatic special-status species. However, the Project is expected to have indirect and temporary impacts on riparian/aquatic special- status species through the temporary loss of potential foraging habitat. However, with implementation of Avoidance Measure AN-1, described below, the inclusion of Project features identified in Section 2.16, Natural Communities, and the implementation of Avoidance, Minimization, and Mitigation Measures NC-1 through NC-5, potential temporary and indirect impacts on riparian/aquatic special-status species would not be adverse.

Although low, there is a small potential for bat mortality to occur during bat exclusion efforts and construction. Additionally, the Project may have indirect and temporary impacts on these special-status species through the temporary loss of potential day and night roosting habitat. However, with implementation of Avoidance and Minimization Measures AN-1 through AN-3, temporary impacts on bats would not be adverse.

Vegetation clearing and grading has the potential to disturb vegetation that may provide nesting habitat for migratory birds. Compliance with the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code, as specified in as a Project Feature PF-86, identified below, would be required to avoid potential temporary impacts on migratory birds during construction.

With the inclusion of Project Features PF-80 through PF-84, as identified in Section 2.16, Natural Communities, and Project Features PF-85 and PF-86 identified below, no temporary direct or indirect adverse impacts on nesting birds would occur during construction:

**PF-85** The City's Resident Engineer will ensure that any native or exotic vegetation removal or tree-trimming activities will occur outside of the nesting bird season (February 15 through September 1). In the event that vegetation clearing is necessary during the nesting season, a qualified biologist will conduct a preconstruction survey to identify the locations of nests. Should nesting birds be found, an exclusionary buffer will be established by the biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction or clearing will not be conducted within this zone until the biologist determines that the young have fledged or the nest is no longer active. Nesting bird protection measures will be implemented in accordance with Caltrans SSP 14-6.03B Bird Protection.

**PF-86** The City's Resident Engineer will ensure that all work on existing bridges with potential habitat conducted between February 15 and September 1 will include a survey for bird nests. If bird nests are found, all inactive bird nests will be removed prior to February 1 of that year, before commencement of the nesting season, under guidance and observation of a qualified biologist. Removal of nests that are under construction must be repeated as frequently as necessary to prevent nest completion or until a nest exclusion device is installed (such as netting or a similar mechanism that keeps birds from building nests). If a nest has been completed and eggs have been laid, an exclusionary buffer will be established by a qualified biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction or clearing will not be conducted within this zone until the biologist determines that the young have fledged or the nest is no longer active. Nest removal and exclusion device installation will be monitored by a qualified biologist. Such exclusion efforts must be continued to keep the structures free of swallows until September or completion of construction. All nest exclusion techniques will be coordinated among the City, a Caltrans District Biologist, and the resource agencies. Nesting bird protection measures will be implemented in accordance with Caltrans SSP 14-6.03B Bird Protection.

### 2.19.3.2 Permanent Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not result in the construction of any of the proposed improvements to the Shoemaker Bridge and, therefore, would not result in permanent impacts on special-status animal species.

#### Alternatives 2 and 3 (Design Options A and B)

The proposed Project under Alternatives 2 and 3 (Design Options A and B) is not expected to result in direct permanent impacts on California sea lions. No haul-out sites for California sea lions would be impacted. As discussed in Section 2.16, Natural Communities, Alternatives 2 and 3 would both result in a permanent net loss of 0.47 or 0.44 acre of deepwater aquatic habitat under Design Options A and B, respectively.

Alternatives 2 and 3 are not expected to result in direct permanent impacts on riparian/aquatic special-status species.

Alternatives 2 and 3 are not expected to result in direct permanent impacts on special-status bridge and crevice dwelling animal species. There is a low probability of bats utilizing the Shoemaker Bridge for day and/or night-roosting. The potential for bats to utilize the new bridge for roosting would be similar to the existing bridge.

New bridge designs could result in occasional bird strikes, including migratory birds. Measures TE-1 through TE-6, found in Section 2.20, Threatened and Endangered Species will reduce potential impacts to migratory birds during bridge construction. Once final bridge design is selected, Measures TE-7 and TE-8, found in Section 2.20, Threatened and Endangered Species, will incorporate design features into the final bridge design so that no noticeable changes in bird strike frequency of migratory birds are expected to occur.

## 2.19.4 Avoidance, Minimization, and/or Mitigation Measures

The implementation of Avoidance, Minimization, and/or Mitigation Measures NC-1 through NC-5, presented in Section 2.16, Natural Communities, will reduce temporary impacts on California sea lions and riparian/aquatic special-status species. In addition, the following measures will be implemented by the City to avoid and/or minimize temporary impacts on bats:

**AN-1** The City of Long Beach's (City) Resident Engineer will ensure that a qualified bat biologist will survey the Shoemaker Bridge Replacement Project (Project) area in the month of June, which falls prior to the demolition of the existing Shoemaker Bridge, to assess the potential for the bridge's use as a maternity roost since maternity roosts are generally formed in late spring. The qualified bat biologist will also perform preconstruction surveys of the bridge and trees that will be impacted by the Project, since bat roosts can change seasonally. The surveys will include a combination of structure and tree inspections, sampling, exit counts, and acoustic surveys. Should the preconstruction surveys find bats roosting in the Project site, a bat protection and relocation plan will be prepared and submitted to California Department of Fish and Wildlife (CDFW) for approval prior to commencement of Project activities.

**AN-2** To avoid direct mortality to bats roosting under the existing Shoemaker Bridge, the City of Long Beach's (City) Resident Engineer will ensure that if bats are found during subsequent surveys, temporary bat exclusion devices will be installed under the supervision of a qualified bat biologist prior to the initiation of demolition activities. Exclusion should be conducted during the fall (September or October) to avoid trapping flightless young inside during the summer months or hibernating individuals during the winter. Such exclusion efforts must be continued to keep the structures free of bats until the completion of the demolition. All bat exclusion techniques will be coordinated among the City, a California Department of Transportation (Caltrans) District Biologist, and the resource agencies. Any placement of exclusions outside the months of September and October will be coordinated between the District Biologist, the City, and resource agencies. Should the preconstruction bat survey determine that trees slated for removal are suitable for bat roosting, a qualified bat biologist will monitor the tree removal activities. To minimize the potential for direct impacts to tree-roosting bats, trees that must be removed will be pushed down using heavy machinery rather than felling the tree with a chainsaw, where feasible, under the supervision of a qualified bat biologist. To ensure the optimum warning for any roosting bats that may still be present, the tree will be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The

tree will then be pushed to the ground slowly. The bat specialist will determine the optimal time to disturb occupied bat habitat to maximize bats escaping during low light levels. Downed trees will remain in place until they are inspected by a bat specialist. Trees that are known to be bat roosts will not be sawn-up or mulched immediately. A period of at least 24 hours (preferably 48 hours) will elapse prior to such operations to allow bats to escape.

**AN-3** If bats are found to be present during construction, the City of Long Beach's (City) Resident Engineer or designated contractor will ensure that all work conducted on bridges or around trees will take place during the day to the best extent feasible. If this is not feasible, impacts will be minimized by directing lighting and noise away from potential night roosting areas as much as possible.

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# 2.20 Threatened and Endangered Species

## 2.20.1 Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA) (and the Department, as assigned), are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take Statement or a Letter of Concurrence. Section 3 of FESA defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts on rare, endangered, and threatened species and to develop appropriate planning to offset Project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA. Section 2080 of the California Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development Projects; for these actions an incidental take permit is issued by CDFW. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of FESA, the CDFW may also authorize impacts on CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

## 2.20.2 Affected Environment

This section is based on the NES (Caltrans 2019c) and the *Biological Assessment* (Caltrans 2019j) prepared for the Project.

A literature review and records search were conducted in 2009 and updated in March 2018 and January 2019 to identify the existence or potential occurrence of threatened and endangered plant and animal species or their designated critical habitat in or within the vicinity of the BSA.

An official USFWS species list was generated using the online IPaC System on March 26, 2018, and updated on June 24, 2020. Additionally, consulting biologists had an informal phone discussion with Sally Brown of the USFWS Carlsbad office on August 29, 2019, regarding bird safe bridge design, inclusion of western snowy plover in the Project documents, and appropriate mitigation measures for listed bird species with the potential to occur in the Project area.

An official Endangered Species Act list was obtained on October 5, 2018, and updated on September 10, 2019, using NMFS' California Species List Tool. Additionally, consulting biologists had an informal phone discussion with Monica DeAngeles of NMFS on December 15, 2009, regarding potential impacts on marine mammals.

Both USFWS and NMFS official species lists are included in Appendix H, USFWS and NMFS Regional Species Lists, of this EIR/EA. NMFS requested additional information regarding Southern California steelhead and marine mammals. A memorandum addressing these species was prepared and submitted to USFWS and NMFS in October 2018 (Appendix F of this EIR/EA).

Based on the literature review, it was determined that a total of 33 special-status plant species and 31 special-status animal species have the potential to occur on or within the vicinity of the Shoemaker BSA. A total of 9 of the 33 special-status plant species and 12 of the 31 special status animal species are federally and/or state-listed endangered, threatened species, and/or CFP species and are discussed in this section. All other special-status plant and animal species are discussed previously in Sections 2.18, Plant Species, or 2.19, Animal Species. There is no designated critical habitat in the BSA. The nearest designated critical habitat is for western snowy plover (*Charadrius nivosus nivosus*), located approximately 9.5 miles to the southwest.

In addition to a literature review, focused surveys for special-status plant species within the I-710 Corridor BSA were conducted on August 11, 12, and 28; September 4, 8, 9, 10, and 23; and November 11, 2009. Follow-up reconnaissance-level surveys of the BSA for the proposed Project were conducted on January 21, 2011, and July 9, 2013. Because of the passage of time since the 2013 reconnaissance-level survey and the updated Project footprint of the proposed Project, an additional follow-up reconnaissance-level field survey was conducted on July 19, 2016, using the current Project BSA. The surveys were conducted to characterize the general biological resources and to ascertain the presence or absence of threatened or endangered animal species and the likelihood of their occurrence in the BSA.

No threatened or endangered plant species were observed or otherwise detected in the BSA at the time of the site visit. The eight threatened and/or endangered plant species identified during the literature review as potentially occurring in or within the vicinity of the BSA are considered absent from the BSA because suitable habitat for these species is not located within the BSA, and these species were not detected during the surveys. Therefore, threatened or endangered plant species are not discussed further in this section.

No federally listed endangered or threatened wildlife species were observed within the Shoemaker BSA during surveys. However, the western snowy plover (*Charadrius alexandrinus nivosus*) and California least tern (*Sterna antillarum browni*), as discussed in detail below, may forage along the LA River within the Project vicinity. Southern California steelhead (*Oncorhynchus mykiss irideus*) are currently absent from the BSA, but the BSA is located within an area identified in the National Marine Fisheries Service 2012 Southern California Steelhead Recovery Plan. All other threatened, endangered, and/or CFP animal species are considered absent from the BSA and are, therefore, not discussed further.

### 2.20.2.1 Western Snowy Plover

The Pacific Coast distinct population segment (DPS) of western snowy plover was listed as federally threatened in 1993. The western snowy plover is a small shorebird that primarily inhabits sandy beaches, dry salt flats, and dune habitats in coastal areas. The species forages upon terrestrial and aquatic invertebrates and nests in natural or scraped depressions on dry ground. The typical breeding season for the species is March through September. The Pacific Coast DPS of western snowy plover breeds along the Pacific coast of the U.S. and winters along the west coast from Southern California through Baja Mexico (USFWS 2007). The BSA does not contain designated critical habitat for western snowy plover; the nearest critical habitat areas for the species are located at Bolsa Chica Reserve and Hermosa State Beach (USFWS 2012).

Western snowy plover were not observed within the BSA during surveys conducted between 2009 and 2016. However, these surveys were not conducted with the intent of determining presence/absence of this species in the BSA. Nesting habitat for western snowy plover does not occur within the BSA, and the nearest known nesting site is approximately 12 miles south of the BSA at Bolsa Chica Ecological Reserve. Due to the distance of the BSA from this nearest nesting location, foraging western snowy plovers would be rare in the BSA. However, this species has been occasionally observed foraging in the LA River north of the BSA near the Willow Street Bridge, most recently on August 24, 2013, and near the Alondra Boulevard Bridge on August 26, 2018 (eBird 2019). Almost all of the recorded observations of western snowy plover in the southern reach of the LA River have occurred in the month of August.

### 2.20.2.2 California Least Tern

The California least tern is a federally endangered colonial breeder that nests along the coast from San Francisco Bay to Baja California (USFWS 1985). California least terns nest colonially at Terminal Island in the Port of Los Angeles. Foraging birds regularly visit the LA River mouth below the Queensway Bridge and occasionally upstream. Sightings noted of foraging California least terns upstream at Willow Street, I-405 and Dominguez Gap wetland restoration area (LSA 2013).

California least tern were not observed within the BSA during surveys conducted between 2009 and 2016. However, these surveys were not conducted with the intent of determining presence/absence of this species in the BSA. Nesting habitat for California least tern does not occur within the BSA, and the nearest known nesting colony is 4.5 miles away at Pier 400 (Terminal Island), Los Angeles Harbor. The Deepwater Aquatic habitat in the LA River is the only potential foraging habitat within the BSA. Least terns may forage in the BSA from April to September, with the highest potential during fall migration (mid-August through late September). Because of the distance of the BSA from the nearest nesting location at the Port of Los Angeles, foraging California least terns would be rare in the BSA. However, this species has been observed foraging in the LA River mouth below the Queensway Bridge and occasionally upstream.

### 2.20.2.3 Southern Steelhead

Southern California steelhead (*Oncorhynchus mykiss irideus*) is a federally endangered species that was once abundant in California coastal and central valley drainages. However, population numbers have declined significantly in recent years, and this species no longer occurs in much of its historic habitat, including the LA River (Titus Et al. 2010; Swift et al. 1993). The BSA is located within the Mojave Rim Biogeographic Population Group as identified in the National Marine Fisheries Service 2012 Southern California Steelhead Recovery Plan (NMFS 2012). Southern California steelhead is

not known to occur nor is it expected to occur in the LA River at this time since they have not been documented in the vicinity in recent history and are considered extirpated from the LA River.

### 2.20.2.4 Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires the NOAA Fisheries to identify, conserve, and enhance EFH for those species regulated under a federal fisheries management plan. EFH has been defined for the purposes of the Magnuson-Stevens Act as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." The BSA supports suitable estuarine habitat within the LA River to support one CPS: northern anchovy (*Engraulis mordax*) foraging and nursery. The BSA does not provide spawning habitat or shelter habitat for this species. Northern anchovy are documented to occur in the LA River; however, the most recent available documented occurrence was a result of birds dropping the fish to surveyors, not as a result of catch from the LA River.

A focused survey for species protected through the establishment of EFH within the BSA was not conducted. The potential for presence of northern anchovy was based on the habitat requirements of these species as provided in the USACE EFH Programmatic Consultation (USACE 2005) and a discussion of estuarine resources within the BSA included in the Draft Estuary Analysis for the I-710 Corridor Project between Ocean Boulevard and State Route 60 Interchange and within the Shoemaker Bridge, LA River Estuary, Marine Biological Impact Assessment (CRM 2017). While some northern anchovy are expected in the BSA, the majority of their population is expected to occur in Queensway and San Pedro Bays (NMFS 2012). The LA River flows into Queensway Bay approximately 1-mile downstream. Queensway and San Pedro Bays provide EFH for a number of species listed as CPS and Pacific Coast groundfish species.

## 2.20.3 Environmental Consequences

### 2.20.3.1 Temporary Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not result in the replacement of the Shoemaker Bridge and, therefore, would not result in temporary impacts on threatened and/or endangered species.

#### Alternatives 2 and 3 (Design Options A and B)

Alternatives 2 and 3 (Design Options A and B) are not expected to result in direct temporary impacts on western snowy plovers and California least terns because of the lack of suitable nesting habitat. Foraging western snowy plovers and California least terns are expected to move out of the BSA during construction. This may indirectly and temporarily limit foraging habitat for western snowy plovers and California least terns during construction. With the implementation of PF-18, included in Section 2.9 Water Quality and Stormwater Runoff, PF-80 through PF-83, included in Section 2.16, Natural Communities, and Measures TE-1 through TE-6, temporary impacts are not anticipated to occur to western snowy plovers and California least terns during construction under Alternatives 2 and 3 (Design Options A and B).

As previously identified, the Southern California steelhead is not expected to occur in the BSA during Project construction. Therefore, Alternatives 2 and 3 would not result in any direct temporary impacts on southern California steelhead since this species does not occur in the LA River at this time.

However, as previously discussed, the deepwater aquatic habitat within the BSA is designated as EFH for the northern anchovy. Alternatives 2 and 3 (Design Options A and B) are not expected to directly affect northern anchovy because of the low probability of their occurrence in the BSA. Although northern anchovy has limited potential to occur within the BSA and no other species listed under the Pacific Coast Groundfish Fisheries Management Plan are expected within the BSA, the LA River flows into Queensway Bay within 1 mile of the southern limits of the BSA, which provides EFH for a number of species listed as CPS and Pacific Coast groundfish species. As previously discussed in Section 2.16, Natural Communities, the proposed Project would result in direct temporary impacts on deepwater aquatic habitat through the demolition of the old bridge construction and placement of support structures for the proposed new bridge. Areas of temporary impacts would only occur during construction. Alternative 2 Option A and Alternative 3 Option A result in up to 7.53 acres of temporary impacts on deepwater aquatic habitat. Alternative 2 (Design Option B) and Alternative 3 (Design Option B) results in up to 7.56 acres of temporary impacts on deepwater aquatic habitat.

In addition, construction effects on fish may include localized disturbance or displacement of fish from noise, suspended sediment, and turbidity generated during in-water construction activities. The potential also exists for injury or mortality of juvenile fish that may not be able to readily move away from channel or nearshore areas directly affected by construction activities. Restricting in-water activities to the period May 1 through October 31 and implementing the minimization measures would minimize the potential for adverse effects.

Effects associated with sedimentation and turbidity, as well as hazardous materials and contaminants from construction activities, would be temporary. Potential adverse effects of the increase in fine sediment and turbidity on EFH would be avoided or minimized through implementation of PF-6 through PF-38, included in Section 2.9, Water Quality and Stormwater Runoff. The potential environmental effects of the Project to EFH would be limited to temporary, localized, and minor increases in turbidity and suspended sediment.

### 2.20.3.2 Permanent Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not result in the replacement of the Shoemaker Bridge and, therefore, would not result in adverse permanent impacts on threatened and/or endangered species.

#### Alternatives 2 and 3 (Design Options A and B)

Alternatives 2 and 3 (Design Options A and B) are not expected to result in direct permanent impacts on western snowy plovers and California least terns because of the lack of suitable nesting habitat. Foraging habitat for least terns is found within and along the LA River. To ensure bird safety during construction of the proposed Shoemaker Bridge under Alternatives 2 and 3 (Design Options A and B), Avoidance Measures TE-7 and TE-8 would be implemented to minimize impacts on bird species, including western snowy plover and least terns, that fly up and down the LA River.

Alternatives 2 and 3 (Design Options A and B) are not expected to result in direct permanent impacts on southern California steelhead because this species does not occur in the LA River at this time. Long-term effects on potential southern California steelhead habitat would be minimal and include the loss of up to 0.47 acre of potential habitat as a result of new bridge pier construction if this species were to be reintroduced to the LA River in the future. This is a small amount of habitat in relation to the overall size of the LA River. The ability for southern California steelhead to migrate upstream and downstream would be maintained post-construction. The Project would result in minimal loss of

potential future southern California steelhead habitat, but would not restrict future migration of this species through the Project area following Project completion. Since the Project would not result in direct impacts on this species and would not affect its potential for long-term recovery according to the 2012 Southern California Steelhead Recovery Plan, the Project would have no substantial adverse effect on the southern California steelhead.

As previously discussed, the deepwater aquatic habitat in the BSA is designated as EFH for the northern anchovy, which is a CPS. Although northern anchovy has limited potential to occur within the BSA and no other species listed under the Pacific Coast Groundfish Fisheries Management Plan are expected within the BSA, the LA River flows into Queensway Bay within 1 mile of the southern limits of the BSA, which provides EFH for a number of species listed as CPS and Pacific Coast groundfish species. As discussed earlier in Section 2.16, Natural Communities, Alternatives 2 and 3 (Design Options A and B) would both result in a permanent net loss of 0.47 or 0.44 acre of EFH that is suitable northern anchovy foraging and nursery habitat under Design Options A and B, respectively. Based on the USFWS National Wetland Inventory, this would equate to approximately 0.001-percent of available coastal deepwater estuarine habitat in Southern California and would not adversely affect EFH for the northern anchovy. Therefore, Caltrans has determined that the proposed Project will not adversely affect EFH for the northern anchovy.

As discussed in Project Feature PF-87**,** in accordance with the Magnuson–Stevens Fishery Conservation and Management Act, Caltrans would consult with NOAA Fisheries. After implementation of SSP 14-6.03, Species Protection, and SSP 14-6.03C, Fish Protection, and Measures NC-1, NC-2, and NC-3, no substantial adverse impacts on EFH for northern anchovy are anticipated.

**PF-87** Caltrans will consult with the NOAA Fisheries for impacts on EFH for northern anchovy. The protection of all life stages of anadromous fish in streams will be done in accordance with Caltrans SSP 14-6.03 Species Protection and SSP 14-6.03C Fish Protection.

### 2.20.3.3 United States Fish and Wildlife Service and National Marine Fisheries Service Endangered Species Act Determinations

Table 2.20-1 shows the determination of the federally listed species that have the potential to occur in the Shoemaker BSA. Based on the findings of the focused surveys and technical studies conducted to date, all of the federally listed species resulted in a “no effect” finding, with the exception of western snowy plover and California least tern.

**Table 2.20-1. Determination of Federally Listed Species Potentially Occurring within the Disturbance Limits**

| Threatened, Endangered, or Proposed Species | Status | Presence of Suitable Habitat? Species Present during 2009-2016 Surveys? | Determination |
|---|---|---|---|
| ***USFWS Species*** | | | |
| ***Plants*** | | | |
| Ventura marsh milk vetch *Astragalus pycnostachyus var. lanosissimus* | FE | No Not Found | No effect |
| Coastal dunes milk- vetch *Astragalus tener var. titi* | FE | No Not Found | No effect |

## Table 2.20-1. Determination of Federally Listed Species Potentially Occurring within the Disturbance Limits

| Threatened, Endangered, or Proposed Species | Status | Presence of Suitable Habitat? Species Present during 2009-2016 Surveys? | Determination |
|---|---|---|---|
| Salt marsh bird's-beak<br>*Chloropyron maritimum ssp. maritimum* | FE | No<br>Not Found | No effect |
| San Diego button-celery<br>*Eryngium aristulatum var. parishii* | FE | No<br>Not Found | No effect |
| Gambel's water cress<br>*Nasturtium gambelii* | FE | No<br>Not Found | No effect |
| Spreading navarretia<br>*Navarretia fossalis* | FT | No<br>Not Found | No effect |
| California Orcutt grass<br>*Orcuttia californica* | FE | No<br>Not Found | No effect |
| Lyon's pentachaeta<br>*Pentachaeta lyonii* | FE | No<br>Not Found | No effect |
| Brand's star phacelia<br>*Phacelia stellaris* | FC | No<br>Not Found | No effect |
| ***Wildlife*** | | | |
| Palos Verdes blue butterfly<br>*Glaucopsyche lygdamus palosverdesensis* | FE | No<br>Not Found | No effect |
| Riverside fairy shrimp<br>*Streptocephalus woottoni* | FE | No<br>Not Found | No effect |
| Mohave Tui chub<br>*Gila bicolor* ssp. *mohavensis* | FE | No<br>Not Found | No effect |
| Green sea turtle<br>*Chelonia mydas* | FT | No<br>Not Found | No effect |
| Western snowy plover (coastal population)<br>*Charadrius alexandrinus nivosus* | FT | Yes<br>Not Found | May affect, not likely to adversely affect |
| Western yellow-billed cuckoo<br>*Coccyzus americanus occidentalis* | FT | No<br>Not Found | No effect |
| Southwestern willow flycatcher<br>*Empidonax traillii extimus* | FE | No<br>Not Found | No effect |
| Coastal California gnatcatcher<br>*Polioptila californica californica* | FT | No<br>Not Found | No effect |
| Ridgway's rail<br>*Rallus obsoletus levipes* | FE | No<br>Not Found | No effect |
| California least tern<br>*Sternula antillarum browni* | FE | Yes<br>Not Found | May affect, not likely to adversely affect |
| Least Bell's vireo<br>*Vireo bellii pusillus* | FE | No<br>Not Found | No effect. |
| Pacific pocket mouse<br>*Perognathus longimembris pacificus* | FE | No<br>Not Found | No effect |
| ***National Marine Fisheries Service Species*** | | | |
| ***Anadromous Fish*** | | | |
| Green sturgeon<br>*Acipenser medirostris* | FT | No<br>Not Found | No effect |

**Table 2.20-1. Determination of Federally Listed Species Potentially Occurring within the Disturbance Limits**

| Threatened, Endangered, or Proposed Species | Status | Presence of Suitable Habitat? Species Present during 2009-2016 Surveys? | Determination |
|---|---|---|---|
| Southern California steelhead *Oncoryhnchus mykiss* | FE | Yes Not Found | No effect |
| ***Marine Invertebrates*** | | | |
| Range black abalone *Haliotis cracherodii* | FE | No Not Found | No effect |
| Range white abalone *Haliotis sorenseni* | FE | No Not Found | No effect |
| ***Sea Turtles*** | | | |
| East Pacific green sea turtle *Chelonia mydas* | FT | No Not Found | No effect |
| Olive Ridley sea turtle *Lepidochelys olivacea* | FT/FE | No Not Found | No effect |
| Leatherback sea turtle *Dermochelys coriacea* | FE | No Not Found | No effect |
| North Pacific loggerhead sea turtle *Caretta caretta* | FE | No Not Found | No effect |
| ***Whales*** | | | |
| Blue Whale *Balaenoptera musculus* | FE | No Not Found | No effect |
| Fin Whale *Balaenoptera physalus* | FE | No Not Found | No effect |
| Humpback Whale *Megaptera novaeangliae* | FE | No Not Found | No effect |
| Southern Resident Killer Whale *Orcinus orca* | FE | No Not Found | No effect |
| North Pacific Right Whale *Eubalaena japonica* | FE | No Not Found | No effect |
| Sei Whale *Balaenoptera borealis* | FE | No Not Found | No effect |
| Sperm Whale *Physeter macrocephalus* | FE | No Not Found | No effect |
| ***Pinnipeds*** | | | |
| Guadalupe fur seal *Arctocephalus townsendi* | FT | No Not Found | No effect |

Notes:
FC=Federal Candidate; FE=Federally Listed as Endangered; FT=Federally Listed as Threatened; USFWS=United States Fish and Wildlife Service

### 2.20.3.4 Agency Consultation

An official USFWS species list was generated using the online IPaC System on March 26, 2018, and updated on August 9, 2019. Additionally, consulting biologists had an informal phone discussion with Sally Brown of the USFWS Carlsbad office on August 29, 2019, regarding bird safe bridge design, inclusion of western snowy plover in the Project documents, and appropriate mitigation measures for listed bird species with the potential to occur in the Project area.

An official Endangered Species Act list was obtained on October 5, 2018, and updated on September 10, 2019, using NMFS' California Species List Tool. Additionally, consulting biologists had an informal phone discussion with Monica DeAngeles of NMFS on December 15, 2009, regarding potential impacts on marine mammals.

Both USFWS and NMFS official species lists are included in Appendix H, USFWS Regional Species List, of this EIR/EA. NMFS requested additional information regarding Southern California steelhead and marine mammals. A memorandum addressing these species was prepared and submitted to USFWS and NMFS in October 2018.

Based on the findings of the focused surveys and technical studies conducted to date, the Project is anticipated to result in a "may affect, but not likely to adversely affect" determination with respect to western snowy plover and California least tern. As a result, informal Section 7 consultation with USFWS is required.

Since southern California steelhead is not known to occur in the LA River at this time and is not expected to occur in the BSA during Project construction, the Project would result in a minimal loss of potential future southern California steelhead habitat. The construction of bridge piers would not restrict future migration of this species through the Project area following Project completion, nor conflict with any proposed Recovery Actions identified for the LA River in the 2012 Southern California Steelhead Recovery Plan. The Project is anticipated to result in a "no effect" determination on southern California steelhead and its habitat.

Once a preferred alternative has been identified, consultation with the NOAA Fisheries regarding impacts on EFH would be required because the Project is anticipated to result in a "may affect but not likely to adversely affect" determination regarding EFH.

## 2.20.4 Avoidance, Minimization, and/or Mitigation Measures

Measures for impacts on deepwater habitat are discussed previously in Section 2.16, Natural Communities. The following avoidance measures would be implemented by the City to avoid and/or minimize temporary and permanent impacts on birds as a result of strikes and predator attraction:

**TE-1** During construction, the City of Long Beach (City) will ensure that a biologist approved by the Carlsbad Fish and Wildlife Office (CFWO) (Project Biologist) will be on site weekly during Project construction within 200 feet of western snowy plover and California least tern habitat in order to ensure compliance with all conservation measures. The Project Biologist will be familiar with the habitats, plants, and wildlife in the Project area to ensure that issues relating to biological resources are appropriately and lawfully managed. The biologist's name and contact information will be submitted to the CFWO prior to initiating project construction. The contract of the biologist will allow direct communication with the CFWO at any time regarding the proposed Project.

**TE-2** After the completion of construction, the City of Long Beach (City) will ensure that the Project Biologist will submit a final report to the Carlsbad Fish and Wildlife Office (CFWO) within 120 days of Project completion, including photographs of impact areas and adjacent habitat, documentation that authorized impacts were not exceeded, and documentation that general compliance with all conservation measures was achieved. The report will specify numbers and locations of listed species (if observed); observed listed species behavior (especially in relation to project activities); and remedial measures employed to

avoid and minimize impacts to listed species. Raw field notes will be provided upon request by the CFWO.

**TE-3** If nighttime construction is necessary, the City of Long Beach (City) will ensure that all Project lighting (e.g., staging areas, equipment storage sites, roadway) will be selectively placed and directed toward the construction site and away from western snowy plover and California least tern habitat. Lighting will be of the lowest illumination necessary for safety, and light glare shields will be used to reduce the extent of illumination into western snowy plover and California least tern habitat.

**TE-4** During construction, the City of Long Beach (City) will ensure that permanent Project lighting will be of the lowest illumination necessary for safety, and such lighting will be directed toward the bridge and paved roadway and away from sensitive habitats. Light glare shields will be used to reduce the extent of illumination into sensitive habitats. The California Department of Transportation (Caltrans) will review the permanent lighting plans for the Project and then submit them to the Carlsbad Fish and Wildlife Office (CFWO).

**TE-5** During construction, the City of Long Beach (City) will ensure that all equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities will be restricted to designated areas located outside of jurisdictional wetlands or waters. The equipment will be located such that runoff from the designated areas will not enter western snowy plover and California least tern habitat and will be shown on construction plans.

**TE-6** During construction, the City of Long Beach (City) will ensure that the Project site will be kept as clear of debris as possible. All food-related trash items will be enclosed in sealed containers and regularly removed from the site. All spoils and material disposal will be disposed of properly. Disposal or temporary placement of excess fill, brush, or other debris will not be allowed in waters of the United States (U.S.) or their banks. All areas of temporary impact will be returned to original grade, and temporary construction fill will be removed from the waterway following Project construction.

**TE-7** During final design, the City of Long Beach (City) will consider the incorporation of bridge poles or fencing into the design of the new bridge, as feasible, to avoid and minimize vehicle caused bird mortality, as well as in the context of other permitting considerations, such as visual impacts. Bridge poles or fencing that may be incorporated will be designed to be visible to birds and prevent perching by raptors, and will be of sufficient height to guide birds over vehicle traffic.

**TE-8** During final design, the City of Long Beach (City) will ensure that the Project landscape design plan will not include the planting of tall trees adjacent to the Los Angeles (LA) River, as raptors may use tall trees for perching and nesting. Such action will discourage raptor species from preying upon foraging western snowy plovers and California least terns.

# 2.21 Invasive Species

## 2.21.1 Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order (EO) 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration (FHWA) guidance issued August 10, 1999 directs the use of the State's invasive species list, maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

## 2.21.2 Affected Environment

This section is based on the NES (Caltrans 2019c) prepared for the Project.

Exotic plant species exist within the nonnative plant communities throughout the BSA, within patches of native plant communities, and in areas that have been disturbed by human uses. Exotic species are typically more numerous adjacent to roads and developed areas and frequently border the ornamental landscape. In the past, these areas likely supported grasslands, oak woodland, coastal sage scrub, chaparral, and riparian habitats. Consequently, scattered plant species associated with these plant communities are often found in these areas.

The California Invasive Plant Council (Cal-IPC) Invasive Plant Inventory (Cal-IPC 2006) is based on information submitted by members, land managers, botanists, and researchers throughout the state, as well as published sources. The inventory highlights nonnative plants that are serious problems in wildlands (natural areas that support native ecosystems, including national, state, and local parks; ecological reserves; wildlife areas; National Forests; Bureau of Land Management lands; etc.). The inventory categorizes plants as High, Moderate, or Limited based on the species' negative ecological impact in California. Plants categorized as High have severe ecological impacts. Plants categorized as Moderate have substantial and apparent, but not severe, ecological impacts. Plants categorized as Limited are invasive, but their ecological impacts are minor on a statewide level.

Twelve exotic plant species occurring on the California Invasive Plant Inventory were identified within the BSA: one with an overall High rating, five with a Moderate rating, and six with a Limited rating. Invasive species that have severe ecological impacts are given a High rating. Species with a High or Moderate rating identified within the BSA are lesser wart-cress (*Lepidium didymium*, High), Bermuda buttercup (*Oxalis pes-caprae*, Moderate), slender wild oat (*Avena barbata*, Moderate), wild oat (*Avena fatua*, Moderate), ripgut brome (*Bromus diandrus*, Moderate), and Bermuda grass (*Cynodon dactylon*, Moderate).

The invasive algae *Caulerpa taxifolia* (Caulerpa) has the potential to cause ecosystem-level impacts on California's bays and near-shore systems because of its extreme ability to outcompete other algae and seagrassess. Caulerpa grows as a dense, smothering blanket, covering and killing all native aquatic vegetation in its path when introduced in a nonnative marine habitat. Fish, invertebrates, marine mammals, and sea birds dependent on native marine vegetation are displaced or die off from the areas where they once thrived. Caulerpa is a tropical-subtropical species used in aquariums. It is believed to have been introduced into Southern California in 2000 (Agua Hedionda Lagoon and

Huntington Harbor) by way of individuals dumping their aquarium waters into storm drains or directly into the lagoons (Merkel & Associates, Inc. 2006).

Although outbreaks have been contained and Caulerpa has not been reported from San Pedro Bay or the Los Angeles/Long Beach Harbor complex, site-specific surveys have not been conducted in the BSA.

## 2.21.3 Environmental Consequences

### 2.21.3.1 Temporary Impacts

#### Alternative 1 (No Build)

Under Alternative 1 (No Build), there would be no construction and no temporary Project-related changes to the extent of invasive species that occur within the BSA.

#### Alternatives 2 and 3 (Design Options A and B)

Invasive species impacts are considered permanent impacts when the introduction of invasive species into previously undisturbed areas would cause invasive species to spread and cause permanent impacts on the habitat. Therefore, there are no temporary impacts as a result of invasive species under Alternatives 2 and 3 (Design Options A and B). Permanent impacts associated with invasive species as a result of construction are described below.

### 2.21.3.2 Permanent Impacts

#### Alternative 1 (No Build)

Alternative 1 (No Build) would not result in the construction of any of the proposed improvements to the Shoemaker Bridge and, therefore, would not result in any permanent impacts associated with invasive species.

#### Alternatives 2 and 3 (Design Options A and B)

Under Alternatives 2 and 3 (Design Options A and B), there would be the potential to spread invasive species by the entering and exiting of construction equipment contaminated by invasive species, disturbances to soil surfaces, and improper removal and disposal of invasive species that result in the seed being spread along the highway. Invasive species also have the potential to be included in seed mixtures and mulch. The requirement for landscaping that will follow the provisions set forth in EO 13112, which mandates preventing the introduction of and controlling the spread of invasive plant species on highway ROW is reflected in Measure IS-4, and requirements to monitor the Project site immediately prior to and during construction to identify the presence of invasive weeds and recommend measures to avoid their inadvertent spread in association with the Project is reflected in Measure IS-5.With implementation of Minimization Measures IS-1, IS-4, and IS-5, potential Project-related permanent impacts on invasive species would not be substantially adverse.

Although outbreaks of Caulerpa have been contained, and Caulerpa has not been reported from San Pedro Bay or the Los Angeles/Long Beach Harbor complex, site-specific surveys have not been conducted in the BSA. In addition, the RWQCB, through NMFS and CDFW, requires projects with the potential to spread this species through dredging and bottom-disturbing activities conduct preconstruction surveys to determine whether this species is present using standard agency-approved protocols and NMFS/CDFW Certified Field Surveyors. The requirement for preconstruction surveys is reflected in Measure IS-2. If invasive seaweed is found within the BSA, a management plan would be prepared, as detailed in Measure IS-3.

With implementation of Measures IS-2 and IS-3, potential Project-related permanent impacts on invasive seaweed would not be considered substantially adverse.

## 2.21.4 Avoidance, Minimization, and/or Mitigation Measures

The following measures would be implemented by the City to avoid and/or reduce Project impacts associated with invasive species:

**IS-1** In compliance with Executive Order (EO) 13112, the City of Long Beach (City) will ensure that a weed abatement program will be developed to minimize the importation of nonnative plant material during and after construction. Eradication strategies will be employed should an invasion occur. Measures addressing invasive species abatement and eradication will be included in the Shoemaker Bridge Replacement Project (Project) design and contract specifications and will be implemented and enforced by the City's Resident Engineer or designated contractor. The California Department of Transportation (Caltrans) will review the landscaping plans for the Project and then submit them to the U.S. Fish and Wildlife Service (USFWS) Carlsbad Fish and Wildlife Office (CFWO). At a minimum, this program will include the following:

- During construction, the City's Resident Engineer or designated contractor will inspect and clean construction equipment at the beginning and end of each day and prior to transporting equipment from one project location to another.
- During construction, the City's Resident Engineer or designated contractor will ensure that soil and vegetation disturbance will be minimized to the greatest extent feasible.
- During construction, the City's Resident Engineer or designated contractor will ensure that all active portions of the construction site are watered as needed due to dry or windy conditions to prevent excessive amounts of dust and seed dispersal.
- During construction, the City's Resident Engineer or designated contractor will ensure that all material stockpiled is sufficiently watered or covered to prevent excessive amounts of dust and seed dispersal.
- During construction, the City's Resident Engineer or designated contractor will ensure that soil/gravel/rock will be obtained from weed-free sources.
- During construction, the City's Resident Engineer or designated contractor will ensure that only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control.
- After construction, the City's Resident Engineer or designated contractor will ensure that the impacted areas adjacent to native vegetation identified for revegetation will be revegetated with plant species approved by the City and the California Department of Transportation (Caltrans) District Biologist that are native to the vicinity.
- After construction, the City's Resident Engineer or designated contractor will ensure all revegetated areas will avoid the use of species listed in the California

Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory with a High or Moderate rating.

- The City's Resident Engineer or designated contractor will ensure that eradication procedures (e.g., spraying and/or hand weeding) will be outlined should an infestation occur; the use of herbicides will be prohibited within and adjacent to native vegetation, except as specifically authorized and monitored by the City and the Caltrans District Biologist.

**IS-2** The City of Long Beach's (City) Resident Engineer or designated contractor will ensure that preconstruction surveys for the invasive seaweed (*Caulerpa taxifolia*) will be conducted by the National Marine Fisheries Service/California Department of Fish and Wildlife (NMFS/CDFW) Certified Field Surveyors prior to bottom-disturbing activities taking place in the Los Angeles River (LA River) to ensure the biological study area (BSA) is not infested with this nonnative invasive seaweed (*Caulerpa taxifolia*).

**IS-3** If invasive seaweed (*Caulerpa taxifolia*) is found within the biological study area (BSA), the City of Long Beach's (City) Resident Engineer or designated contractor will ensure that a management plan will be prepared according to guidelines in the National Marine Fisheries Service (NMFS) Caulerpa Control Protocol, or other approved protocol, and submitted to the U.S. Fish and Wildlife Service (USFWS) for approval prior to the start of construction. Construction activities will not begin prior to approval of this plan, if needed.

**IS-4** During the final design, the City of Long Beach's (City) Resident Engineer will ensure that the Shoemaker Bridge Replacement Project (Project) landscaping will follow the provisions set forth in Executive Order (EO) 13112, which mandates preventing the introduction of and controlling the spread of invasive plant species on highway right-of-way (ROW). No invasive species listed in the National Invasive Species Management Plan, State of California Noxious Weed List, or California Invasive Plant Council (Cal-IPC) Invasive Plant Inventory list will be used in the landscaping plans for the Project. Caltrans will review the landscaping plans for the project and then submit them to the U.S. Fish and Wildlife Service (USFWS) Carlsbad Fish and Wildlife Office (CFWO).

**IS-5** During construction, the City of Long Beach's (City) Resident Engineer will ensure that the Shoemaker Bridge Replacement Project (Project) Biologist will monitor the project site immediately prior to and during construction to identify the presence of invasive weeds and recommend measures to avoid their inadvertent spread in association with the Project. Such measures may include inspection and cleaning of construction equipment and use of eradication strategies. Special care will be taken during transport, use, and disposal of soils containing invasive weed seeds, and all weedy vegetation removed during construction will be properly disposed of to prevent spread into areas outside of the construction area. All heavy equipment will be washed and cleaned of debris prior to entering the project area to minimize the spread of invasive weeds.

# 2.22 Construction Impacts

This section discusses construction impacts on the resources evaluated in this EIR/EA.

## 2.22.1 Construction Method Approach

This section discusses the construction process and typical construction impacts.

### 2.22.1.1 Construction Process

The Project would be constructed in five stages under two phases. The intent of this staging approach would maintain vehicular access between SR-710 and downtown Long Beach throughout construction activities, to the extent feasible. Although the primary purpose of the Project is to replace the existing Shoemaker Bridge with a new bridge just north of the existing bridge, key components of the local roadway improvements would include the construction of temporary roadways during the relocation of East Shoreline Road within the Project limits and the conversion of 6th and 7th Streets from one-way streets to two-way streets. An overview of the staging approach is described below.

- **Phase 1 (Stages 1 through 3):** Under Phase 1, the existing 6th, 9th, and 10th Street connectors would be removed; a new bridge over LA River would be constructed, along with the construction of a new roundabout under Design Option A or a Y intersection under Design Option B and the west half of the new SR-710 connection, as well as the reconstruction of Shoreline Drive as a two-way street. Phase 1 includes the following stages:

- **Stage 1:** Stage 1 would include demolishing the existing 9th and 10th Street connectors and associated roadways, constructing bents and abutments for the new Shoemaker Bridge over the LA River, removing interfering portions of south half of existing Shoemaker Bridge, constructing temporary roadways for construction vehicles to maintain access within the area of Cesar Chavez Park is relocated during the relocation of East Shoreline Drive, and initiating construction of a temporary connection between East Shoreline Drive and 7th Street to be used during future stages.

- **Stage 2:** Stage 2 would include the construction of the new Shoemaker Bridge over the LA River, as well as the south half of associated bridge over NB SR-710, the construction of the east half of the new roundabout structure under Design Option A or the Y intersection under Design Option B, the conversion of 6th and 7th Streets from a one-way to a two-way street, and completion of construction of a temporary connection between East Shoreline Drive and 7th Street.

- **Stage 3:** Stage 3 would include the reconstruction of East Shoreline Drive East from a one-way to two-way street and the opening of the two-way temporary roadway connection to 7th Street, the demolition of the 6th Street connector and remaining south half existing Shoemaker Bridge over the LA River, the construction of the remainder of roundabout structure under Design Option A or the Y intersection under Design Option B, the construction of the two-way Shoreline Drive just south of roundabout or Y intersection, and the construction of a temporary connection between the two-way 6th Street and ultimate Shoreline Drive that would be used in Phase 2 construction activities.

- **Phase 2 (Stages 4 and 5):** Phase 2 would include the construction of the 7th Street connection to the roundabout under Design Option A or the Y intersection under Design Option B, as well as the east half of the new SR-710 connection, and the removal of the majority of existing Shoemaker Bridge. If Alternative 2 (Design Options A and B) is selected as the preferred alternative, Phase 2 would also include the repurposing of the remaining easterly portion of existing Shoemaker Bridge for park use. Phase 2 includes the following stages:

- **Stage 4:** Stage 4 would include the removal of East Shoreline Drive and temporary connection to 7th Street used in Phase 1 of construction activities, the opening of the new Shoemaker Bridge over LA River, the roundabout under Design Option A or the Y intersection under Design Option B, the ultimate two-way Shoreline Drive; and the opening of a temporary connector between 6th Street and the ultimate Shoreline Drive to vehicular traffic. Stage 4 would also include the construction of the 7th Street connection to either the new roundabout or the Y intersection and east half of the new SR-710 connection, the removal of the existing Shoemaker Bridge, the repurposing of the remaining portion of existing Shoemaker Bridge for park use if Alternative 2 (Design Options A and B) is selected as the preferred alternative, and the construction of a new pedestrian and bicycle connection to the repurposed bridge.

- **Stage 5:** Stage 5 would include the removal of the temporary connection between 6th Street and ultimate Shoreline Drive used during Stage 4 of construction, the reconfiguration of 6th Street to its final configuration, and configuration of the SR-710 connection west of new Shoemaker Bridge to its final condition. Stage 5 would also include the construction of maintenance access roads, the completion of proposed bikeways, and the completion of grading activities and proposed planting within Cesar E. Chavez Park.

### 2.22.1.2 Typical Construction Impacts

This section describes construction impacts from Alternatives 2 and 3 (Design Options A and B). Temporary impacts on resources are described in Section 2.22.2. Typical construction impacts associated with the proposed Project include the following:

- Traffic plan lane closures, which would divert more traffic demand than what would be added as a result of construction traffic

- Existing roadway drainage

- Waste pavement and waste structural concrete that would be either placed in landfills or recycled

- Noise generated by demolition and pile driving that would be audible to nearby land uses

- Short-term pollutant noise increase and air emissions (fugitive dust emissions, MSATs, and asbestos)

- Air pollutants from clearing, cut and fill activities, grading, removing or improving existing roadways, and paving roadway surfaces

## 2.22.2 Construction Impacts on Specific Resources

This section discusses construction impacts on the natural and human environment from the alternatives. Alternative 1 (No Build) is not discussed in this section because it proposes no modification to the existing bridge or realignment of West Shoreline Drive or local streets, and therefore, would have no environmental impact associated with construction activities.

### 2.22.2.1 Geology and Soils Seismic Topography

#### Alternatives 2 and 3 (Design Options A and B)

Temporary impacts are related to construction activities. Alternatives 2 and 3 (Design Options A and B) would alter existing landforms because of grading and construction activities. Construction activities may also temporarily disturb soil within the Project limits, primarily in the trample zone around work areas, heavy equipment traffic areas, and material laydown areas. Temporary impacts would include soil compaction and increased possibility of soil erosion.

Under Alternatives 2 and 3 (Design Options A and B), excavated soil would be exposed, and there would be an increased potential for soil erosion compared with existing conditions. Additionally, during a storm event, soil erosion could occur at an accelerated rate. The proposed Project would be required to adhere to the requirements of the general construction permit and implement erosion and sediment control BMPs identified in the Project SWPPP to keep sediment from moving off site into receiving waters. Refer to Section 2.9, Water Quality and Storm Water Runoff, for additional information regarding construction-related water quality issues and avoidance, minimization, and mitigation.

The construction activities associated with Alternatives 2 and 3 (Design Options A and B) could be affected by ground motion, liquefaction, and possibly ground deformation if an earthquake event were to occur during construction. However, implementation of safe construction practices and compliance with Caltrans and Cal-OSHA requirements would minimize the impacts of these conditions. Based on the Project features identified in Section 2.9, Water Quality and Storm Water Runoff, and compliance with standard Caltrans and Cal-OSHA requirements, temporary impacts related to soil compaction and erosion, ground motion, liquefaction, and potential ground deformation during construction activities would be not be considered substantially adverse.

### 2.22.2.2 Paleontology

#### Alternatives 2 and 3 (Design Options A and B)

Alternatives 2 and 3 (Design Options A and B) would require ground disturbance and modification to existing freeway and local street structures. These construction activities would result in direct or indirect adverse impacts on paleontological resources. The potential impacts on paleontological resources would be permanent direct or indirect impacts and are discussed in Section 2.11.4.2.

### 2.22.2.3 Hazardous Waste/Materials

#### Alternatives 2 and 3 (Design Options A and B)

*Sites of Concern*

Based on the due diligence efforts that have been completed as part of the ISA, 28 properties were identified to have RECs within the hazardous waste/materials study area. Of these 28 properties, 8 were identified to have a potential impact on the Project (5 properties are located within the Project limits, and 3 properties are located adjacent to the Project limits). Potential contamination associated

with these properties are due to existing and past land uses and operation activities (e.g., existing and former gas stations, active oil wells, maintenance yards, and industrial facilities), which may have resulted in a release or spill. Section 2.12 lists each site that has a potential to impact the Project and includes a description of the contamination issues.

Under Alternatives 2 and 3 (Design Options A and B), there is a potential for the Project to encounter soil and/or groundwater contamination associated with eight properties. Interviews with regulatory agency officials and/or PSIs are recommended for these properties to further assess for the presence of contamination issues and are described in Section 2.12, Hazards/Hazardous Materials. No adverse temporary impacts from soil and/or groundwater contamination associated with these eight sites are anticipated under Alternatives 2 and 3 (Design Options A and B) with the inclusion of Project features and the implementation of Minimization Measures HAZ-1 through HAZ-8 identified in Section 2.12, Hazards/Hazardous Materials.

### *Aerially Deposited Lead*

There is a potential for soil contaminated with ADL from the historical use of leaded gasoline to exist within the state highway system ROW. Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed under the July 1, 2016, ADL agreement between Caltrans and the California DTSC. This ADL agreement allows such soils to be safely reused within the Project limits as long as all requirements of the ADL agreement are met.

Under Alternatives 2 and 3 (Design Options A and B), there is a potential the Project may encounter ADL contaminated soils during construction. Unpaved soils adjacent to the existing roadway should be tested for ADL according to Caltrans ADL testing guidelines. If ADL concentrations are detected in existing soils, such soils would be handled in accordance with Caltrans SSP 14-11.08 Material Containing Hazardous Waste Concentrations of Aerially Deposited Lead (2018) and under the July 1, 2016 ADL Agreement between Caltrans and the California DTSC, identified as Project Feature PF-51 in Section 2.12, Hazards/Hazardous Materials. With the inclusion of this Project feature, no adverse temporary impacts from ADL contaminated soils are anticipated under Alternatives 2 and 3 (Design Options A and B).

### *Creosote and Pentachlorophenol*

Several telephone poles were observed within the Project limits. It is common practice to treat the wood used to make telephone poles, as well as fence posts, sill plates, landscape timbers, pilings, guardrails, and decking, with chemicals to protect the wood from insect attack and fungal decay. These chemicals include creosote and pentachlorophenol and require proper handling and disposal. Under Alternatives 2 and 3 (Design Options A and B), there is a potential the Project may require the removal of treated wooden telephone poles during construction. The removal of any wooden telephone poles would be conducted in accordance with Appendix XII of the CCR, Title 22, Division 4.5, Chapter 11, as described in Section 2.12.4. No adverse temporary impacts from creosote and pentachlorophenol associated with the removal of wooden telephone poles are anticipated under Alternatives 2 and 3 (Design Options A and B).

### *Asbestos-Containing Materials/Lead-Based Paint*

Alternatives 2 and 3 (Design Options A and B) would require the modification or removal of structures, which may contain ACM and LBP. Alternatives 2 and 3 (Design Options A and B) would both require the removal of the Golden Shore grade separation over West Shoreline Drive. In addition, Alternative

2 (Design Options A and B) would include repurposing a portion of the existing Shoemaker Bridge for non-motorized transportation and recreational use, and Alternative 3 (Design Options A and B) would include the removal of the existing Shoemaker Bridge in its entirety. Any modification or removal of structures would require ACM and LBP surveys, as described in Section 2.12.4. The modification or removal of LBP and ACM in bridges would be conducted in accordance with the U.S. EPA NESHAP 40 CFR regulation; SCAQMD Rule 1403; and in accordance with Caltrans SSP 14-11.13, Disturbance of Existing Paint Systems on Bridges, and Caltrans SSP 14-11.16, Asbestos-Containing Construction Materials in Bridges. No adverse temporary impacts from ACM and LBP associated with the modification or removal of structures are anticipated under Alternatives 2 and 3 (Design Options A and B).

*Lead and Chromium*

Elevated concentrations of lead and chromium may be present in the striping paint used on the existing roadways within the proposed Project limits. Under Alternatives 2 and 3 (Design Options A and B), there is a potential the Project may require removal or disturbance of paint striping during construction. Any removal or disturbance of paint striping would require sampling and analysis of yellow and white paint striping, as described in Section 2.12.4. The removal, handling, and disposal of yellow and white paint striping would be performed in accordance with Construction Program Procedure Bulletin 99-2, Caltrans SSP 14-11.12, Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue, and Caltrans SSP, 36-4 Residual Containing Lead from Paint and Thermoplastic. No adverse temporary impacts from lead and chromium associated with the removal or disturbance of paint striping are anticipated under Alternatives 2 and 3 (Design Options A and B).

*Polychlorinated Biphenyls*

PCBs were once used as industrial chemicals whose high stability contributed to both their commercial usefulness and long-term deleterious environmental and health effects. PCBs can be present in coolants or lubricating oils used in older electrical transformers, hydraulic systems, and other similar equipment. In 1979, the U.S. EPA generally prohibited the domestic use of PCBs in electrical capacitors, electrical transformers, vacuum pumps, hydraulic pumps, and gas turbines.

Several pole- and pad-mounted transformers were observed within the Project limits. In addition, the SCE Seabright Substation was observed within the Project limits, which may also contain PCBs. Under Alternatives 2 and 3 (Design Options A and B), there is a potential the Project may require the removal or disturbance of transformers during construction. Any removal or disturbance of transformers would require sampling for PCBs, as described in Section 2.12.4. No adverse temporary impacts from PCBs associated with transformers are anticipated under Alternatives 2 and 3 (Design Options A and B).

*Underground Utilities*

There are known underground transmission lines and facilities within the Project limits, which may be impacted under Alternatives 2 and 3 (Design Options A and B) during ground-disturbance activities associated with construction. USA would be notified at least 2 days prior to ground-disturbance activities to enable all utility owners within the Project disturbance limits to identify the locations of known underground transmission lines and facilities, as described in Section 2.12.4. No adverse temporary impacts from encountering underground utility lines are anticipated under Alternatives 2 and 3 (Design Options A and B).

*Unknown Hazards*

Because of existing and past land uses, as well as operation activities of facilities within and adjacent to the Project limits, there is a potential for the Project under Alternatives 2 and 3 (Design Options A and B) to encounter unknown hazards during construction, such as soil contamination and buried drums and underground tanks containing hazardous waste/materials. In addition, shallow groundwater (5 to 12 feet bgs) exist within and adjacent to the Project limits. It is likely that groundwater would be encountered during construction activities, which may also be contaminated. Any encountering of unknown hazards would follow the hazards procedures described in Chapter 7 Environmental Stewardship of the Caltrans Construction Manual (Caltrans 2017a). In addition, a health and safety plan, a construction contamination management plan, and a construction contingency plan would be prepared prior to construction to protect worker health and safety and the environment, as described in Section 2.12.4. No adverse temporary impacts from encountering unknown hazardous are anticipated under Alternatives 2 and 3 (Design Options A and B).

*Hazardous Materials Used and Hazardous Waste Generated During Construction*

During construction, Alternatives 2 and 3 (Design Options A and B) would require the use of hazardous materials (e.g., solvents, paints, oils, fuels) and would also generate hazardous waste (e.g., removal or modification of structures). The handling, storing, and disposal of hazardous waste would be conducted in accordance with Caltrans SSP 14-11.03, Hazardous Waste Management, as described in Section 2.12.4. No substantial adverse temporary impacts from the handling, storing, and disposal of hazardous waste are anticipated under Alternatives 2 and 3 (Design Options A and B).

### 2.22.2.4 Air Quality

#### Alternatives 2 and 3 (Design Options A and B)

*Construction Emissions*

Site preparation and roadway construction would involve clearing, cut and fill activities, grading, removing or improving existing roadways, and paving roadway surfaces. During construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment powered by gasoline and diesel engines are also anticipated and would include CO, $NO_x$, VOCs, directly-emitted $PM_{10}$ and $PM_{2.5}$, and TACs, such as DPM. Construction activities are expected to increase traffic congestion in the area, resulting in increases in emissions from traffic during the delays. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Under the transportation conformity regulations (40 CFR 93.123(c)(5)), construction-related activities that cause temporary increases in emissions are not required in a hot-spot analysis. These temporary increases in emissions are those that occur only during the construction phase and last 5 years or less at any individual site. They typically fall into two main categories:

- *Fugitive Dust*: A major emission from construction due to ground disturbance. All air districts and the California Health and Safety Code (Sections 41700-41701) prohibit “visible emissions” exceeding 3 minutes in 1 hour; this applies not only to dust but also to engine exhaust. In general, this is interpreted as visible emissions crossing the ROW line.

Sources of fugitive dust include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site may deposit mud on local streets, which could be an additional source of airborne dust after it dries. $PM_{10}$ emissions may vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. $PM_{10}$ emissions depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

- *Construction Equipment Emissions*: DPM is a California-identified TAC, and localized issues may exist if diesel-powered construction equipment is operated near sensitive receptors.

The construction emissions were estimated for the Project using the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, Version 8.1.0. While the model was developed for Sacramento conditions in terms of fleet emission factors, silt loading, and other modeling assumptions, it is considered adequate for estimating road construction emissions by the SCAQMD in its CEQA guidance and is used for that purpose in this analysis. Construction-related emissions for Alternatives 2 and 3 (Design Options A and B) are presented in Section 2.13, Air Quality. The results of the Sacramento model are included in Appendix B of the AQAR. The emissions presented below are based on the best information available at the time of calculations and assume that the schedule for all improvements is anticipated to begin in 2022 and end in 2024. Default equipment assumptions for the Road Construction Emissions Model were used in developing the emissions estimates; these estimates can be refined once final engineering has been completed for the Project. The emissions listed in in Section 2.13, Air Quality, represent the peak daily construction emissions that would be generated by Alternatives 2 and 3 (Design Options A and B). As each phase of the Project construction is expected to last less than 5 years, construction-related emissions were not considered in the conformity analysis.

The following Project features, some of which may also be required for other purposes, such as stormwater pollution control, would reduce air quality impacts resulting from construction activities. Although these Project features are anticipated to reduce construction-related emissions, these reductions cannot be quantified at this time.

**PF-60** During construction, the City's Resident Engineer will ensure that the construction contractor complies with the Caltrans' Standard Specifications in Section 14 9 (2018).

- Section 14 9 02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances..

**PF-61** During construction, the City's Resident Engineer or designated contractor will ensure that water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions.

**PF-62** During construction, the City's Resident Engineer or designated contractor will ensure that a soil binder will be spread on any unpaved roads used for construction purposes and on all Project construction parking areas.

**PF-63** During construction, the City's Resident Engineer or designated contractor will ensure that trucks will be washed as they leave the ROW as necessary to control fugitive dust emissions.

**PF-64** During construction, the City's Resident Engineer or designated contractor will ensure that construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by CCR Title 17, Section 93114.

**PF-65** Prior to construction, the City's Resident Engineer or designated contractor will ensure that a dust control plan will be developed; documenting sprinkling, temporary paving, speed limits, and timely revegetation of disturbed slopes, as needed; to minimize construction impacts on existing communities.

**PF-66** During construction, the City's Resident Engineer or designated contractor will ensure that equipment and materials storage sites will be located as far away from residential and park uses as practicable. Construction areas will be kept clean and orderly.

**PF-67** Prior to construction, the City's Resident Engineer or designated contractor will ensure that environmentally sensitive areas will be established near sensitive air receptors. Within these areas, construction activities involving the extended idling of diesel equipment or vehicles will be prohibited, to the extent feasible.

**PF-68** During construction, the City's Resident Engineer or designated contractor will ensure that track out reduction measures, such as gravel pads at Project access points to minimize dust and mud deposits on roads affected by construction traffic, will be used.

**PF-69** During construction, the City's Resident Engineer or designated contractor will ensure that all transported loads of soils and wet materials will be covered before transport or adequate freeboard (space from the top of the material to the top of the truck) will be provided to minimize emission of dust during transportation.

**PF-70** During construction, the City's Resident Engineer or designated contractor will ensure that dust and mud deposited on paved, public roads due to construction activity and traffic will be promptly and regularly removed to reduce particulate matter emissions.

**PF-71** During construction, the City's Resident Engineer or designated contractor will ensure, to the extent feasible, that construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.

**PF-72** During construction, the City's Resident Engineer or designated contractor will ensure that mulch will be installed or vegetation planted as soon as practical after grading to reduce windblown particulate matter in the area.

*Construction Conformity*

Construction activities would not last for more than 5 years at one general location, so construction-related emissions do not need to be included in regional and project-level conformity analysis (40 CFR 93.123(c)(5)).

*Naturally Occurring Asbestos*

The Project is located in Los Angeles County, which is among the counties listed as containing serpentine and ultramafic rock. However, the portion of the County within which the proposed Project lies is not known to contain serpentine or ultramafic rock. Therefore, the impact from naturally occurring asbestos during Project construction would be minimal to none.

### 2.22.2.5 Noise

#### Alternatives 2 and 3 (Design Options A and B)

Two types of short-term noise impacts would occur during Project construction. The first type would be from construction crew commutes and the transport of construction equipment and materials to the Project site and would incrementally raise noise levels on access roads leading to the site. The pieces of heavy equipment for grading and construction activities would be moved on site, would remain for the duration of each construction phase, and would not add to the daily traffic volume in the Project vicinity. A high single-event noise exposure potential at a maximum level of 87 dBA Lmax from trucks passing at 50 feet would exist. However, the projected construction traffic would be minimal when compared with existing traffic volumes on Shoreline Drive, Ocean Boulevard, Broadway Avenue, 3rd Street, 6th Street, 7th Street, and other affected streets, and the associated long-term noise level change would not be perceptible. Therefore, short-term construction-related worker commutes and equipment transport noise impacts would not be substantially adverse.

The second type of short-term noise impact is related to noise generated during roadway construction. Construction is performed in discrete steps, each of which has its own mix of equipment and consequently its own noise characteristics. These various sequential phases would change the character of the noise generated and the noise levels along the Project alignment as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Typical noise levels at 50 feet from an active construction area range up to 90 dBA $L_{eq}$ during the noisiest construction phases. The site preparation phase, which includes grading and paving, tends to generate the highest noise levels because the noisiest construction equipment is earth-moving equipment. Earth-moving equipment includes excavating machinery, such as excavators, backfillers, bulldozers, and front loaders. Earth-moving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

Construction of the proposed Project is expected to require the use of earthmovers, bulldozers, water trucks, and pickup trucks. Noise associated with the use of construction equipment is estimated between 79 and 89 dBA $L_{max}$ at a distance of 50 feet from the active construction area for the grading phase. As discussed in in Section 2.13, Noise, the maximum noise level generated by each scraper is assumed to be approximately 87 dBA $L_{max}$ at 50 feet from the scraper in operation. Each bulldozer would generate approximately 85 dBA $L_{max}$ at 50 feet. The maximum noise level generated by water trucks and pickup trucks is approximately 86 dBA $L_{max}$ at 50 feet from these vehicles. Each doubling of the sound source would increase the noise level by 3 dB. Each piece of construction equipment operates as an individual point source. The worst-case composite noise level at the nearest residence

during this phase of construction would be 91 dBA $L_{eq}$ (at a distance of 50 feet from an active construction area).

The closest sensitive receptors are located within 50 feet of the Project construction area. Therefore, these receptor locations may be subject to short-term noise higher than 91 dBA $L_{eq}$ generated by construction activities along the Project alignment. To minimize construction noise impacts on sensitive land uses adjacent to the Project site, construction noise is regulated by Caltrans Standard Specifications in Section 14-8.02, "Noise Control," and also by SSP S5-310, which have been included as Project features. As specified in Minimization Measure N-1, compliance with the construction hours specified in the City of Long Beach Municipal Code would be required. The noise level from the contractor's operations between the hours of 9 p.m. and 6 a.m. would not exceed 86 dBA $L_{max}$ at a distance of 50 feet. With the implementation of Project features and Minimization Measure N-1, the short-term noise impacts during Project construction would not be substantially adverse.

### 2.22.2.6 Energy

#### Alternatives 2 and 3 (Design Options A and B)

Construction under Alternatives 2 and 3 (Design Options A and B) would result in short-term energy consumption related to the manufacture of construction materials, the use of construction equipment that requires petroleum fuels, and the use of construction workers' motor vehicles as they travel to and from the site. With the implementation of PF-3 and PF-71 and Minimization Measure E-1, in addition to construction activities being limited to approximately 3 years in duration, construction-related energy consumption anticipated under Alternatives 2 and 3 (Design Option A and B) would be finite and limited and would not have a substantial adverse impact on area energy supplies.

### 2.22.2.7 Natural Communities

#### Alternatives 2 and 3 (Design Options A and B)

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in direct temporary impacts on deepwater aquatic habitat through the construction of the new Shoemaker Bridge and the demolition of the existing bridge. The existing Shoemaker Bridge would be partly or wholly in Alternative 2 and 3, respectively, and four support structures would be removed below the invert of the channel in both alternatives. However, these impacts would only occur during construction. Alternative 2 (Design Option A) and Alternative 3 (Design Option A) would result in up to 7.53 acres of temporary impacts on deep water aquatic habitat. Alternative 2 (Design Option B) and Alternative 3 (Design Option B) would result in up to 7.56 acres of temporary impacts on deep water aquatic habitat.

In addition to direct temporary impacts, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in temporary indirect impacts from construction-related impacts, such as the temporary reduction in benthic invertebrate fauna (i.e., food sources), an increased level of suspended solids from disruption of the soft-bottom debris, potential fuel spills from construction equipment, and activities of equipment or personnel outside designated construction areas, as well as operation impacts including those on adjacent habitats caused by construction noise and vibration, storm water runoff, traffic, and litter.

Construction may indirectly impact deepwater aquatic habitat permanently through enhancing the germination and proliferation of nonnative invasive plant species. Indirect impacts are difficult to

quantify because they are a result of normal activities and can vary day to day. However, implementation of Avoidance Minimization Measures IS-1 through IS-5 would reduce potential indirect impacts on deepwater aquatic habitat.

### 2.22.2.8 Wetlands

#### Alternatives 2 and 3 (Design Options A and B)

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in direct temporary impacts on non-wetland waters (deepwater aquatic habitat) through the construction and placement of support structures for the proposed new bridge and the demolition of the old bridge. The existing Shoemaker Bridge would be partly or wholly removed in Alternative 2 and 3 (Design Options A and B), respectively, and four support structures would be removed below the invert of the channel in both alternatives. Areas of temporary impacts would only be impacted during construction.

Alternative 2 (Design Option A) and Alternative 3 (Design Option A) would result in up to 7.53 acres of temporary impacts on non-wetland waters of the U.S. Alternative 2 (Design Option B) and Alternative 3 (Design Option B) would result in up to 7.56 acres of temporary impacts on non-wetland waters of the U.S. Temporary impacts are slightly less for Section 10 waters, including 7.28 acres for Alternative 2 (Design Option A) and Alternative 3 (Design Option A) and 7.31 acres for Alternative 2 (Design Option B) and Alternative 3 (Design Option B). Temporary impacts on RWQCB jurisdiction would be the same as impacts on USACE jurisdiction. Alternative 2 (Design Option A) and Alternative 3 (Design Option A) would result in up to 8.45 acres of temporary impacts on CDFW streambed. Alternative 2 (Design Option B) and Alternative 3 (Design Option B) would result in up to 8.48 acres of temporary impacts on CDFW streambed.

Temporary impacts on the LA River would be replaced at a minimum 1:1 ratio, with in-kind habitat restored in place within the BSA. If off-site restoration is conducted, it would be undertaken within the LA River Watershed.

### 2.22.2.9 Plant Species

#### Alternatives 2 and 3 (Design Options A and B)

The southern tarplant is considered absent from the BSA; therefore, there would be no temporary impact on this species under Alternatives 2 and 3 (Design Options A and B).

### 2.22.2.10 Animal Species

#### Alternatives 2 and 3 (Design Options A and B)

The proposed Project under Alternatives 2 and 3 (Design Options A and B) is not expected to result in direct temporary impacts on California sea lions. However, the Project may also have indirect and temporary impacts through incidental harassment because of the temporary loss of potential foraging habitat during construction. As discussed in Section 2.16, Natural Communities, the proposed Project would result in direct temporary impacts on estuarine subtidal (deepwater aquatic) habitat through the construction of the new bridge and demolition of the old bridge. Areas of temporary impacts would only be impacted during construction. In addition to Project features identified in Section 2.16.4, Minimization Measures NC-1 through NC-5, presented in Section 2.16, Natural Communities, would avoid and/or minimize potential indirect temporary impacts on California sea lions; thus, impacts would not be considered substantially adverse.

Construction activities within the LA River are not expected to result in direct temporary impacts on riparian/aquatic special-status species. However, the Project is expected to have indirect and temporary impacts on riparian/aquatic special-status species through the temporary loss of potential foraging habitat. However, with implementation of Minimization Measure AN-1, the inclusion of Project features identified in Section 2.16.4, and the implementation of Minimization Measures NC-1 through NC-5, potential temporary and indirect impacts on riparian/aquatic special-status species would not be substantially adverse.

Although low, there is a small potential for bat mortality to occur during bat exclusion efforts and construction. Additionally, the Project may have indirect and temporary impacts on these special-status species through the temporary loss of potential day and night roosting habitat. However, with implementation of Minimization Measures AN-1 through AN-3, temporary impacts on bats would not be substantially adverse.

Vegetation clearing and grading has the potential to disturb vegetation that may provide nesting habitat for migratory birds. Compliance with the MBTA and the California Fish and Game Code, as specified in a Project feature described under Section 2.19.4, would be required to avoid potential temporary impacts on migratory birds during construction.

## 2.22.2.11 Threatened and Endangered Species

### Alternatives 2 and 3 (Design Options A and B)

Alternatives 2 and 3 (Design Options A and B) are not expected to result in direct temporary impacts on California least terns and western snowy plover because of the lack of suitable nesting habitat. Foraging California least terns and western snowy plover are expected to move out of the BSA during construction. This may indirectly and temporarily limit foraging habitat for California least terns and western snowy plover during construction. However, these potential temporary impacts would cease upon the completion of construction.

As previously discussed, the deepwater aquatic habitat within the BSA is designated as EFH for the northern anchovy. Alternatives 2 and 3 (Design Options A and B) are not expected to directly affect north anchovy because of the low probability of their occurrence in the BSA. Although northern anchovy has limited potential to occur within the BSA, and no other species listed under the Pacific Coast Groundfish Fisheries Management Plan are expected within the BSA, the LA River flows into Queensway Bay within 1 mile of the southern limits of the BSA, which provides EFH for a number of species listed as coastal pelagic species and pacific coast groundfish species.

As previously discussed in Section 2.16, Natural Communities, the proposed Project would result in direct temporary impacts on deepwater aquatic habitat through the construction of the new bridge and the demolition of the old bridge. Areas of temporary impacts would only be impacted during construction. Alternative 2 (Option A) and Alternative 3 (Option A) would result in up to 7.53 acres of temporary impacts on deep water aquatic habitat. Alternative 2 (Design Option B) and Alternative 3 (Design Option B) would result in up to 7.56 acres of temporary impacts on deep water aquatic habitat.

### 2.22.2.12 Invasive Species

#### Alternatives 2 and 3 (Design Options A and B)

Impacts on invasive species are considered permanent impacts because the introduction of invasive species into previously undisturbed areas would result in permanent impacts on the habitat. Therefore, impacts on invasive species as a result of construction are described in Section 2.21.3.2.

## 2.22.3 Avoidance, Minimization, and/or Mitigation Measures

With the implementation of avoidance, minimization, and mitigation measures identified as Measures GEO-1 and GEO-2 in Section 2.10, Geology, Soils, Seismic, and Topography; AQ-1 and AQ-2 in Section 2.13, Air Quality; N-1 in Section 2.14, Noise; E-1 in Section 2.15, Energy; NC-1 through NC-5 in Section 2.16, Natural Communities; WET-1 through WET-3 in Section 2.17, Wetlands and Other Waters; AN-1 through AN-3 in Section 2.19, Animal Species; and TE-1 through TE-6 in Section 2.20, Threatened and Endangered Species; no adverse construction impacts are anticipated.

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# 2.23 Cumulative Impacts

## 2.23.1 Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed Project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the Project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

The California Environmental Quality Act (CEQA) Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under the National Environmental Policy Act (NEPA) can be found in 40 Code of Federal Regulations (CFR) Section 1508.7.

## 2.23.2 Methodology

The methodology used in the cumulative impacts analysis for Alternatives 2 and 3 (Design Options A and B) was developed by following the eight-step process as set forth in the Caltrans Guidelines for Preparers of Cumulative Impact Analysis (Caltrans 2005). The eight-step process is comprised of the following actions:

1. Identify the resources to consider in the cumulative impacts analysis by gathering input from knowledgeable individuals and reliable information sources. This process is initiated during project scoping and continues throughout the NEPA/CEQA analysis.
2. Define the geographic boundary or resource study area for each resource to be addressed in the cumulative impacts analysis.
3. Describe the current health and historical context of each resource.
4. Identify the direct and indirect impacts of the proposed project that might contribute to a cumulative impact on the identified resources.
5. Identify a set of other current and reasonably foreseeable future actions or projects and their associated environmental impacts to include in the cumulative impacts analysis.
6. Assess cumulative impacts.
7. Report the results of the cumulative impacts analysis.
8. Assess the need for mitigation and/or recommendations for actions by other agencies to address a cumulative impact.

## 2.23.3 Resources Included in Cumulative Impact Analysis

As specified in the Caltrans guidance, the cumulative analysis should focus only on those resources significantly impacted by the project or resources currently in poor or declining health or at risk even if the project impacts are relatively small (less than significant). Furthermore, if a project will not cause a direct or indirect impacts on a resource, it will not contribute to a cumulative impact on that resource, and need not be further evaluated. Table 2.23-1 lists all resources included in the cumulative impact analysis that meet these criteria. Those identified as resulting in an individual impact, and, thus, included in the cumulative impact analysis are resources for which a direct or indirect impact would occur after the incorporation of avoidance or minimization measures and before the implementation of any mitigation measures.

Table 2.23-1 identifies the resource study area that corresponds to the cumulative analysis for each included resource. A cumulative impact analysis reviews the resources in the Project vicinity as a whole, and as a result, the resource study areas in the context of the cumulative analysis are often different than the study areas defined in the preceding sections of the EIR/EA.

**Table 2.23-1 . Resource Areas Included in Cumulative Impact Analysis**

| Resource Area | Reason Included in Cumulative Analysis | Resource Study Area |
|---|---|---|
| Recreational Resources | Permanent incorporation of parkland into a transportation facility | Entirety of Cesar E. Chavez Park, Golden Shore RV Park, LB MUST, and LARIO Trail and all other recreational resources within 0.5 mile of Project footprint |
| Traffic and Transportation | Temporary and permanent impacts on traffic and circulation; temporary impacts on bicycle and pedestrian facilities | Transportation facilities within approximately 1 mile of Project footprint |
| Paleontology | Potential for destruction or damage to paleontological resources | Properties within and immediately adjacent to the paleontological study area |
| Noise | Temporary and permanent noise impacts on sensitive receptors | Entirety of the Project limits and areas within 0.5 mile of the Project limits, or the noise study area |
| Natural Communities | Temporary and permanent impacts on deepwater aquatic habitat | Deepwater aquatic habitat of LA River 1.5 mile north and south of BSA |
| Wetlands and Other Waters | Direct temporary and permanent impacts on waters of the U.S. and streambed | Deepwater aquatic habitat of LA River 1.5 mile north and south of Project limits; LA River top-of-bank to top-of-bank within BSA |
| Threatened and Endangered Species | Permanent loss of essential fish habitat (northern anchovy, *Engraulis mordax*) | Deepwater aquatic habitat of LA River 1.5 mile north and south of BSA |

Notes:
BSA=biological study area; RV=recreational vehicle; LA River=Los Angeles River; LARIO=Los Angeles River and Rio Hondo; LB MUST=Long Beach Municipal Urban Stormwater Treatment

## 2.23.4 Current Health and Historical Context

### Recreational Resources

The recreational resources within the Resource Study area include local parks and the Long Beach Shoreline Marina. The recreational facilities include boating, skating, pedestrian and bike paths, basketball courts, community centers, tennis courts, soccer fields, picnic area, and playground areas. The amenities at the parks are typical of the facilities available in an urban and residential neighborhoods. The parks in the city are operated by the Long Beach Parks, Recreation and Marine Department. Historically, the demand for use of the parks has been by the local families and visitors of the marina.

### Traffic and Transportation

Major state highway systems, such as SR-1, SR-710, I-405, and SR-19, traverse through the city. Historically, there has been a constant demand for use of these facilities to transport cargo to and from the port and by port employees on their commute to work. Also, being located south of the Los Angeles Airport, a major international airport, and north of Orange County, these major highway systems are of high importance to the region. Local roads provide mobility within the city and to the surrounding communities. In recent years, economic growth has led to the approval and development of new residential, commercial and office space uses that will add additional demand on the existing transportation system. The LA Metro Blue Line provides direct access to downtown Los Angeles.

### Paleontology

The Project is within the Los Angeles Basin, an actively subsiding basin bound by the Santa Monica and San Gabriel Mountains to the north, the Santa Ana Mountains to the east, and the Palos Verdes Hills to the south. Rapid deposition of deep sediment fill has resulted from the subsidence, with sediment in the area of Long Beach reaching 14,000 feet in depth. This deep sediment fill has also resulted in the accumulation of notable fossil resources and petroleum resources, including the local Long Beach Oil Field. The Project is located in the coastal zone, a heavily altered area of Long Beach, with little natural landscape remaining.

There are four geologic units within the Project area for Alternatives 2 and 3 (Design Options A and B) including artificial fill (*af*), young alluvial fan and valley deposits ($Qyf_a$), unconsolidated shelf sediment (*Qms*), and old paralic deposits ($Qop_s$). Artificial fill does not have the potential to contain scientifically significant paleontological resources because of its disturbed context. Based on the paleontological records search conducted for the proposed Project, there are two known fossil localities within the boundaries of the Project area. In addition, paleontological resources have been recovered near the Project area and elsewhere in the region. Of the four geologic units within the Project area, old paralic deposits have high paleontological sensitivity based on their age, composition, and depositional environment as well as the scientifically significant fossil remains they have produced in other areas.

### Noise

Noise within and surrounding the Project limits is generally generated by traffic on the freeways local roads, equipment operations, urban uses, aircraft, and other noise sources typical in urban and developed areas. These sources contribute to ambient noise throughout the Project limits and the City typical of urban areas. Urbanization and development prevalent in the downtown area of the City adjacent to the Project limits may further contribute to increased ambient noise levels throughout the City when combined with the noise associated with construction of the proposed Project. Additional

noises typical in this area may include emergency vehicle sirens, school bells, and traffic. With the ongoing development trend in the City, there may also be a temporary increase noise from construction activities.

### Natural Communities

Urbanization with the City and the surrounding area resulted in the extensive modifications. Native habitats in the area have been greatly impacted and reduced by the development of Long Beach, channelization of the LA River, and oil and petroleum exploration. Presently, deepwater aquatic habitat occurs in the LA River. Deepwater aquatic habitats are permanently inundated areas that typically do not support rooted emergent (above water) or woody plant species but may support submergent (below water) plant species. Deepwater aquatic waters are recognized as having a high habitat value because of their use as a fish and wildlife resource and limited distribution in the arid west.

### Wetlands and Other Waters

Prior to the channelization of the LA River, the LA River provided natural wetland habitats. Vast amounts of fill were deposited across the wetlands west of Long Beach to not only create viable residential and farming land, but the Port of Los Angeles and the Port of Long Beach. The LA River is the only drainage feature located in the BSA. On July 6, 2010, the U.S. EPA designated the LA River as a TNW. The LA River parallels SR-710 in the BSA and is a historically natural drainage that is currently an unvegetated, concrete and riprap-lined trapezoidal channel along most of its length. It serves as a flood control channel for the highly urbanized surrounding areas. Within the BSA, the LA River is subject to tidal influence. It has a natural bottom and riprap sides. A small amount of wetland habitat occurs within the BSA at Anaheim Street Bridge. Sediment that has accumulated on the toe of the riprap banks supports two small patches of California bulrush (*Schoenoplectus californicus*), a plant species identified as almost always occurring in wetlands. No other areas supporting hydrophytic vegetation occur in the BSA. Runoff from adjacent commercial, industrial, and residential developments is likely conveyed into the LA River via a storm drain system. There are no other potentially jurisdictional drainage features in the BSA.

### Threatened and Endangered Species

Alternatives 2 and 3 (Design Options A and B) impact the deepwater aquatic habitat that is designated as EFH for the northern anchovy, which is a coastal pelagic species. Although no northern anchovy, or other species listed under the Pacific Coast Groundfish Fisheries Management Plan are expected within the BSA, the LA River flows into Queensway Bay within 1 mile of the southern limits of the BSA, which provides EFH for a number of species listed as coastal pelagic species and pacific coast groundfish species.

California least terns are present at the nearest nesting colony at Port of Los Angeles, 4.75 miles from Shoemaker Bridge, only during the nesting season (between April 15 and September 15). Researchers have noted that 75 percent of California least terns forage within 0.75 mile of nesting sites (Keane and Smith 2016). They have been documented foraging at Port of Long Beach and infrequently observed foraging in the lower portion of the LA River estuary, approximately 1.25 mile from Shoemaker Bridge, between late June and mid-July (Keane and Smith 2016). However, while not likely to occur within the BSA, there remains a low potential for California least terns to forage within the BSA between April 15 and September 15.

Western snowy plover are present at the nearest nesting habitat at the Bolsa Chica Ecological Reserve, approximately 12 miles from the Shoemaker Bridge. Snowy plover has been occasionally

observed foraging in the LA River north of the BSA near the Willow Street Bridge and Alondra Boulevard Bridge. While not likely to occur within the BSA, there remains a low potential for the western snowy plover to forage within the BSA.

Southern steelhead is an anadromous variant of rainbow trout closely related to Pacific salmon. The species was once abundant in California coastal and central valley drainages. The LA River Watershed is considered to have been historically occupied by Southern California steelhead but populations south of Ventura County have been extirpated, except in Malibu Creek and San Mateo Creek in San Diego County due to factors including urbanization, water diversions and damming of creeks. NMFS issued the Southern California Steelhead Recovery Plan in January 2012. The Recovery Plan identifies recovery goals and actions intended to recover anadromous steelhead and ensure the long-term persistence of self-sustaining wild populations of steelhead across the Southern California Distinct Population Segment with the ultimate goal of removing southern California steelhead from the Federal List of Endangered and Threatened Wildlife (NMFS 2012). In October 2018, HDR biologists confirmed with staff at the Aquarium of the Pacific and staff with FOLAR that there is no documentation of steelhead in the LA River near Shoemaker Bridge. Southern California steelhead does not currently occupy the LA River.

### 2.23.4.1 Other Current Reasonably Foreseeable Projects Considered in the Cumulative Impacts Analysis

Table 2.23-2 identifies other current and reasonably foreseeable projects that, in combination with the proposed Project, could potentially make a considerable contribution to cumulative environmental impacts. Figure 2.23-1 shows the location of the foreseeable projects.

**Table 2.23-2. Current Reasonably Foreseeable Projects Considered in Cumulative Impact Analysis**

| Project | Jurisdiction | Overview | Status |
|---|---|---|---|
| I-710 Corridor Project | Multiple | Improve I-710 in Los Angeles County between Ocean Boulevard and SR-60: add up to two lanes in each direction, improve interchanges, and upgrade lane widths, merging distance, etc. to current standards. | Proposed. |
| SR-47 Expressway Project | Caltrans and ACTA | Replace the Schuyler Heim Bridge over Cerritos Channel with a fixed-span bridge connecting to a new limited-access four-lane elevated highway. Construct new two-lane flyover to divert eastbound Ocean Boulevard traffic directly to northbound SR-47 and across the new bridge. | Construction started 2011; Anticipated Completion 2030. |
| Gerald Desmond Bridge Replacement Project | POLB, Caltrans, FHWA | Replace the existing four-lane Gerald Desmond Bridge with a new six-lane bridge (three lanes in each direction). Construct the Terminal Island East Interchange and I-710 connector ramps. The project is needed help the Port meet on-dock rail goals set in the San Pedro Bay Ports 2017 Clean Air Action Plan Update. The bridge would also include a pedestrian and bike path, and scenic overlooks. | Construction: 2013 through end 2019 |

## Table 2.23-2. Current Reasonably Foreseeable Projects Considered in Cumulative Impact Analysis

| Project | Jurisdiction | Overview | Status |
|---|---|---|---|
| Pier B On-Dock Rail Support Facility Project | POLB | Reconfigure, expand, and enhance the Pier B Rail Yard located along Anaheim Street and SR-710 Freeway. | EIR Approved 2018. Construction: 2025-2032 |
| Middle Harbor Redevelopment Project | POLB | Redevelop, expand, and modernize the existing waterfront property that is part of the Middle Harbor area of the POLB and Port lands. | Phases 1 and 2 completed. Phase 3 construction completion is estimated end of 2020. |
| Piers G and J Terminal Redevelopment Project | POLB | Redevelop two existing marine container terminals into one terminal. Develop a marine terminal up to 315 acres by consolidating two existing terminals on Piers G and J and several surrounding parcels. | Phased – Partly Constructed. Pier G includes up to 16 separate construction phases. Most project elements were completed in 2014. |
| Oceanaire Apartments | City of Long Beach | New high-rise residential development and two-level parking structure with ingress/egress along West Seaside Way. | Construction is estimated to be complete 2020. |
| 442 West Ocean Boulevard Apartments | City of Long Beach | New 95-unit multi-family apartment complex with parking. | Under Construction, |
| Drake/ Chavez Greenbelt Master Plan | City of Long Beach | Construct a new 57-acre public park along the lower LA River that will link Cesar E. Chavez Park to Drake Park, as well as Loma Vista Park. | Proposed |
| Drake/Chavez Soccer Fields | City of Long Beach | As part of the Drake/Chavez Greenbelt Master Plan, this project developed 8.75 acres of new park facility on vacant parcels. This project includes one striped soccer field; large, landscaped open space/passive park areas; a pedestrian walking trail; restroom facilities; and parking. The park also incorporates the existing Loma Vista Park. | **Opened 2018** |
| RiverLink Plan | City of Long Beach | The plan proposes to connect the neighborhoods of the west side of Long Beach to the LA River. | Planning |
| Golden Shore Master Plan | City of Long Beach | Develop a maximum of 1,370 residential condominiums, 340,000 sf of office space, 28,000 square feet of retail space, a 400-room hotel, 27,000 sf of conference and banquet facilities and up to 3,430 parking spaces. | Approved April 2010 |
| 1235 Long Beach Boulevard Mixed-Use Project | City of Long Beach | Develop housing and community facilities for seniors, veterans, and others with special needs, with two-level parking garage. Development would include 199 new apartments, 20 on-site parking stalls, and outdoor seating area. | Construction: estimated completion in 2019 |

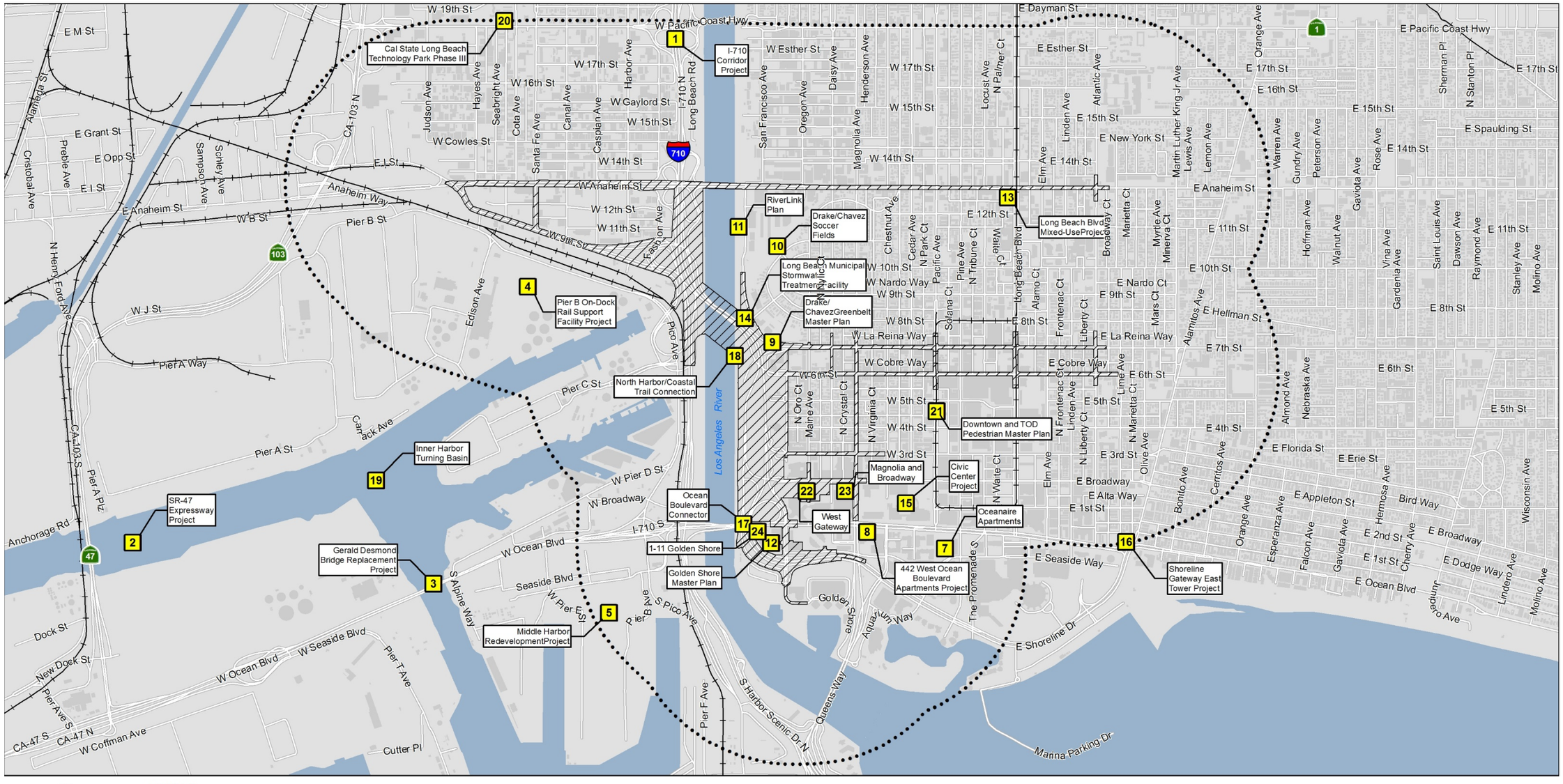
## Table 2.23-2. Current Reasonably Foreseeable Projects Considered in Cumulative Impact Analysis

| Project | Jurisdiction | Overview | Status |
|---|---|---|---|
| LB MUST | City of Long Beach | Develop a Municipal Urban Stormwater Treatment facility located along the east bank of the LA River, immediately north of the existing Shoemaker Bridge. Construct detention basins south of the existing Shoemaker bridge and surrounding the eastern terminus support structure of the proposed Shoemaker Bridge. | Construction: 2018 - 2023 |
| Civic Center Project | City of Long Beach | Construct major improvements to Civic Center, including a new 11-story Port Building, a new City Hall, an underground parking structure, a new two-story Main Library, redevelopment of the old Main Library into the new Lincoln Park, a seven-story, multi-family residential complex, and a new mixed use development after the demolition of existing City Hall. | Construction: 2015 – mid 2019 opening of the new city hall, port headquarters and main library. Construction of the new Lincoln Park is estimated to complete end of 2020. |
| Shoreline Gateway East Tower Project | 777 East Ocean Boulevard | Develop a 35-story mixed-use building (East Tower) with 315 residential units and 6,460 sf retail/restaurant space. | Construction: 2018 through end of 2021 |
| North Harbor/Coastal Trail Connection | POLB | Close a gap in the California Coastal Trail by providing a bicycle/pedestrian connection through the North Harbor Planning District of the Port Master Plan from Anaheim Street at the border of the cities of Los Angeles and Long Beach, to 6th and/or 7th Street in the City. | Proposed |
| Inner Harbor Turning basin | POLB | Dredging of approximately 50,000 cubic yards of material to widen the Turning Basin to 1,190 feet and deepen it to -52 feet MLLW. | Under Construction. |
| Ocean Boulevard Connection | POLB | The POLB is exploring options to connect the eastern terminus of the Mark Bixby Bicycle and Pedestrian Path with Ocean Boulevard across the LA River, and connecting to the LA River Bike Path and the City’s bicycle network. | Proposed |
| Cal State Long Beach Technology Park Phase III | City of Long Beach | The proposed project is an approximately 10- acre site on the north side of Pacific Coast Highway, also known as SR-1, between Cota Avenue and Hayes Avenue. The proposed project would include approximately 205,060 sf of warehousing land use, including approximately 20,000 sf of office space. The proposed project is intended to meet growing demand for warehouse space in West Long Beach. | Proposed |

## Table 2.23-2. Current Reasonably Foreseeable Projects Considered in Cumulative Impact Analysis

| Project | Jurisdiction | Overview | Status |
|---|---|---|---|
| Downtown and TOD Pedestrian Master Plan | City of Long Beach | The study area is divided into three major districts, roughly along the Blue Line light rail between I-405 and the Harbor. The proposed project includes a list of 14 high-priority pedestrian improvement projects in the Plan and represents $71 million in investment to be implemented over the next 15 years. These priority projects strike a balance between the Wardlow, Midtown and Downtown Districts. | Proposed |
| West Gateway | City of Long Beach | The project proposes a 40 story mixed use project consisting of 694 dwelling units, approximately 3,200 square feet of retail, and a commercial, residential and retail parking structure. | **Proposed** |
| Magnolia and Broadway | City of Long Beach | The project proposes a seven story, 142-unit residential development that will feature a mix of studio, one-, two, and three-bedroom units. Amenities consist of a roof deck with a pool, spa, fitness center, and community room for residents. | **Proposed** |
| 1-11 Golden Shore | City of Long Beach | The project proposes an eight story development with 11,000 square feet of commercial space, 750 dwelling units, an entertainment terrace, fireside terrace, garden room, game lawn, and resort pool and spa | **Proposed** |

Notes:
ACTA=Alameda Corridor Transportation Authority; Caltrans=California Department of Transportation; EIR=environmental impact report; EIS=environmental impact statement; FHWA=Federal Highway Administration; I-710=Interstate 710; LA River=Los Angeles River; LB MUST=Long Beach Municipal Urban Stormwater Treatment; MLLW mean lower low water POLB=Port of Long Beach; sf=square feet; SR-1=State Route 1; SR-47=State Route 47; TOD=transit oriented development




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 2.23-1. Current and Foreseeably Reasonable Projects**

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Of these projects, the one that has the potential for the greatest cumulative impact on the resources affected by the proposed Project is the LB MUST facility. The LB MUST facility will be located along the east bank of the LA River, immediately north of the existing Shoemaker Bridge. The LB MUST project includes facilities intended to improve water quality associated with urban runoff in the project area, which ultimately flows into the LA River. The project will be integrated with the Drake/Chavez Park Master Plan improvements and by providing pedestrian and bicyclist access to the LA River, and coastal post detention basins. These detention basins will be located just south of the existing bridge and will surround the eastern terminus support structure of the proposed Shoemaker Bridge. Construction of the LB MUST facility is tentatively scheduled for January 2018 with a completion date of May 2021, and construction of the Project is scheduled for January 2022 through December 2024.

## 2.23.5 Environmental Consequences

Potential temporary and permanent cumulative impacts on each resource identified in Table 2.23-1 are evaluated and presented below. Because Alternatives 2 and 3 (Design Options A and B) are similar, the Alternatives are considered to have similar cumulative impacts in this analysis.

### 2.23.5.1 Recreational Resources

#### Temporary Impacts

Project construction is anticipated to begin in 20224. Construction of the LB MUST project, which also would impact Cesar E. Chavez Park, is expected to be completed in 2021. If construction of the LB MUST Project is delayed, some construction activities would occur simultaneously within the park. There are no expected adverse construction impacts with the proposed Project; therefore, the proposed Project would not contribute to cumulative impacts on Cesar E. Chavez Park during construction. However, coordination between the City and the LB MUST facility would be expected to avoid any potential unanticipated impacts during construction.

#### Permanent Impacts

The proposed Project would convert Cesar E. Chavez parkland, Golden Shore RV Park, and LB MUST parkland to transportation use and replace the lost parkland with a net gain of approximately 2.7 acres of parkland. The net-positive changes to the park would occur in coordination with the City, regarding these three facilities. Therefore, the proposed Project would not have a cumulative adverse impact on Cesar E. Chavez Park. The proposed Project would also require a permanent aerial easement over LB MUST and LARIO Trail. Other reasonably foreseeable projects, in combination with this Project, would not exacerbate the need for the easement; therefore, the proposed Project would not contribute to a cumulative adverse impact recreational resources.

### 2.23.5.2 Traffic and Transportation

#### Temporary Impacts

Construction of the proposed Project would result in minimal impacts on local access and circulation because of the inclusion of a TMP, included as Project feature. In addition, Minimization Measure TR-1 requires a ramp closure study if full ramp closures would be necessary for 10 days or longer; findings and recommendations would be incorporated into the TMP. Project construction may overlap with other projects, such as LB MUST, in the vicinity of the proposed Project, which may affect local access and circulation. With coordination between the City and the LB MUST facility, or project owners of other nearby projects under construction at the same time, any potential unanticipated impacts

during construction would be avoided or minimized. Therefore, the Project would not contribute to a cumulative impact.

### Permanent Impacts

The methodology to determine which intersections are impacted by the proposed Project when comparing the No Build and Build Alternatives were based on the following criteria:

- If an intersection is degraded to LOS E or F, attributable to the proposed Project Build Alternatives; and
- If an intersection operates at LOS E or F under the Build Condition(s) and has more delay compared to the No Build Condition.

With the proposed Project under the Build Alternatives, all the study intersections would operate at satisfactory LOS with the exception of the intersection of Pier B Street/Pico Avenue at SR-710 ramps/9th Street intersection, which continues to operate at LOS F during the AM peak hour for all the scenarios. Since the intersection was already operating at an unsatisfactory LOS in the existing conditions, the operational and capacity issues are due to the existing system deficiencies and is not due to the newly added trips attributed to the proposed Project.

Although, the proposed Project under the build conditions would not adversely impact any of the study intersections, poor LOS and congestion in the Downtown Long Beach traffic study area would still result at the Pier B Street/Pico Avenue at SR-710 Ramps/9th Street intersection. The City does not currently plan to implement improvements at the intersection of Pier B Street/Pico Avenue due to the existing ROW constraints within the downtown area, which is predominately built out.

However, based on the Final EIR for the Pier B On-Dock Rail Support Facility Project (Pier B Project), certified January 22, 2018, the improvements as part of the 12th Street Alternative (or the selected Alternative) would consist of removing the Pier B Street/Pico Avenue at SR-710 Ramps/9th Street intersection. The Final EIR states that the opening year for the Pier B Project is 2025, which is the same opening year as the proposed Project. Therefore, it is assumed that the existing system deficiencies identified at the Pier B Street/Pico Avenue at SR-710 Ramps/9th Street intersection would be eliminated prior to the opening year or the proposed Project and, thus, traffic impacts are no longer anticipated under the 2025 and 2035 Build Condition for the proposed Project. Therefore, this Project under Alternative 2 and 3 (Design Options A and B) would not result in cumulative impacts on traffic and transportation.

## 2.23.5.3 Paleontology

### Temporary Impacts

Temporary activities such as earthmoving operations, which include grading and pile driving, could result in the destruction of fossils and fossiliferous rock units within the construction disturbance limits. As discussed in Section 2.11, Paleontology, the City of Long Beach in particularly areas east of the Shoemaker Bridge are designated as areas with a high potential to contain paleontological resources. Figure 2.11-2, Paleontological Sensitivities Map, shows the designated high areas in the Project area. Foreseeable projects considered in this analysis located within the high paleontological sensitivity area have the potential to affect the same nonrenewable paleontological resources. However, as stated in Section 2.11.4.1, Temporary Impacts, the potential impacts on paleontological resources would be

permanent direct or indirect impacts and are addressed below. Therefore, any analysis of cumulative direct or indirect temporary impacts is not applicable.

### Permanent Impacts

As discussed above, any impact on paleontological resources during construction would be permanent. Alternatives 2 and 3 (Design Options A and B) and the reasonably foreseeable projects have the potential to result in the permanent destruction of or damage to paleontological resources, loss of contextual data associated with paleontological resources, or loss of associations between paleontological resources during construction.

Implementation of Project Mitigation Measures PAL-1 through PAL-5 will involve the development of a Paleontological Mitigation Plan (PMP), preconstruction field surveys, full-time monitoring by a qualified paleontologist, and the recovery, identification, and appropriate storage of any paleontological resources found. While these measures would not avoid a potential permanent impact on a discovered paleontological resources, the measures would partially mitigate the impact by ensuring adequate process to treat and preserve the discovered paleontological resource. Similarly to this Project, the foreseeable cumulative projects would also be required to develop their own measures to mitigate potential permanent impacts on paleontological resources through a separate environmental review process.

Because of the high paleontological sensitivity in the area, the Project would have a considerable contribution to the cumulative impact on paleontological resources. Together, the reasonable foreseeable projects and the Project would have a cumulative impact on paleontological resources.

## 2.23.5.4 Noise

### Temporary Impacts

Alternatives 2 and 3 (Design Options A and B) would result in direct temporary impacts on sensitive receptors (residences, schools, churches, parks, etc.) through the construction and placement of support structures for the proposed new bridge and the demolition of the old bridge (Alternative 3 only). Implementation of Project features identified in Section 2.14, Noise, in addition to the implementation of Measure N-1 would minimize the Project's construction noise to 86 dBA. Project construction under Alternatives 2 and 3 (Design Options A and B) is would occur from January 2022 through December 2024. Construction of the LB MUST and Project would overlap. However, there are no sensitive receptors in the vicinity of the LB MUST and this Project. Therefore, there would be no temporary cumulative impact during construction.

### Permanent Impacts

Under Alternatives 2 and 3 (Design Options A and B), the increased noise levels associated with the Build Alternatives would not constitute a significant impact under CEQA. However, noise receptors locations evaluated as part of the proposed Project would be exposed to noise levels that approach or exceed the noise abatement criteria. Because of local access issues, noise abatement was not considered feasible; however, no receptors within the Project limits were exposed to substantial increases in long-term traffic noise. Therefore, no direct permanent impacts would occur as a result of the proposed Project under Alternatives 2 and 3 (Design Options A and B). Other transportation or development projects within the general area of the Project would also undergo their own separate environmental review process, which would require similar noise analyses and noise reducing or mitigating measures. Therefore, the noise exposure from the Project and the other foreseeable projects on these sensitive resources would not result in a cumulative impact on noise.

### 2.23.5.5 Natural Communities and Wetlands and Other Waters

#### Temporary Impacts

Construction of the new Shoemaker Bridge (Alternatives 2 and 3 [Design Options A and B]) and the demolition of the existing bridge (Alternative 3 [Design Options A and B]) would result in direct temporary impacts on deepwater aquatic habitat. In addition, temporary indirect impacts from construction-related impacts may occur, such as temporary reduction in food sources, an increased level of suspended solids, potential fuel spills, activities of equipment or personnel outside designated construction areas, and construction noise and vibration, stormwater runoff, traffic, and litter. The LB MUST Project would overlap in construction along the LA River. Other projects, such as the RiverLink Plan, Ocean Boulevard Connection, and Drake/Chavez Greenbelt Master Plan, have unspecified construction timeframes. Other projects potentially under construction at the same time may impact the same natural communities in similar ways; however, BMPs incorporated into each project would minimize any impacts for each individual project. The proposed Project under the Build Alternatives includes the application of Project features identified in Section 2.16, Natural Communities that are designed to reduce temporary impacts on natural communities. In addition, Avoidance, Minimization, and Mitigation Measures NC-1 through NC-5 would be implemented to avoid and minimize any temporary impacts on natural communities. Moreover, temporary direct impacts on the LA River would be replaced at a minimum 1:1 ratio with restoration of in-kind habitat. Therefore, the Project would not result in a substantially adverse cumulative impacts.

#### Permanent Impacts

The proposed Project would permanently impact deepwater aquatic habitat within the LA River. Permanent impacts on the LA River would be mitigated on- or off-site at a minimum 2:1 ratio. Implementation of Avoidance Minimization Measure NC-4, preparation of a HMMP in coordination with USACE, RWQCB, and CDFW, would ensure no net loss of estuarine habitat value or acreage. Therefore, the proposed Project would not result in a substantially adverse cumulative impacts.

### 2.23.5.6 Threatened and Endangered Species

#### Temporary Impacts

Construction of the new Shoemaker Bridge (Alternatives 2 and 3 [Design Options A and B]) and the demolition of the existing bridge (Alternative 3 [Design Options A and B]) would result in direct temporary impacts on deepwater aquatic habitat, which could, in turn, affect listed species.

Construction activities may temporarily cause California least terns and western snowy plover to avoid the BSA, which provides foraging habitat for this species. This may indirectly and temporarily limit foraging habitat for California least terns and western snowy plover during construction. However, these potential temporary impacts would cease upon the completion of construction.

Construction activities would not result in any direct temporary impacts on southern California steelhead since this species does not occur in the LA River at this time. Southern California steelhead is not known to occur nor is it expected to occur in the LA River at this time since they have not been documented in the vicinity in recent history and are considered extirpated from the LA River. Project construction would not directly impact this species since it is considered absent from the LA River watershed at this time. If this species does happen to migrate into the BSA during construction, it would likely only remain in the area temporarily due to lack of vegetation cover and other refugia and individuals would be able to swim away from construction equipment. Water quality would be slightly

reduced during construction as a result of equipment stirring up sediment, but the reduction is expected to be minimal and would not likely affect southern California steelhead

Although no northern anchovy, or other species listed under the Pacific Coast Groundfish Fisheries Management Plan are expected within the BSA, the LA River flows into Queensway Bay within 1 mile of its southern limits, which provides EFH for a number of species listed as coastal pelagic species and pacific coast groundfish species.

Project features and Avoidance Minimization Measures NC-1 through NC-5 and TE-1 through TE-6, identified in Section 2.16, Natural Communities, and Section 2.20, Threatened and Endangered Species, would address impacts on California least terns, western snowy plover, southern California steelhead, and EFH through consultation with the NMFS under Section 7 of the federal ESA. Other projects potentially under construction at the same time as the proposed Project would be subject to the same requirements of Section 7 to avoid and minimize potential impacts. Therefore, the Project would not result in substantially adverse cumulative impacts.

### Permanent Impacts

Alternatives 2 and 3 (Design Options A and B) are not expected to result in direct permanent impacts on California least terns because of the lack of suitable nesting habitat. However, due to the presence of potential foraging habitat for the California least tern and western snowy plover, Avoidance Minimization Measures TE-7 and TE-8, identified in Section 2.20, Threatened and Endangered Species, would be implemented as part of the Project.

Alternatives 2 and 3 (Design Options A and B) are not expected to result in direct permanent impacts on southern California steelhead because this species does not occur in the LA River at this time, and the Project would not restrict future migration of this species through the Project area following Project completion.

Alternatives 2 and 3 (Design Options A and B) would permanently impact deepwater aquatic habitat within the LA River, and permanent impacts on the LA River would be mitigated on- or off-site at a minimum 2:1 ratio. However, implementation of Mitigation Measure NC-4, preparation of a HMMP in coordination with USACE, RWQCB, and CDWF, would ensure no net loss of estuarine habitat value or acreage. With the inclusion of PF-87 regarding EFH, identified in Section 2.20, Threatened and Endangered Species, impacts on EFH would be either avoided or minimized through consultation with the NMFS under Section 7 of the federal ESA. As a result, impacts on threatened and endangered species would be avoided, minimized, and/or mitigated. Therefore, the proposed Project would not result in substantially adverse cumulative impacts.

## 2.23.6 Avoidance, Minimization, and/or Mitigation Measures

Cumulative impacts are anticipated with the implementation of Alternatives 2 and 3 (Design Options A and B) on paleontological resources. However, no additional avoidance, minimization, and/or mitigation measures outside of the measures identified above, are recommended at this time.

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# Chapter 3 California Environmental Quality Act (CEQA) Evaluation

## 3.1 Determining Significance under CEQA

The Project is subject to federal, as well as City of Long Beach (City) and state environmental review requirements because the City proposes the use of federal funds from the Federal Highway Administration (FHWA) and/or the project requires an approval from FHWA. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The City is the project proponent and the lead agency under CEQA. FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or a lower level of documentation, would be required. NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require Caltrans to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

The discussion in this chapter provides a description of the existing physical environment and baseline setting for each environmental issue area. For the purpose of this chapter and pursuant to the CEQA Guidelines (Section 15125(a)), the environmental setting is used to determine the impacts associated with the proposed Project and is based on the environmental conditions that existed at the time the NOP was published on April 1, 2016. The only difference between the NEPA baseline condition and CEQA baseline condition is that the NEPA baseline condition assumes planned LB MUST project, whereas the CEQA baseline condition does not.

# 3.2 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects would indicate that there are no impacts on a particular resource. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 in order to provide the reader with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

## 3.2.1 Aesthetics

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Except as provided in Public Resources Code Section 21099, would the project:*** | | | | |
| a) Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☐ | ☒ |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | ☒ |
| c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ☒ | ☐ |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☒ | ☐ |

### 3.2.1.1 CEQA Significance Determinations for Aesthetics

**a), b) <u>No Impact</u>**

As stated in Section 2.6, Visual and Aesthetics, there are no scenic vistas or state-designated scenic highways in the Project limits. According to the City's Urban Design Element and Mobility Element, Ocean Boulevard is a locally designated scenic route. However, improvements to Ocean Boulevard

within the Project limits would be limited to sidewalk tie-ins where Ocean Boulevard intersects with Golden Shore/Golden Avenue and Magnolia Avenue. Since these improvements would not change the overall use of the existing roadway, no impacts are anticipated and no mitigation is required.

**c) Less Than Significant Impact**

The proposed Project is located within an urban area of the Long Beach. The southern portion of the Project is located within the Coastal Zone. As discussed in Section 2.1.2, the CCC delegates power to local government to develop and enact their own LCP. As such, the Project would be required to be consistent with the City's LCP.

As discussed in Section 2.6, Visual and Aesthetics, temporary visual impacts during implementation of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would include construction activities, equipment staging, truck hauling, excavation activity, and detour signage. Project construction is anticipated to take 36 months, with an overall area of approximately 46 acres to be temporarily disturbed. As a result of construction, mature ornamental trees would be removed mostly within the portion of Cesar E. Chavez Park that is not accessible because of the connectors to the existing Shoemaker Bridge and SR-710. Replacement landscaping would be provided as part of the proposed Project and would be consistent with City, and Caltrans guidelines. Temporary impact areas to Cesar E. Chavez Park would be restored to a condition equivalent or better than prior to the Project.

The improvements proposed under Alternatives 2 and 3 (Design Options A and B) would be consistent with the goals and policies identified within the City's General Plan, LCP, and, applicable Master Plans. Additionally, Minimization Measures VIS-1, identified in Section 2.6.4, would develop a landscape plan that would ensure consistency with the Caltrans Highway Design Manual, City's General Plan, Development Districts, Master Plans, and LCP. Incorporation of Minimization Measure VIS-2 through VIS-4 would minimize impacts on removal of mature trees, develop a hardscape plan, and ensure adequate lighting within the Project limits. Therefore, impacts are considered less than significant and no mitigation measures are required.

Additionally, the visual character and quality with implementation of the proposed Project would be enhanced because of reuse of the existing Shoemaker Bridge for non-transportation uses (i.e., park), by removing old roadways and making this land available for park use. Implementation of Measures VIS-1, through VIS-4, provided in Section 2.6, Visual and Aesthetics, would minimize visual impacts during construction and operation of the proposed Project under Alternatives 2 and 3 (Design Options A and B). Therefore, impacts are considered less than significant and no mitigation is required.

**d) Less Than Significant Impact**

The Project under Alternatives 2 and 3 (Design Options A and B) currently receives light at night from traffic, street and bridge lighting; signalized intersections; freeway on- and off-ramps; the surrounding commercial zone; and limited light sources from nearby residential development. Existing lighting on the bridge and along the local connectors would be modified or relocated as part of the proposed Project under Alternatives 2 and 3 (Design Options A and B). Measure VIS-4, provided in Section 2.6, Visual and Aesthetics, would minimize potential impacts regarding light and glare. Therefore, impacts are considered less than significant and no mitigation is required.

## 3.2.2 Agriculture and Forest Resources

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:*** | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | ☐ | ☐ | ☐ | ☒ |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |

### 3.2.2.1 CEQA Significance Determinations for Agriculture and Forest Resources

**a), b), c), d) and e) <u>No Impact</u>**

The area within the Project limits is located within a highly urbanized area comprised of residential, commercial, industrial, transportation and utilities, and open space uses. There are no farmlands, agricultural resources, forest lands, or timberlands within or immediately adjacent to the disturbance limits of the proposed Project. Areas adjacent to the Project limits are not zoned for agricultural or timberland uses, and there are no Williamson Act contracts in effect within or adjacent to the Project limits. In addition, per Chapter 21.30 of the City's Municipal Code, the City does not have any land zoned for agricultural use. Therefore, implementation of the proposed Project would not conflict with existing City zoning for agricultural use and the proposed Project would not result in impacts related to the direct or indirect conversion of forestlands, farmlands, or timberlands to non-forest use, nonagricultural or nontimberland uses. No impacts are anticipated and no mitigation is required.

## 3.2.3 Air Quality

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:*** | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☐ | ☒ |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard? | ☐ | ☐ | ☒ | ☐ |
| c) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☐ |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

### 3.2.3.1 CEQA Significance Determinations for Air Quality

**a) No Impact**

As stated in Section 2.13, Air Quality, the AQMP uses the assumptions and projections by local planning agencies to determine control strategies for regional compliance status. The Build Alternatives are consistent with the scope of design concept of the FTIP. The project description and opening year are currently being amended in the RTP. Therefore, the Build Alternatives will not be in conformance with the SIP until the amendment is incorporated. Therefore, any projects causing a significant impact on air quality would impede the progress of the AQMP. For a project in the SCAB to be consistent with the AQMP, the pollutants emitted from the project must not exceed the SCAQMD significance threshold or cause a significant impact on air quality. If feasible mitigation measures can be implemented to reduce the project's impact level from significant to less than significant under CEQA, the project is considered to be consistent with the AQMP. The proposed Project under Alternatives 2 and 3 (Design Options A and B) would not result in any long-term change in CO, PM, MSAT, or GHG emissions. For this reason, mitigation measures are not required for the long-term operation of the Project. Hence, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is considered to be consistent with the City General Plan and the SCAG forecast and is therefore consistent with the AQMP. No impacts are anticipated and no mitigation is required.

**b) Less Than Significant Impact**

As described in Section 2.13, Air Quality, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is not expected to result in any concentrations exceeding the 1-hour or 8-hour CO standards. In addition, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not delay the attainment of the PM2.5 or PM10 air quality standards within the SCAB. Therefore, the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant. Thus, impacts are considered less than significant and no mitigation is required.

**c) Less Than Significant Impact**

The sensitive receptors within or adjacent to the Project limits are residential, park, and school uses. As discussed above, the proposed Project under Alternatives 2 and 3 (Design Options A and B) may result in temporary, short-term, construction-related increases in pollutant concentrations specifically associated with construction equipment emissions and fugitive dust. The implementation of SCAQMD Standard Conditions and Caltrans Standard Construction Specifications, provided in the project features and in Measures AQ-1 and AQ-2 in Section 2.13, Air Quality, would minimize potential short-term air quality impacts on sensitive receptors. Therefore, impacts are considered less than significant and no mitigation is required.

**d) Less Than Significant Impact**

The proposed Project under Alternatives 2 and 3 (Design Options A and B) may result in temporary, short-term, construction-related increases in objectionable odors. Implementation of the SCAQMD Standard Conditions and Caltrans Standard Construction Specifications, as described in Section 2.13, Air Quality, would minimize this potential short-term impact. Therefore, impacts are considered less than significant and no mitigation is required.

## 3.2.4 Biological Resources

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☒ | ☐ | ☐ |
| b) 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? | ☐ | ☒ | ☐ | ☐ |
| c) 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? | ☐ | ☒ | ☐ | ☐ |
| d) 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? | ☐ | ☒ | ☐ | ☐ |

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☒ | ☐ |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

### 3.2.4.1 CEQA Significance Determinations for Biological Resources

**a), b) Less Than Significant with Mitigation Incorporated**

No federally listed endangered or threatened plant and/or wildlife species were observed within the area of the Project limits during surveys. However, it is possible for federally listed or other special-status wildlife species to move onto the site prior to construction. There have been 12 federally listed as endangered, threatened, or candidate animal species are known to occur in the vicinity of the BSA.

The proposed Project under Alternatives 2 and 3 (Design Options A and B) is not expected to result in direct temporary impacts on western snowy plovers and California least terns because of the lack of suitable nesting habitat. Foraging western snowy plovers and California least terns are expected to move out of the BSA during construction. This may indirectly and temporarily limit foraging habitat for western snowy plovers and California least terns during construction. With the implementation of project features PF-18, PF-80 through PF-83, and Measures TE-1 through TE-6, temporary impacts are not anticipated to occur on western snowy plovers and California least terns during construction. In addition, the proposed Project under Alternatives 2 and 3 (Design Options A and B) is not expected to result in direct permanent impacts on western snowy plover and California least terns because of the lack of suitable nesting habitat. Foraging habitat for least terns is found within and along the LA River. To ensure bird safety during construction of the proposed Shoemaker Bridge under the proposed Project, Avoidance Measures TE-7 and TE-8 would be implemented to minimize impacts on bird species, including western snowy plover and least terns that fly up and down the LA River. Therefore, with the incorporation of applicable project features and the implementation of Measures TE-1 through TE-8, impacts would to nesting birds would be considered less than significant.

**Essential Fish Habitat**

The deepwater aquatic habitat in the BSA has been designated by the NOAA Fisheries Service as EFH for the northern anchovy (*Engraulis mordax*), the Project is located within an area designated as EFH for CPS and PCGS, and within a HAPC for PCGS in estuarine waters. Critical habitat is not designated for EFH species, but EFH is a protected habitat area. The HAPC designation does not necessarily mean additional protections or restrictions upon an area, but they help to prioritize and focus conservation efforts. Estuarine habitat within the BSA is stressed by development and provides an important but degraded migratory route for fish, including species that once inhabited the LA River

but are now extirpated from the area due to upstream habitat loss, such as southern steelhead trout (*Oncorhynchus mykiss*). While the BSA at this time does not provide high quality habitat, preservation of the HAPC area within the BSA would be important to future restoration efforts in other areas of the LA River.

The proposed Project under Alternatives 2 and 3 (Design Options A and B) is expected to result in 0.47 acres of permanent loss of EFH that is suitable for northern anchovy foraging and nursery habitat, which is less than 0.001 percent of total estuarine habitat along the California Coast. Additionally, Alternative 2 (Design Option A) and Alternative 3 (Design Option A) result in up to 7.53 acres of temporary impacts on deep water aquatic habitat. Alternative 2 (Design Option B) and Alternative 3 (Design Option B) result in up to 7.56 acres of temporary impacts on deep water aquatic habitat. It is expected that the proposed Project would result in a "may affect, but not likely to adversely affect" determination regarding Essential Fish Habitat. With implementation of the project features identified in Sections 2.16, Natural Communities, and 2.20, Threatened and Endangered Species in addition to Minimization Measure NC-1, Avoidance Measures NC-2, NC-3, NC-5, and Mitigation Measure NC-4, impacts would be less than significant with mitigation incorporated.

### California Sea Lion

The California sea lion has been observed in and adjacent to the Project BSA. However, the generally shallow depth and lack of suitable haul out sites in the BSA limit the suitability of habitat within the BSA for California sea lion. Construction activities in the LA River have the potential to result in direct impacts on California sea lions. The proposed Project under Alternatives 2 and 3 (Design Options A and B) may also have indirect and temporary impacts on them through incidental harassment due to the temporary loss of potential foraging habitat during construction. With the inclusion of project features identified in Section 2.16, Natural Communities, in addition to the implementation of Minimization Measure NC-1, Avoidance Measures NC-2, NC-3, NC-5, as well as Mitigation Measure NC-4, potential direct and indirect temporary impacts on California sea lions would be less than significant with mitigation incorporated.

### c) Less Than Significant with Mitigation Incorporated

The LA River connects directly to the Pacific Ocean approximately 1 mile south of the BSA. The part of the LA River in the BSA has a tidal influence from the Pacific Ocean. Since the LA River is a TNW, the USACE would assert jurisdiction under Section 404 of the CWA. In addition, because the part of the LA River in the Shoemaker BSA has tidal influence, it is also subject to jurisdiction by the USACE under Section 10 of the Rivers and Harbors Act of 1899. A small amount of wetland habitat occurs within the BSA at Anaheim Street Bridge. Sediment that has accumulated on the toe of the riprap banks supports two small patches of California bulrush (*Schoenoplectus californicus*), a plant species identified as almost always occurring in wetlands. No other areas supporting hydrophytic vegetation occur in the BSA.

The BSA includes a total of 10.29 acres of waters subject to USACE jurisdiction, pursuant to Section 404 of the CWA, 0.01 acre of wetland waters associated with the Freshwater Emergent Marsh habitat on the south side of the Anaheim Street Bridge, and 9.94 acres of earthen-bottom tidally influenced waters subject to Corps jurisdiction pursuant to Section 10 of the Rivers and Harbors Act.

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in direct temporary impacts on deepwater aquatic habitat through the construction of the new Shoemaker Bridge and demolition of the existing bridge. The existing Shoemaker Bridge would be wholly or partly

removed in Alternative 3 and Alternative 2, respectively. Four support structures would be removed below the invert of the channel in Alternative 2 and five support structures would be removed below the invert of the channel in Alternative 3. Alternative 2 (Design Option A) and Alternative 3 (Design Option A) result in up to 7.53 acres of temporary impacts on deep water aquatic habitat. Alternative 2 (Design Option B) and Alternative 3 (Design Option B) result in up to 7.56 acres of temporary impacts on deep water aquatic habitat.

In addition to direct temporary impacts, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in temporary indirect impacts from construction-related impacts, such as the temporary reduction in benthic invertebrate fauna (i.e., food sources), an increased level of suspended solids from disruption of the soft bottom, debris, potential fuel spills from construction equipment, and activities of equipment or personnel outside designated construction areas, as well as operation impacts including those on adjacent habitats caused by construction noise and vibration, storm water runoff, traffic, and litter.

Construction may indirectly impact deepwater aquatic habitat permanently through enhancing the germination and proliferation of nonnative invasive plant species. Indirect impacts are difficult to quantify because they are a result of normal activities and can vary day to day. Project features found in Section 2.9, Water Quality and Storm Water Runoff, require preparation and implementation of a SWPPP and implementation of BMPs during construction to prevent resuspension of contaminated sediment in the LA River. In addition, project features in Section 2.16, Natural Communities, would prevent impacts on sensitive natural communities within the Project limits.

Prior to construction, the City's Resident Engineer will ensure that HMMP will be developed in coordination with the USACE, RWQCB, and the CDFW and will ensure no net loss of estuarine habitat value or acreage, as specified in Mitigation Measure NC-4 in Section 2.16, Natural Communities.

Under Alternatives 2 and 3 (Design Options A and B), direct permanent impacts would result from the installation of structures to support the new Shoemaker Bridge (i.e., columns). Alternative 2 would result in a permanent net loss of 0.47 or 0.44 acre of waters of the U.S. under Design Options A and B, respectively. Alternative 3 would result in a permanent net loss of 0.45 or 0.42 acre of waters of the U.S. under Design Options A and B, respectively. Four support structures would be removed below the invert of the LA River Flood Channel under Alternative 2 (Design Options A and B) and five support structures would be removed below the invert of the LA River Flood Channel under Alternative 3 (Design Options A and B).

Estuarine habitat would be subject to an increase in permanent shade impacts as a result of the new Shoemaker Bridge under Alternatives 2 and 3 (Design Options A and B), and the repurposed portion of the existing Shoemaker Bridge under Alternative 2 (Design Options A and B). A permanent shade increase of 0.73 acre would occur under Alternative 2 (Design Option A) and 0.68 acre under Alternative 2 (Design Option B). A permanent shade increase of 0.50 acre would occur under Alternative 3 (Design Option A) and 0.45 acre under Alternative 3 (Design Option B). However, given that the bridge is oriented in a northeast southwest direction and well above the water’s surface, the increase in shading impacts would still be considered minimal. Additionally, species utilizing the habitat are adapted to large ranges in salinity, temperature, and dissolved oxygen, as indicated by their ability to utilize a wide range of habitats from open ocean to shallow estuaries.

With the inclusion of project features identified in Sections 2.9, Water Quality and Stormwater Runoff and Section 2.16, Natural Communities and the implementation of Minimization Measure NC-1, Avoidance Measures NC-2, NC-3, NC-5, and Mitigation Measure NC-4 identified in Section

2.16, Natural Communities, impacts on state and federal jurisdictional waters would be less than significant mitigation incorporated.

**d) Less Than Significant with Mitigation Incorporated**

The LA River provides a movement corridor for aquatic wildlife and birds between the Pacific Ocean and habitat upstream of the project area.. The proposed Project under Alternatives 2 and 3 (Design Options A and B) would temporarily impact Essential Fish Habitat; therefore, it may interfere with the movement of migratory fish. As discussed above, in Response a, the inclusion of project features and the implementation of Minimization Measure NC-1, Avoidance Measures NC-2, NC-3, NC-5, and Mitigation Measure NC-4 included in Section 2.16, Natural Communities, would reduce potential impacts to less than significant levels with mitigation incorporated.

The proposed project under Alternatives 2 and 3 (Design Options A and B) would temporarily impact avian use of the LA River for foraging and migration. New bridge designs could result in occasional bird strikes, including migratory birds. With the inclusion of Measures TE-1 through TE-8 included in Section 2.20, Threatened and Endangered Species, no noticeable changes in bird strike frequency of migratory birds during or after construction is anticipated to occur.

**e) Less Than Significant Impact**

Trees in the City are protected under Chapter 14.28 (Trees and Shrubs) of the City's Municipal Code, which regulates the planting, maintenance, and removal of trees along any City street, and a permit would be acquired from the Director of Public Works, as required per Section 14.28.060 of the City's Municipal Code. Guards would be placed around any trees in the vicinity of Project construction activities located along the street, alley, court or other public place in order to prevent injury to protected trees. Any removal or maintenance of trees along City streets would be conducted per the requirements of Chapter 14.28. Therefore, impacts are considered less than significant and no mitigation is required.

**f) No Impact**

There are no MSHCPs or any other adopted HCPs or NCCPs within the Project limits. Therefore, no impacts are anticipated and no mitigation is required.

## 3.2.5 Cultural Resources

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? | ☐ | ☐ | ☒ | ☐ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | ☐ | ☐ | ☒ | ☐ |

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| c) Disturb any human remains, including those interred outside of dedicated cemeteries? | ☐ | ☐ | ☒ | ☐ |

### 3.2.5.1 CEQA Significance Determinations for Cultural Resources

**a) Less Than Significant Impact**

As stated previously in Section 2.7, Cultural Resources, a single, resource located in the APE, the LA River Flood Channel, is assumed eligible for the NRHP for the purposes of this Project only, pursuant to Stipulation VIII.C.4 of the FHWA Section 106 PA. However, a full evaluation of the entire channel is precluded by the resource's large size and the limited potential for effects. Presumption of eligibility was approved after consultation with Caltrans CSO on April 16, 2018, pursuant to Stipulation VIII.C.4 of the FHWA Section 106 PA. The other four resources evaluated were determined not eligible for listing in either the NRHP or CRHR. In a letter dated July 3, 2019, SHPO concurred with Caltrans' determination of non-eligibility for listing in the NRHP for the four built environmental resources and had no objection to the assumption of eligibility for the LA River Flood Channel. The proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in grade-separated crossing improvements to the LA River Flood Channel, including an aerial easement for a bridge over the segment and the construction of a pier within the boundary of the LA River Flood Channel. There would be no permanent physical changes to the LA River Flood Channel's intact character-defining features and the new Shoemaker Bridge would not have a substantial effect on the LA River Flood Channel's physical design or setting, nor would it reduce the integrity of the segment to the degree that it is no longer eligible for listing in the NRHP or CRHR. Thus, impacts on cultural resources would be considered less than significant with the inclusion of project features identified in Section 2.7, Cultural Resources, and no mitigation is recommended or required.

In addition, according to the HRER, the street improvements and traffic calming measures extend through the locally designated Drake Park/Willmore City Historic District. The work within the district would occur along 6th and 7th Streets between Magnolia Avenue and Park Court and would be limited in these areas to restriping the existing striped roadway and modifying existing signals. As identified in the HRER, the Drake Park/Willmore City Historic District was evaluated for the NRHP and CRHR as part of the Daisy Avenue Bicycle Boulevard Project in 2016. That evaluation determined that the district was not eligible for the NRHP or CRHR. Because the Drake Park/Willmore City Historic District has already been determined ineligible for the NRHP and CRHR, it was not re-evaluated as part of this project. There are no other locally designated historical resources within the historical resources Project limits. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) Finding of No Adverse Effect (FNAE) with Standard Conditions with the implementation of the Secretary of the Interior's Standards (SOIS) Plan for the Treatment of Historic Properties as identified in the Measure CR-1. With the implementation of Measure CR-1, impacts to the LA River Channel would be avoided, and impacts would be considered less than significant.

**b) Less Than Significant Impact**

Implementation of the proposed Project under Alternatives 2 and 3 (Design Options A and B) may cause the disturbance of previously unknown archaeological resources within the Project limits. Although considered unlikely, construction in undeveloped areas or redevelopment that requires excavation to depths greater than current foundations has the potential to encounter unknown archaeological resources. In the event cultural materials are discovered during Project construction, all earthmoving activity would cease in the immediate area of the discovery area and a qualified archaeologist would access the significant of the find. The project features regarding the handling of cultural resources or human remains found during ground disturbance activities identified in Section 2.7, Cultural Resources, would avoid and/or minimize potential impacts on previously unknown archaeological resources. Therefore, impacts are considered less than significant and no mitigation is required.

**c) Less Than Significant Impact**

Although considered unlikely, there is the potential to encounter unknown buried cultural materials or human remains within the APE during construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B). If buried archaeological or cultural materials are exposed during construction, it is Caltrans policy that work in the area must halt until a qualified archaeologist can evaluate the nature and significance of the find. In the event that previously unknown buried cultural materials or human remains are encountered during construction, corresponding project features (found in Section 2.7, Cultural Resources) would avoid and/or minimize potential impacts on previously unknown cultural resources or human remains. Therefore, impacts are considered less than significant and no mitigation is required.

## 3.2.6 Energy

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ☐ | ☒ |

### CEQA Significance Determinations for Energy

**a) Less than Significant Impact.**

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in temporary fuel usage associated with construction vehicles and equipment. Project construction would involve grubbing/land clearing, grading/excavation, drainage/utilities/sub-grade, paving, and striping during

construction. The Project's construction emissions under the Alternatives 2 and 3 (Design Options A and B) were estimated using the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, Version 9.0.0. Default equipment assumptions for the Road Construction Emissions Model were used in developing the emissions estimates.

The grading and excavation phase during construction activities would result in maximum daily construction emissions and thus, would be the most energy intensive. Energy use for construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B) is estimated to result in the short-term consumption of up to 377,398 gallons of fuel from construction equipment. This represents a small demand on local and regional fuel supplies that would be easily accommodated, and this demand would cease once construction is complete. Moreover, construction-related energy consumption would be temporary and not a permanent new source of energy demand, and demand for fuel would have no noticeable effect on peak or baseline demands for energy.

The proposed improvements may include additional street lighting, restriping, turn lanes, bicycle, pedestrian, and streetscape improvements. Thus, the Alternatives 2 and 3 (Design Options A and B) would accommodate the projected increase in demand for the City's non-motorized transportation facilities, thus promoting transportation energy efficiency. Based on the TOAR (Caltrans 2019a), Alternative 2 (Design Option A) yields superior LOS results compared to Alternative 2 (Design Option B) under 2035 Build Conditions. As a result, energy savings are associated with the Alternative 2 (Design Option A) compared to Alternative 1 (No Build). As Alternatives 2 and 3 (Design Options A and B) would not increase capacity and thus would not increase traffic using the Shoemaker Bridge and associated downtown connectors, a net increase in energy consumption is not anticipated. In addition, with implementation of Project Features PF-3, PF-71, and PF-88, as well as Measure E-1, which would assist in minimizing impacts on energy consumption through the use of LED lighting in traffic signals and lights, energy impacts would be considered less than significant.

**b) No Impact.**

The Project would comply with all SCAQMD regulations regarding use of construction vehicles and equipment. During construction activities, construction traffic would be scheduled and would reduce congestion caused by idling vehicles along local roads during peak travel times (Caltrans 2018g). Implementation of the Alternatives 2 and 3 (Design Options A and B) would provide consistency with the improvements proposed as part of the I-710 Corridor Project and the City's General Plan Mobility Element (City of Long Beach 2013) as the Project's Build Alternatives under Design Options A and B would increase pedestrian and bicycle access. Therefore, Alternatives 2 and 3 (Design Options A and B) would be consistent with the following strategy and policy identified in the Mobility Element of the City's General Plan:

- **Strategy No. 1**: Establish a network of complete streets that complements the related street type.
- **Policy 1-1:** To improve the performance and visual appearance of Long Beach's streets, design streets holistically using the "complete streets approach" which considers walking, those with mobility constraints, bicyclists, public transit users, and various other modes of mobility in parallel.

The proposed Project is listed in the 2016 financially constrained RTP, which was approved by the SCAG on April 7, 2016, and FHWA and FTA made a regional conformity determination finding on June 1, 2016. The 2016 RTP (Amendment 3) was found to conform by FHWA and FTA on December 17,

2018. The Project is also included in the financially constrained 2019 FTIP. The SCAG's 2019 Regional FTIP was determined to conform by FHWA and FTA on December 17, 2018 (Caltrans 2019h). The FTIP, Amendment 15, was approved by the FHWA on November 25, 2019. The Project under Alternatives 2 and 3 are consistent with the scope of design concept of the FTIP. The project description and opening year are currently being amended in the RTP. Therefore, the Project under Alternatives 2 and 3 will not be in conformance with the SIP until the amendment is incorporated. In California, no new regional conformity determinations can be approved by FHWA until emissions inventories are updated with new assumptions reflecting the recently-implemented Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. Once the RTP is officially amended, the Project under Alternatives 2 and 3 will be consistent with the latest conforming RTP and no impacts are anticipated and no mitigation is required.

The Project limits do not currently contain any generators of renewable energy. The proposed Project would not obstruct or conflict with a state or local plan for renewable energy. The proposed Project's implementation of Measures E-1 and VIS-4 regarding use of LED lighting is consistent with State and local policies with regards to energy efficiency (CPUC n.d.). Therefore, no impacts are anticipated and no mitigation is required.

### 3.2.7 Geology and Soils

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) 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? Refer to Division of Mines and Geology Special Publication 42? | ☐ | ☐ | ☒ | ☐ |
| ii) Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv) Landslides? | ☐ | ☐ | ☒ | ☐ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | ☐ | ☐ | ☒ | ☐ |

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | ☐ | ☐ | ☒ | ☐ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | ☐ | ☐ | ☐ | ☒ |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☒ | ☐ | ☐ |

### 3.2.7.1 CEQA Significance Determinations for Geology and Soils

**a) (i) Less Than Significant Impact**

No active or potentially active surface faults are known to exist within or near the Project limits. In addition, the site is not located within a designated Alquist-Priolo Earthquake Fault Zone. However, the Project is located within a seismically active region that would be subject to future seismic shaking from earthquakes occurring along local or regional faults. Active faults without surface expression (blind faults) or other potentially active seismic sources capable of generating an earthquake may be present under the site at depth but not yet identified. The Newport Inglewood-Rose Canyon Fault and Palos Verdes Fault within the Project vicinity have been documented as producing earthquakes with a magnitude of 7.2. Therefore, the proposed Project may be subject to seismic ground shaking.

Requirements for a geotechnical investigation during final design (Measure GEO-1, found in Section 2.10, Geology, Soils, Seismic, and Topography) and implementation of recommendations from the report and adherence to Caltrans' Seismic Design Criteria and the Uniform Building Code (Measure GEO-2, found in Section 2.10, Geology, Soils, Seismic, and Topography) are sufficient to avoid and/or minimize impacts related to surface fault rupture. Therefore, impacts are considered less than significant and no mitigation is required.

**a) (ii) Less Than Significant Impact**

The Project is located in the highly seismic Southern California region within the influence areas of several fault systems. These fault systems are considered active and well-defined and are capable of producing potentially damaging seismic groundshaking. Therefore, it is anticipated that the Project would periodically experience ground acceleration as the result of moderate to large seismic events. The structures (e.g., Shoemaker Bridge and ramps) constructed for the proposed Project would be potentially subject to adverse impacts related to seismic ground shaking. However, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would be designed in accordance with the requirements of Caltrans's Seismic Design Criteria and the Uniform Building Code, and Measures GEO-1 and GEO-2, found in Section 2.10, Geology, Soils, Seismic, and Topography, would be

implemented to minimize potential impacts due to seismic ground shaking. Therefore, impacts are considered less than significant and no mitigation is required.

**a) (iii) Less Than Significant Impact**

The Project is within a potential liquefaction hazard zone. Due to the varying and potentially high groundwater elevations in the area and the presence of loose/soft soils at the area of the Project limits, the potential for liquefaction during an earthquake is considered high. However, as detailed in Measure GEO-1, found in Section 2.10, Geology, Soils, Seismic, and Topography, the potential for liquefaction effects on the structures constructed for the proposed Project under Alternatives 2 and 3 (Design Options A and B) would be further investigated during final design. If recommended by the geotechnical investigation, final design would include design features related to liquefiable soils. Therefore, impacts are considered less than significant and no mitigation is required.

**a) (iv) Less Than Significant Impact**

The topography of the Project limits is relatively flat with no natural slopes, except for existing the embankments and levees of the LA River. However, earthquake induced slope instability is possible in areas where the potential for liquefaction is present. As previously stated the potential for liquefaction in the Project limits is high. Measures GEO-1 and GEO-2, found in Section 2.10, Geology, Soils, Seismic, and Topography, would be implemented to minimize potential impacts under Alternatives 2 and 3 (Design Options A and B) due to seismic ground shaking. Therefore, impacts are considered less than significant and no mitigation is required.

**b) Less Than Significant Impact**

Construction activities for the proposed Project under Alternatives 2 and 3 (Design Options A and B), such as grading and cut and fill slopes, would disturb soil and alter existing landforms. Temporary impacts would include soil compaction and an increased possibility of soil erosion. Exposed soils would be particularly prone to erosion during construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B), especially during heavy rains. Erosion impacts related to water quality are evaluated in Section 2.9, Water Quality and Storm Water Runoff. With the inclusion of project features, described in Section 2.9, Water Quality and Storm Water Runoff, impacts during construction and operation related to erosion would be considered less than significant, and no mitigation is required.

**c) Less Than Significant Impact**

The Project is within a potential liquefaction hazard zone and seismically active region. Due to the varying and potentially high groundwater elevations in the area and the presence of loose/soft soils at the Project limits, the potential for liquefaction during a design level earthquake is considered high. Additionally, there is potential for liquefaction-induced spreading and which would need be further evaluated during final design. Measure GEO-2, found in Section 2.10, Geology, Soils, Seismic, and Topography, would be implemented to minimize potential impacts due to settlement liquefaction or related secondary seismic impacts. Therefore, impacts are considered less than significant and no mitigation is required.

**d) Less Than Significant Impact**

The proposed Project under Alternatives 2 and 3 (Design Options A and B) may be subject to direct adverse impacts associated with expansive and collapsible soils. Caltrans' Standard Conditions require the preparation of a detailed geotechnical investigation during final design of the proposed

Project under Alternatives 2 and 3 (Design Options A and B), as specified in Measure GEO-1 in Section 2.10, Geology/Soils/Seismicity/Topography. The detailed geotechnical investigation would address the potential for expansive and collapsible soils in the Project limits. If expansive and/or collapsible soils are identified, the final design would include design features related to expansive and collapsible soils as specified in Measure GEO-1, found in Section 2.10, Geology, Soils, Seismic, and Topography. Therefore, impacts are considered less than significant, and no mitigation is required.

**e) No Impact**

No septic or alternative waste treatment systems would be required as part of the proposed Project under Alternatives 2 and 3 (Design Options A and B) because it is a transportation facility and would not generate sewer demand. Therefore, no impacts are anticipated and no mitigation is required.

**f) Less Than Significant with Mitigation Incorporated**

Paleontological resources, or fossils, are the remains of extinct organisms, and provide the only direct evidence of ancient life. They are considered to be non-renewable resources because they cannot be replaced once they are destroyed. Although the area within the Project limits is highly developed and disturbed, it is underlain by multiple geological units, some of which have high potential to contain significant paleontological resources based on known fossil collecting localities and information from published paleontological and geological literature. In general, surface disturbing activities such as grading and excavation have the potential to cause significant impacts on nonrenewable surface and subsurface paleontological resources. Development and implementation of a Paleontological Mitigation Plan (PMP) would be required and is identified in Minimization Measures PAL-1 through PAL-5 in Section 2.11, Paleontology. Upon completion of construction activities, a Paleontological Mitigation Report (PMR) documenting implementation of the approved PMP Paleontological Mitigation Report would be prepared by a Principal paleontologist (also identified in Measures PAL-1 through PAL-5). With the implementation of Measures PAL-1 through PAL-5, potential impacts on paleontological resources would be considered less than significant with mitigation incorporated.

## 3.2.8 Greenhouse Gas Emissions

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☒ | ☐ |

**a) Less Than Significant Impact**

As discussed in Section 3.3.6, when compared to the Existing (2015) conditions, Alternatives 2 and 3 would reduce the GHG emissions by 1,187 MT of $CO_2e$ per year in 2025 and 1,580 MT of $CO_2e$ per

year in 2035. Therefore, because there is a reduction in future emissions compared to existing emissions, there is evidence of substantial progress in reducing emissions and the impact may be considered less than significant.

**b) Less than Significant Impact**

As discussed in Sections 3.3.6.1 through 3.3.6.4, the proposed Project is consistent with the State's GHG reduction goals, the CARB Scoping Plan, and SCAG's 2016 RTP/SCS in addition to the City's CAAP. Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases and the impact may be considered less than significant.

## 3.2.9 Hazards and Hazardous Materials

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| b) 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? | ☐ | ☐ | ☒ | ☐ |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☒ | ☐ |
| d) 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? | ☐ | ☐ | ☒ | ☐ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. | ☐ | ☐ | ☐ | ☒ |

### 3.2.9.1 CEQA Significance Determinations for Hazards and Hazardous Materials

**a) Less Than Significant Impact**

During construction, there is the potential to encounter hazardous materials in the soils and existing road materials. The proposed Project under Alternatives 2 and 3 (Design Options A and B) would involve disturbance of soils and demolition of existing structures; therefore, hazardous soil contaminants such as ADL, PCBs, lead chromate, and ACM may be encountered during Project construction. In addition, soil impacted by petroleum hydrocarbons, halogenated compounds, or other hazardous materials could be encountered at the properties that would be partially or fully acquired for the proposed Project under Alternatives 2 and 3 (Design Options A and B).

Typical hazardous materials used during construction (e.g., solvents, paints, fuels) would be handled in accordance with standard procedures. There are standard regulations and Caltrans policies (avoidance and minimization measures) that must be followed with respect to the use, storage, handling, disposal, and transport of potentially hazardous materials during construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B) to protect human health and the environment.

With the inclusion of project features identified in Section 2.12, Hazardous Waste/Materials, in addition to Measures HAZ-1 through HAZ-9 require further testing and proper handling of hazardous waste and materials. With implementation of these measures, potential impacts related to hazardous materials would not be significant.

Routine maintenance activities during operation of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would be required to follow applicable regulations with respect to the use, storage, handling, transport, and disposal of potentially hazardous materials. Therefore, the operation of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not result in significant impacts related to hazardous waste or materials. No mitigation is required.

**b) Less Than Significant Impact**

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would not create a significant hazard to the public or the environment through any reasonably foreseeable upset or accident conditions involving the release of hazardous materials. As discussed above in Response a, routine hazardous materials such as paint, solvents, and fuel would be used, handled, stored, disposed of, and transported during construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B) in accordance with applicable local, State, and federal regulations. Therefore, impacts are considered less than significant and no mitigation is required.

**c) Less Than Significant Impact**

Twelve schools are located within 0.25 mile of the Project limits. These schools are identified as Cesar Chavez Elementary School, Edison Elementary School, Oropeza International Elementary School, Roosevelt Elementary School, Stevenson Elementary School, George Washington Middle School, Long Beach Polytechnic High School, PAAL Academy, Renaissance High School, St. Anthony High School, St Anthony Elementary School, and Montessori on Elm are within 0.25 mile of the proposed Project. However, as discussed above in Response a, routine hazardous materials such as paint, solvents, and fuel would be used, handled, stored, disposed of, and transported during construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B) in

accordance with applicable local, State, and federal regulations. Therefore, impacts are considered less than significant and no mitigation is required.

**d) Less Than Significant Impact**

Based on the due diligence efforts completed as part of the ISA, 28 properties in total were identified to have RECs within the hazardous waste/materials study area. Of these 28 properties, 8 were identified to have a potential impact on the Project under Alternatives 2 and 3 (Design Options A and B) (5 properties are located within the Project limits and 3 properties are located adjacent to the Project limits). Potential contamination associated with these properties are due to existing and past land uses and operation activities (e.g., existing and former gas stations, active oil wells, maintenance yards, and industrial facilities), which may have resulted in a release or spill.

Under Alternatives 2 and 3 (Design Options A and B), there is a potential for the Project under Alternatives 2 and 3 (Design Options A and B) to encounter soil and/or groundwater contamination associated with eight properties. Interviews with regulatory agency officials and/or PSIs are recommended for these properties to further assess for the presence of contamination issues. With the implementation of Measures HAZ-1 through HAZ-9 identified in Section 2.12, Hazardous Waste/Materials, impacts would be considered less than significant.

**e) No Impact**

The proposed Project is not located within 2 miles of a public airport, public use airport, or within the vicinity of a private airstrip. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not result in the construction of any features that would pose a hazard to air traffic in the vicinity of the Project limits, nor would it result in aviation-related safety impacts. Therefore, no impacts are anticipated and no mitigation is required.

**f) Less Than Significant Impact**

Traffic delays are expected during Project construction. In addition, travel times would increase due to construction staging along the freeway. As a result, some temporary impairment to emergency response times may occur. However, the proposed Project under Alternatives 2 and 3 (Design Options A and B) includes a Caltrans-required TMP as a Project Feature PF-3. Thus, these temporary impacts during construction are considered less than significant and no mitigation is required.

**g) No Impact**

The Project is located in an urbanized area surrounded by existing commercial, industrial, and residential development. There are no wildlands or wildland fire hazard areas in the vicinity of the Project limits. No impacts are anticipated and no mitigation is required.

## 3.2.10 Hydrology and Water Quality

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | ☐ | ☐ | ☒ | ☐ |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin? | ☐ | ☐ | ☐ | ☒ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | | |
| i) result in substantial erosion or siltation on- or off-site; | ☐ | ☐ | ☒ | ☐ |
| ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; | ☐ | ☐ | ☒ | ☐ |
| iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | ☐ | ☐ | ☐ | ☒ |
| iv) impede or redirect flood flows? | ☐ | ☐ | ☐ | ☒ |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ☒ | ☐ |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ☐ | ☒ |

### 3.2.10.1 CEQA Significance Determinations for Hydrology and Water Quality

**a) <u>Less Than Significant Impact</u>**

During construction activities under Alternatives 2 and 3 (Design Options A and B), excavated soil would be exposed and there would be an increased potential for soil erosion compared to existing conditions. In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction of the proposed Project with the potential to be transported via storm water runoff into receiving waters.

During operation under Alternatives 2 and 3 (Design Options A and B), pollutants of concern of a transportation facility include sediment/turbidity, nutrients, organic compounds, trash and debris,

oxygen-demanding substances, bacteria and viruses, oil and grease, pesticides, and metals. These pollutants could also be discharged into the LA River in storm water runoff as a result of incidental drippings from vehicles, and accidental spills during maintenance activities, such as bridge painting and surface treatments.

Alternatives 2 and 3 (Design Options A and B) would reduce the impervious area by approximately 10 acres; therefore, providing an overall net positive effect for runoff. The proposed Project under Alternatives 2 and 3 (Design Options A and B) includes project features included in Section 2.9, Water Quality that complies with applicable NPDES permit requirements for construction and operation to protect the beneficial uses of waters. In addition, these project features include BMPs that would be implemented during construction and operation of the proposed Project under Alternatives 2 and 3 (Design Options A and B). Project features provided in Section 2.9, Water Quality and Storm Water Runoff, are regulatory requirements that would minimize Project impacts on water quality during construction and operation under Alternatives 2 and 3 (Design Options A and B).

Since the proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in a DSA greater than 1 acre, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would be required to comply with the NPDES Construction General Permit as specified within Project Feature PF-12. In addition, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would be required to prepare and implement a SWPPP, also identified within Project Feature PF-12. The project features identified within Section 2.9 Water Quality and Storm Water Runoff as well as the SWPPP prepared for the proposed Project prior to construction would identify temporary Best Management Practices (BMPs) to address the potential temporary impacts on water quality. Project Features PF-6 through PF-10 included in Section 2.9 Water Quality and Storm Water Runoff are comprised of standard measures and BMPs that would be included as a part of the Project and also identified within the proposed Project's SWPPP in order to address general construction impacts on water quality. Therefore, impacts are considered less than significant and no mitigation is required.

**b) <u>No Impact</u>**

Dewatering is anticipated during Project construction under Alternatives 2 and 3 (Design Options A and B); however, any groundwater dewatering that could occur would be considered minimal. The proposed Project under Alternatives 2 and 3 (Design Options A and B) would not use groundwater during operation, since it is a transportation Project and would not cause additional growth and need for additional groundwater supply. As a result, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not impede sustainable groundwater management within the LA Groundwater Basin. Therefore, no impacts are anticipated and no mitigation is required.

**c) (i) (ii) <u>Less than Significant Impact</u>**

As discussed in Response 3.2.10.1a, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would be required to comply with the Construction General Permit and develop a SWPPP to address all potential sources of pollution, which may affect water quality including sediment erosion and siltation.

Implementation of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not significantly alter the existing drainage pattern within the Project limits and surrounding area. The area drainage patterns are anticipated to be similar to existing conditions, with only minor modifications to accommodate the improvements to the bridge and local connectors. The proposed Project under Alternatives 2 and 3 (Design Options A and B) would modify the existing storm drain systems and treat

surface runoff through bio-treatment where hydraulically feasible prior to entering into the existing pump stations located at 6th Street and Golden Shore. Treatment options, including bio-swales, bio-strips, and wet basins, and/or an urban runoff and reuse facility would be incorporated as landscape features that would be integrated with the overall landscaping form of Drake Park and Cesar E. Chavez Park. Water treatment would be coordinated with the design of the new LB MUST facility currently being developed by the City. LB MUST will accommodate drainage from the northern portion of the Project north of Broadway and a new detention basin would be constructed as a part of the Project to accommodate drainage south of Broadway within the Project vicinity.

In addition, the replacement of the Shoemaker Bridge under Alternatives 2 and 3 (Design Options A and B) would involve the placement of new columns in the LA River. The disturbance of existing channel bottom sediments would be localized around the proposed bridge columns and also around any temporary supports required to erect the new bridge.

Because Alternatives 2 and 3 (Design Options A and B) would reduce the impervious area by 10 acres, this would have an overall net positive effect for runoff. BMPs would be implemented during construction and operation of the proposed Project to control erosion, siltation, and drainage at the site. Project features identified in Section 2.9, are regulatory requirements that would minimize impacts during construction and operation related to erosion. Therefore, impacts are considered less than significant and no mitigation is required.

**c) (iii) No Impact**

As stated in Section 2.8, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not increase peak storm flows because it would reduce impervious area within the Project limits with the conversion of transportation uses into park uses within Cesar E. Chavez Park. Runoff would be accommodated by detention basin and the separate project, LB MUST as discussed in Response c) (i) (ii), above. Therefore, the proposed Project would not 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. Thus no impacts are anticipated and no mitigation is required.

**c) iv) No Impact**

The FEMA Map Numbers 06037C1964F, 06037C1962F, and 06037C1965F for Los Angeles County, California, show that the LA River is located in Flood Zone A, which indicates the Project is located in a high risk area and has a 1 percent annual chance of flooding. The Project under Alternatives 2 and 3 (Design Options A and B) does propose the construction of structures within a 100-year floodplain. During Project construction, temporary supports would be required in the LA River Flood Channel to construct the new Shoemaker Bridge. These temporary supports would be minor structures that would not be expected to substantially affect flood control functions in the LA River. During operation of the proposed Project under Alternatives 2 and 3 (Design Options A and B), water flow in the LA River Flood Channel would not be restricted, and the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not result in increased storm water flows from the bridge. No significant changes to flood control functions are anticipated and temporary impacts would not occur under the proposed Project under Alternatives 2 and 3 (Design Options A and B). In addition, the effects on water surface elevation would be minimized by final design features and a hydraulic analysis would be conducted during final design to determine appropriate bridge type, substructure arrangements, and localized channel modifications needed to meet flood capacity and permitting requirements. Therefore, no impacts are anticipated and no mitigation is required.

**d) Less than Significant Impact**

As discussed above, the proposed Project is located within a 100- year floodplain. In addition, there is a risk for seiches (oscillations in enclosed bodies of water caused by seismic waves) in the LA River and the POLB area. Because the Project is located near the ocean, there is also a medium risk of tsunami inundation. The City is somewhat protected from tsunamis based on the geography and the breakwater; however, considerable damage to sea-front structures could occur (City of Long Beach 1975). In the City, slope instability is not a major problem as slopes generally are neither high nor steep; therefore, the risk of mudflows is low. Although portions of the Project limits could be inundated by a seiche or tsunami, the replacement of the bridge and realignment of the connectors does not increase the risk.

As stated in Section 2.8, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not increase peak storm flows because it would reduce impervious area within the Project limits with the conversion of transportation uses into park uses within Cesar E. Chavez Park. Runoff would be accommodated by detention basin and the separate project, LB MUST. Therefore, a less than significant impact is anticipated and no mitigation is required.

**e) No Impact**

As previously discussed in Section 2.9 Water Quality and Storm Water Runoff and in Responses 3.2.10.1 a and b, the propose Project under Alternatives 2 and 3 (Design Options A and B) would be designed and implemented consistent with the federal, state, and local water quality control plans and groundwater management plans.

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would be designed to meet the water quality standards outlined by the Caltrans Storm Water Management Plan, NPDES Permit, CGP, and the LA Basin Plan. In addition, the proposed Project under Alternatives 2 and 3 (Design Options A and B) does not propose to use groundwater resources or otherwise affect any groundwater resources that are used for water supply. The Project is not located in an area identified for groundwater recharge. As such, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater water table. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not conflict with or obstruct the implementation of any applicable water quality control plans or groundwater management plans. Therefore, no impacts are anticipated, and no mitigation is required.

## 3.2.11 Land Use and Planning

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| a) Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| b) 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? | ☐ | ☐ | ☒ | ☐ |

### 3.2.11.1 CEQA Significance Determinations for Land Use and Planning

**a) No Impact**

The replacement of Shoemaker Bridge and realignment of local connectors would not divide an established community because a majority of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would be constructed within City and Caltrans --ROW. No residences or businesses would be displaced. Therefore, no impacts are anticipated and no mitigation is required.

**b) Less Than Significant Impact**

The proposed Project under Alternatives 2 and 3 (Design Options A and B) is consistent with the FTIP, and is generally consistent with the goals and policies of the City General Plan, the POLB Master Plan, and the California Coastal Act. The proposed Project is consistent with the 2016 financially constrained RTP. The 2016 RTP (Amendment 3) was found to conform by FHWA and FTA on December 17, 2018. However, at this time, the project description and opening year are currently being amended in the RTP. In California, no new regional conformity determinations can be approved by FHWA until emissions inventories are updated with new assumptions reflecting the recently-implemented SAFE Vehicles Rule Part One: One National Program. Once the RTP is officially amended, the Project under Alternatives 2 and 3 will be consistent with the latest conforming RTP. For reference, the 2016 RTP and 2019 FTIP listings are included in Appendix G. The Project would also comply with all SCAQMD requirements.

Although a majority of Project construction would occur with the City and Caltrans ROW, the Project under Alternatives 2 and 3 (Design Options A and B) would require TCEs, staging areas, and temporary roadways that would impact Cesar E. Chavez Park and the proposed LB MUST project which is slated for completion prior to the proposed Project.

With the closure of NB West Shoreline Drive and widening of SB West Shoreline Drive acquisition of a portion of Cesar E. Chavez Park would occur. Additionally, closure to the LB MUST recreational facilities would be for approximately 2 years in duration during construction, and would require the placement of supporting structures for the Project's eastern terminus within the LB MUST facility's property. The Project may also impact the outer landscaped boundaries of the Golden Shore RV Park due to the removal and modifications of roadways that bound the property to the north and east. However, the Project under Alternatives 2 and 3 (Design Options A and B) would result in a net gain of parkland with the incorporation and conversion of multiple roadways that currently segment the park into parkland.

Furthermore, the footings of the new bridge would impact the LA River, which is designated as open space, and would close portions of the LARIO Trail and the pathways within LB MUST that connect to

the LARIO Trail for approximately 2 years during construction. Impacts on open space and recreational uses are minor or temporary, and would not affect the use of these facilities. Short-term impacts on access associated with construction of the proposed Project would be reduced by implementation of the TMP which is included as a project feature, and coordination for closures (Measures LU-1 and PR-11 through PR-28). Therefore, impacts are considered less than significant.

## 3.2.12 Mineral Resources

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☒ |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | ☐ | ☐ | ☐ | ☒ |

### 3.2.12.1 CEQA Significance Determinations for Mineral Resources

**a), b) No Impact**

Portions of the proposed Project are located in MRZ 1 and MRZ-4. MRZ-1 refers to areas where no significant deposits are present or they are not likely to be present. MRZ-4 refers to areas where information is inadequate. Additionally, the resources and materials that would be used to construct the Project under Alternatives 2 and 3 (Design Options A and B) would not utilize any materials that are considered to be rare or unique. The City's General Plan identifies that the City has financially benefitted from the abundant oil deposits in the Long Beach tidelands area. One drilling operation is located within the Project limits. Oxy Oil operates a facility on property leased from the City, located along the LA River from Anaheim Street to Ocean Boulevard. However, the Project under Alternatives 2 and 3 (Design Options A and B) would not result in a loss of availability of resources extracted by these facilities. The proposed Project under Alternatives 2 and 3 (Design Options A and B) involves the replacement of an existing bridge, and the realignment and improvement of local connectors. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not result in the loss of availability of known mineral resources or a mineral resource recovery site. No impacts are anticipated and no mitigation is required.

## 3.2.13 Noise

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☐ | ☒ | ☐ |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

### 3.2.13.1 CEQA Significance Determinations for Noise

**a) Less Than Significant Impact**

Sensitive receivers would be temporarily exposed to construction noise during construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B). The closest sensitive receivers are within 50 feet of the Project construction areas under Alternatives 2 and 3 (Design Options A and B) and may be subject to short-term noise levels of 91 dBA $L_{max}$ or higher that are generated by construction activities.

Specific noise project features which include compliance with Caltrans's Standard Specifications and SSP to minimize construction noise, as well as compliance with the construction hours specified in the City of Long Beach Municipal Code (Measure N-1) would minimize the short-term noise impacts during Project construction under Alternatives 2 and 3 (Design Options A and B).

Potential long-term noise impacts associated with Project operations under Alternatives 2 and 3 (Design Options A and B) are solely from traffic noise. Traffic noise was evaluated for the worst-case traffic condition. As discussed in Section 2.14, Noise, with implementation of the proposed Project, 45 of 189 modeled receptors would approach or exceed the 67 dBA Leq NAC under the proposed Project.

In the future (2035) build condition, receivers would experience up to a 7 dBA increase in noise levels when comparing the existing condition to the 2035 build condition. There would be up to a 7 dBA increase in noise levels when comparing the 2035 No Build condition compared to the 2035 build condition, and noise levels at most receptors would decrease. A 3 dBA change is the lowest level that is barely perceptible by the average human ear in an outdoor environment. Under CEQA, comparison is made between the baseline noise level and the build noise level. Because the proposed Project setting is highly urbanized and because of the proximity of the receptors to the highway, the magnitude of the noise increase from the Project under Alternatives 2 and 3 (Design Options A and B) is not

considered substantial and would not result in a significant noise impact under CEQA. In addition, during final design, the City will evaluate acoustic methods developed by Caltrans' Division of Environmental Analysis (DEA) in order to locate and quantify potential noise impacts as a result of the bridge replacement. Project elements identified within the DEA Draft Noise Notes for Bridge Projects will be implemented within the bridge design to the extent feasible as identified in minimization measure N-2. With the implementation of minimization measures N-1 and N-2, impacts from noise are considered less than significant.

**b) Less Than Significant Impact**

Refer to Response a. During construction, the proposed Project under Alternatives 2 and 3 (Design Options A and B) could generate ground-borne noise with pile driving. This would be controlled by adherence to City and Caltrans noise standards. An increase in ground-borne vibration is not anticipated since the proposed Project under Alternatives 2 and 3 (Design Options A and B) would reconstruct an existing bridge and local connectors. Therefore, impacts are considered less than significant and no mitigation is required.

**c) No Impact**

The proposed Project under Alternatives 2 and 3 (Design Options A and B) is not located within an airport land use plan and is not located within 2 miles of a public airport, a public use airport, or a private airstrip. In addition, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not expose people residing or working in the area of the Project limits to excessive noise levels due to its proximity to an airport. Therefore, no impacts are anticipated and no mitigation is required.

## 3.2.14 Population and Housing

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| a) 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)? | ☐ | ☐ | ☐ | ☒ |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

### 3.2.14.1 CEQA Significance Determinations for Population and Housing

**a) No Impact**

The proposed Project under Alternatives 2 and 3 (Design Options A and B) does not involve the construction of housing or employment centers. The Project under Alternatives 2 and 3 (Design Options A and B) is proposing the replacement of a deficient bridge, realignment and improvements of surrounding roadways, and possible relocation of existing utilities. No extension of roads or infrastructure would occur and no capacity is being added. Additionally, no displacement or relocation of residents or businesses would occur. The proposed Project under Alternatives 2 and 3 (Design

Options A and B) would create short-term jobs for the area and help in lowering the current rates of unemployment during the construction phase of the Project under Alternatives 2 and 3 (Design Options A and B). While the Project under Alternatives 2 and 3 (Design Options A and B) would generate additional employment opportunities during construction of the Project, the majority of these jobs are expected to be filled by residents of Long Beach and surrounding communities. Therefore, substantial unplanned population growth associated with Project construction under Alternatives 2 and 3 (Design Options A and B) is not anticipated. No impacts are anticipated and no mitigation is required.

**b) No Impact**

The proposed Project under Alternatives 2 and 3 (Design Options A and B) does not propose the construction of additional housing, nor would the Project displace people or relocate any residences or businesses as part of the proposed Project under Alternatives 2 and 3 (Design Options A and B). The majority of improvements and construction associated with Alternatives 2 and 3 under both Design Options A and B would occur within the existing Caltrans and City ROW. Partial acquisitions and an easements would be required adjacent private properties and LACFCD property. However, it is anticipated that acquisitions of land required for Alternatives 2 and 3 (Design Options A and B) would not temporarily affect existing use or function of these properties. All property acquisition and relocation under any Alternatives 2 and 3 (Design Options A and B) would be handled in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as identified in Measure CI-3, in Section 2.3, Community Impacts. No displacements of business or residential properties are anticipated; thus no impacts related to the displacement of substantial numbers of existing housing necessitating a need for replacement housing elsewhere, would occur and no mitigation is required.

## 3.2.15 Public Services

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*** | | | | |
| i) Fire protection? | ☐ | ☐ | ☐ | ☒ |
| ii) Police protection? | ☐ | ☐ | ☐ | ☒ |
| iii) Schools? | ☐ | ☐ | ☐ | ☒ |
| iv) Parks? | ☐ | ☐ | ☐ | ☒ |
| v) Other public facilities? | ☐ | ☐ | ☐ | ☒ |

### 3.2.15.1 CEQA Significance Determinations for Public Services

**a) No Impact**

The proposed Project under Alternatives 2 and 3 (Design Options A and B) is limited to the replacement of the existing Shoemaker Bridge and the realignment of existing roadways within the Project limits. The proposed Project under Alternatives 2 and 3 (Design Options A and B) does not include the development of residential or commercial structures which may result in a need for new or improved governmental facilities. Therefore, the same service ratios, response times, or other performance objectives for the existing public services such as fire protection, police protections, available schools and parks, and other public facilities already identified to serve the Project limits is sufficient. No impacts are anticipated and no mitigation is required.

## 3.2.16 Recreation

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Would the project 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? | ☐ | ☐ | ☒ | ☐ |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☒ | ☐ |

### 3.2.16.1 CEQA Significance Determinations for Recreation

**a) Less Than Significant Impact**

Roadways that currently cut through Cesar E. Chavez Park that currently segment the park under Alternatives 2 and 3 (Design Options A and B) would be converted into parkland and incorporated into Cesar E. Chavez Park, allowing for more useable park space. In addition, roadway improvements under Alternatives 2 and 3 (Design Options A and B) are anticipated to temporarily and permanently impact the existing Golden Shore RV Park property, and the planned LB MUST facility. Temporary construction impacts related to enhancement of recreational facilities under Alternatives 2 and 3 (Design Options A and B) would occur due to street removal, staging areas, and TCEs. Impacts on the Golden Shore RV Park and the LB MUST facility are considered less than significant. As part of the proposed Project, under Alternatives 2 and 3 (Design Options A and B), a net gain of parkland would occur with the incorporation of the existing NB West Shoreline Drive and other adjacent roadways into Cesar E. Chavez Park. Therefore, substantial physical deterioration as a result of recreational use is not anticipated as the Project is not a growth-inducing project. Therefore, impacts are considered less than significant and no mitigation is required.

**b) Less Than Significant Impact**

The proposed Project under Alternatives 2 and 3 (Design Options A and B) does not require the construction or expansion of recreational facilities. However, impacts would occur to Golden Shore RV Park, LB MUST and Cesar E. Chavez Park. As stated previously, impacts on Golden Shore RV Park would not be considered significant. The vacated space within Cesar E. Chavez Park would be incorporated back into the existing park to expand additional useable park space. This Project component would not have a significant physical effect on the environment. The Project under Alternatives 2 and 3 (Design Options A and B) would result in a net gain of parkland with the incorporation and conversion of multiple roadways that currently segment the park into parkland. Therefore, impacts are considered less than significant, and no mitigation is required.

## 3.2.17 Transportation

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | ☐ | ☐ | ☒ | ☐ |
| b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☐ | ☒ |
| d) Result in inadequate emergency access? | ☐ | ☐ | ☒ | ☐ |

### 3.2.17.1 CEQA Significance Determinations for Transportation/Traffic

**a) Less Than Significant Impact.**

Temporary traffic delays are expected during construction of the new bridge and local connectors; however, no extended ramp closures and no full local road closures are anticipated under Alternatives 2 and 3 (Design Options A and B).

In addition, bus stops in the vicinity of the proposed improvements along Anaheim Street, 3rd Street, 6th Street, 7th Street, Pacific Avenue, Long Beach Boulevard, Atlantic Avenue, and Broadway Avenue from Cesar E. Chavez Park to Magnolia Avenue under Alternatives 2 and 3 (Design Options A and B) may also result in increased service times. Bus stops in the vicinity of the proposed improvements along Ocean Boulevard and 6th Street may be temporarily relocated during construction. However, these impacts would be temporary and would cease after completion of construction.

Temporary sidewalk closures on 7th Street, 6th Street, 3rd Street, Broadway, and Ocean Boulevard, as well as road work would impact pedestrian and bicycle access under Alternatives 2 and 3 (Design Options A and B). Staged construction plans would include provisions for maintaining pedestrian and bicycle access in these areas during construction. Finally, to ensure the safety of construction workers

and trail users, it may be necessary to temporarily close the LARIO Trail crossing at SR-710 during construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B). Detours would be provided during any trail closures. These impacts would be temporary and would cease after completion of construction. Short-term adverse traffic and transportation/ pedestrian and bicycle facilities impacts associated with construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B) would be reduced by the TMP, included as a project feature, and coordination for closures (Measures LU-1, and PR-11 through PR-28).

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in a temporary loss of approximately 20 out of 72 available parking spaces in a parking lot located along Broadway (between the Ocean Boulevard on ramp to NB W Shoreline Drive and Magnolia Avenue) and a temporary loss of street parking along 6th and 7th Streets during construction. It is anticipated that the remaining number of available spaces within the parking lot, and surrounding parking garages and parking lots will temporarily provide adequate parking to accommodate for the continued function of the adjacent hotel and businesses that utilize the parking lot along Broadway. Temporary impacts to street parking along 6th and 7th Streets would be minimized through a TMP, identified as Project Feature, PF-3 (Section 2.5, Traffic and Transportation/Pedestrian and Bicycle Facilities). All these impacts would be temporary and cease after completion of construction. Once construction is complete, temporary parking impacts that would result in a temporary loss of parking would be restored. Thus, temporary impacts to parking are considered less than significant.

Due to planned roadway improvements, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would result in a permanent loss of 58 street parking spaces along 6th Street and 7th Street (between Nylic Court and Lime Avenue) and along Magnolia Avenue (between Ocean Boulevard and West Broadway). Additionally, 173 street parking spaces along 7th Street would be restricted during AM and PM peak under Measure TR-1. Although there would be a loss in available street parking, improvements along these streets would improve safety particularly along 6th and 7th Street by slowing down traffic and providing new connections to recreational resources throughout the Project limits.

Along 6th and 7th Streets is a mix of residential, religious, office, and commercial, and school uses and along Magnolia are governmental uses. However, most of these uses have their own dedicated parking spaces, parking lots, or nearby public parking facilities within walking distance. There are 4 public parking structures and lots located along 6th Street and 7th Street, between Pacific Avenue and Locust Avenue, with a total of 1,860 available parking spaces. These lots are located approximately mid-point of the most affected portions of 6th Street and 7th Street, with two of the structures offering free parking for the first 2 hours and all parking structures providing daily and monthly parking rates. Furthermore, most of these uses already have dedicated parking spaces or parking lots, such as the Civic Center Project, which includes an underground parking structure with 509 available parking spaces and another parking structure with 725 available parking spaces to serve the new city hall and proposed mix-use that is proposed. ---Therefore, permanent impacts on parking are considered less than significant with mitigation incorporated.

With the proposed Project under Alternatives 2 and 3 (Design Options A and B), the only intersection that would not operate at satisfactory LOS and meets the two criteria thresholds indicating significant impacts is at the intersection of Pier B Street/Pico Avenue at SR-710 Ramps. This intersection would continue to operate at LOS F during the AM peak hour for all the scenarios. Since the intersection was already operating at an unsatisfactory LOS under the existing condition, the operational and capacity

issues are due to the existing system deficiencies and is not due to the newly added trips attributed to the proposed Project under Alternatives 2 and 3 (Design Options A and B).

Although, the proposed Project under the Build Conditions would have not significantly impact any of the study intersections, poor level of service and congestion in the Downtown Long Beach traffic study area would still result at the Pier B Street/Pico Avenue at SR-710 Ramps. However, based on the Final EIR for the Pier B On-Dock Rail Support Facility Project (Pier B Project), released January 12, 2018, the improvements as part of the 12th Street Alternative (or the selected Pier B Project Alternative) would consist of the operational closure of 9th Street, thus removing potential traffic circulation off of the Pier B Street/Pico Avenue at SR-710 ramps. In addition, the Pier B Project would need to acquire ROW for all properties along 9th Street to facilitate its proposed improvements by 2024. Therefore, it is assumed that the existing system deficiencies identified at the Pier B Street/Pico Avenue at SR-710 Ramps would be eliminated prior to the Opening Year of the proposed Project under Alternatives 2 and 3 (Design Options A and B) and thus, significant traffic impacts at this intersection are no longer anticipated under the 2025 and 2035 Build Condition for the proposed Project under Alternatives 2 and 3 (Design Options A and B). Therefore, impacts are considered less than significant and no mitigation is required.

**b) Less than Significant**

Section 15064.3 was added to the Guidelines and describes the specific considerations for evaluating a project's transportation impacts. While public agencies may immediately apply Section 15064.3 of the updated Guidelines, statewide application is not required until July 1, 2020. In addition, uniform statewide guidance for Caltrans projects is still under development. As such, this threshold is not applicable until July 1, 2020. Project approval is anticipated prior to this date and no response is required.

**c) No Impact**

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would be constructed in compliance with Caltrans's Standard Construction Specifications. The proposed improvements do not include any hazardous design features or incompatible uses. In fact, the replacement of the existing bridge addresses existing safety issues related to design. Therefore, no impacts are anticipated and no mitigation is required.

**d) Less Than Significant Impact**

During construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B), traffic would be temporarily delayed and travel times would increase due to construction staging and detours. As a result, there could be a temporary increase in emergency response times in the area of the Project limits, although access would be maintained. Emergency response times are expected to remain the same or improve after Project completion. Therefore, Project impacts are considered less than significant. A TMP is included as a project feature and described in Section 2.5, Traffic and Transportation/ Pedestrian and Bicycle Facilities, requires preparation of a TMP that would minimize impacts during construction. Therefore, impacts are considered less than significant and no mitigation is required.

## 3.2.18 Tribal Cultural Resources

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*** | | | | |
| i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | ☐ | ☐ | ☒ | ☐ |
| ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe | ☐ | ☐ | ☒ | ☐ |

### 3.2.18.1 CEQA Significance Determinations for Tribal Cultural Resources

**a) (i), (ii) <u>Less Than Significant Impact</u>**

For the purposes of AB 52 consultation, the City sent letters to the 10 Native American groups or representatives on the NAHC recommended list via U.S. certified mail on April 11, 2016, December 20, 2016, and May 4, 2017. Follow-up emails were sent on April 5, 2018, and April 23, 2018, and follow up phone calls were also attempted on April 23, 2018, and April 26, 2018. -

As of January 2019, five responses from the Native American groups/representatives during the AB 52 and Section 106 consultation process requested formal consultation with the City and Caltrans, as well as the provision of a Native American monitor during Project construction. Copies of the ASR were sent out to the Native American groups/representatives in January 2019 and Native American consultation summary letters sent in June 2019.

Based on the archaeological sensitivity analysis results, the archaeological sensitivity throughout the majority of the Direct APE, with two areas considered to be very low. It is Caltrans' policy and practice is to have Native American monitoring in three circumstances: 1) during archaeological excavations; 2) during construction and construction-related activities adjacent to known Native American archaeological or cultural sites, or such sites identified as ESAs; and 3) during construction or related activities in areas where there is a high probability that there may be a buried deposit based on the geomorphology of the area. The results of the archaeological sensitivity analysis indicate that the Direct APE has a low probability that a buried deposit would be encountered. Therefore, the Project does not meet the Caltrans thresholds for monitoring and no recommendations for further management and/or research in the study area were identified as a result of the study. However, it is Caltrans' policy to avoid cultural resources whenever possible. If cultural resources or human remains are expose during Department activities, Department policy and state and federal law require that

activity in that area is stopped until appropriate action can be taken to address the discovery, i.e. until a qualified archaeologist can evaluate the nature and significance of the find. In addition, Caltrans will consult with the Native American tribes/representatives in the event that human remains or other Tribal cultural resources are discovered during construction. Impacts associated with this issue are anticipated to be less than significant.

## 3.2.19 Utilities and Service Systems

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***Would the project:*** | | | | |
| a) Require or result in the relocation or construction of new or expanded water, wastewater, or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects? | ☐ | ☐ | ☐ | ☒ |
| b) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☐ | ☐ | ☐ | ☒ |
| c) 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? | ☐ | ☐ | ☐ | ☒ |
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ☒ | ☐ |
| e) Comply with federal, state, and local statutes and regulations related to solid waste? | ☐ | ☐ | ☒ | ☐ |

### 3.2.19.1 CEQA Significance Determinations for Utilities and Service Systems

**a), b), c) <u>No Impact</u>**

The proposed Project under Alternatives 2 and 3 (Design Options A and B) is limited to transportation improvements, which involves the replacement of the existing Shoemaker Bridge and the realignment of local connectors. Therefore, the Project under Alternatives 2 and 3 (Design Options A and B) is not considered growth inducing and would not require use of water supplies nor would it require an increase in wastewater treatment as a result of the proposed Project under Alternatives 2 and 3 (Design Options A and B). The Project under Alternatives 2 and 3 (Design Options A and B) would also not require the construction of new water or wastewater treatment facilities or the expansion or relocation of existing ones. Therefore, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not result in a need for construction of new water or wastewater facilities. No impacts are anticipated and no mitigation is required.

**d) Less Than Significant Impact**

During construction of the proposed Project under Alternatives 2 and 3 (Design Options A and B) solid waste would be generated. The Southeast Resource Recovery Facility, which is located at 118 Pier S. Avenue, southeast of the Project limits, is the closest large volume transfer and processing solid waste facility to the Project. The Southeast Resource Recovery Facility permits a capacity of 2,240 tons per day of other hazardous, mixed municipal, and green material waste. The waste from the proposed Project under Alternatives 2 and 3 (Design Options A and B) would include concrete, asphalt, vegetation, soil, rebar, and other similar materials. The amount of construction waste material anticipated to be disposed of in the landfill under the alternatives is not expected to exceed the permitted capacity of the landfill. During operation waste generated would be part of maintenance of landscape and other waste material along roadsides. The total amount of waste generated under the proposed Project under Alternatives 2 and 3 (Design Options A and B) is not expected to exceed the permitted capacity of the landfill. Therefore, impacts are considered less than significant and no mitigation is required.

**e) Less Than Significant Impact**

Construction waste would be disposed of in accordance with federal, State, and local regulations related to recycling, which would minimize the amount of waste material entering local landfills. Therefore, impacts are considered less than significant and no mitigation is required.

## 3.2.20 Wildfire

| | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*** | | | | |
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☒ |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ☐ | ☒ |
| c) 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? | ☐ | ☐ | ☐ | ☒ |
| d) 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? | ☐ | ☐ | ☐ | ☒ |

### 3.2.20.1 CEQA Significance Determinations for Wildfire

**a, b, c, and d) No Impact.**

The Project is not located within a designated fire hazard area according to the California Department of Forestry and Fire Protection (Cal Fire), Fire Hazard Severity Zones; City of Long Beach Very High Fire Hazard Severity Zones map for Local Responsibility Areas (LRA); and City of Long Beach Public Safety Element, Fire Hazard Areas map. Therefore, no impact has been identified for this issue area, and no mitigation is required.

## 3.2.21 Mandatory Findings of Significance

| Does the Project: | Significant and Unavoidable Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☒ | ☐ | ☐ |
| b) Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | ☐ | ☒ | ☐ | ☐ |
| c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☐ | ☒ | ☐ |

### 3.2.21.1 CEQA Significance Determinations for Mandatory Findings of Significance

**a) <u>Less Than Significant with Mitigation Incorporated</u>**

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would impact deepwater aquatic habitat within the LA River during construction, which would temporarily impact habitat for special-status birds and the California sea lion. In addition, demolition of the bridge and connectors has the potential to impact special-status bats. This area is also designated as EFH. It is anticipated there would be “no effect” to federally listed special-status species with the exception of the California Least tern, for which a “may affect but not likely to adversely affect” finding is anticipated. A series of avoidance and minimization measures are required to be implemented consistent with regulatory requirements to avoid or minimize impacts on special-status birds, the California sea lion, and

special-status bats (project features and Measures NC-1 and NC-2 in Section 2.16, Natural Communities, and Measures AN-1 through AN-3 in Section 2.19, Animal Species). Project features and Measures TE-1 through TE-8 included in Section 2.20, Threatened and Endangered Species, is required to reduce the potential for special-status birds to be killed by bridge traffic. Consultation with the NOAA Fisheries Service regarding impacts on EFH would be required since the Project under Alternatives 2 and 3 (Design Options A and B) is anticipated to result in a "may affect, but not likely to adversely affect" determination regarding EFH, which is specified in a project feature included in Section 2.20, Threatened and Endangered Species. With inclusion of these project features and implementation of these series of measures, impacts on special-status animal species would be less than significant.

The potential to impact subsurface paleontological resources would be minimized through and Measures PAL-1 through PAL-5. Therefore, impacts on paleontological resources would be considered less than significant.

The proposed Project under Alternatives 2 and 3 (Design Options A and B) may require compensatory mitigation for loss of deepwater aquatic habitat in the form of preparation of a HMMP developed in coordination with the USACE, the RWQCB, and the CDFW to ensure no net loss of estuarine habitat value or acreage (Measure NC-2, from Section 2.16, Natural Communities).. With implementation of Measures NC-1 and NC-2 , impacts on riparian habitat and wetlands and other waters would be less than significant.

**b) Less than Significant Impact with Mitigation Incorporated**

Refer to the analysis in Section 2.22, Cumulative Impacts. With the inclusion of project features and the series of measures referenced in Section 2.22, Cumulative Impacts, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would not have impacts that are individually limited but cumulatively considerable. Therefore, impacts are less than significant with mitigation incorporated.

**c) Less Than Significant**

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would improve safety and structural and geometric design of the bridge and local connectors, which would improve the quality of the built environment. Typical of roadway projects, construction impacts related to aesthetics, noise, detours, and dust would occur; however, these impacts would be minimized through adherence to a TMP, included as a project feature identified in Section 2.5, Traffic and Transportation/Pedestrian and Bicycle Facilities, project features for air quality and Measures AQ-1 through AQ-2 identified in Section 2.13, Air Quality, and project features related to noise and Measure N-1 identified in Section 2.14, Noise. Incorporation of these project features and measures would avoid and minimize indirect impacts on the community during construction. Therefore, impacts are considered less than significant and no mitigation is required.

# 3.3 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological

Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride ($SF_6$), and various hydrofluorocarbons (HFCs). $CO_2$ is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated $CO_2$.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

## 3.3.1 Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce GHG emissions from transportation sources.

### 3.3.1.1 Federal

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices.[1] This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability."[2] Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Economy (CAFE) Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

[1] https://www.fhwa.dot.gov/environment/sustainability/resilience/
[2] https://www.sustainablehighways.dot.gov/overview.aspx

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA[3] in conjunction with the National Highway Traffic Safety Administration (NHTSA) is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. The current standards require vehicles to meet an average fuel economy of 34.1 miles per gallon by 2016. EPA and NHTSA are currently considering appropriate mileage and GHG emissions standards for 2022–2025 light-duty vehicles for future rulemaking.

NHTSA and EPA issued a Final Rule for "Phase 2" for medium- and heavy-duty vehicles to improve fuel efficiency and cut carbon pollution in October 2016. The agencies estimate that the standards would save up to 2 billion barrels of oil and reduce $CO_2$ emissions by up to 1.1 billion metric tons over the lifetimes of model year 2018–2027 vehicles.

#### 3.3.1.2 State

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

- EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.
- AB 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (ARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.
- EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be

[3] U.S. EPA's authority to regulate GHG emissions stems from the U.S. Supreme Court decision in Massachusetts v. EPA (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and EPA's assessment of the scientific evidence that form the basis for EPA's regulatory actions.

reduced by at least 10 percent by the year 2020. ARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the Governor's 2030 and 2050 GHG reduction goals.

- SB 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it would achieve the emissions target for its region.
- SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.
- EO B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.
- EO B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent (MMTCO2e).4 Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, Safeguarding California, every 3 years, and to ensure that its provisions are fully implemented.
- SB 32, Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.
- SB 1386, Chapter 545, 2016, declared "it to be the policy of the state that the protection and management of natural and working lands … is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."
- AB 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

[4] GHGs differ in how much heat each trap in the atmosphere (global warming potential, or GWP). $CO_2$ is the most important GHG, so amounts of other gases are expressed relative to $CO_2$, using a metric called "carbon dioxide equivalent" ($CO_2e$). The global warming potential of $CO_2$ is assigned a value of 1, and the GWP of other gases is assessed as multiples of $CO_2$.

- SB 743, Chapter 386 (September 2013), changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on VMT to promote the state's goals of reducing GHG and traffic-related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety. Lead agencies have until July 1, 2020, to comply with the new VMT metric for analyzing transportation impacts, although they may voluntarily comply earlier (CCR Section 15064.3 (c)).
- SB 150, Chapter 646, 2017, Regional transportation plans, requires the California ARB to prepare a report that assesses progress made by each MPO in meeting their established regional GHG emission reduction targets.
- EO B-55-18 to Achieve Carbon Neutrality (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

## 3.3.2 Environmental Setting

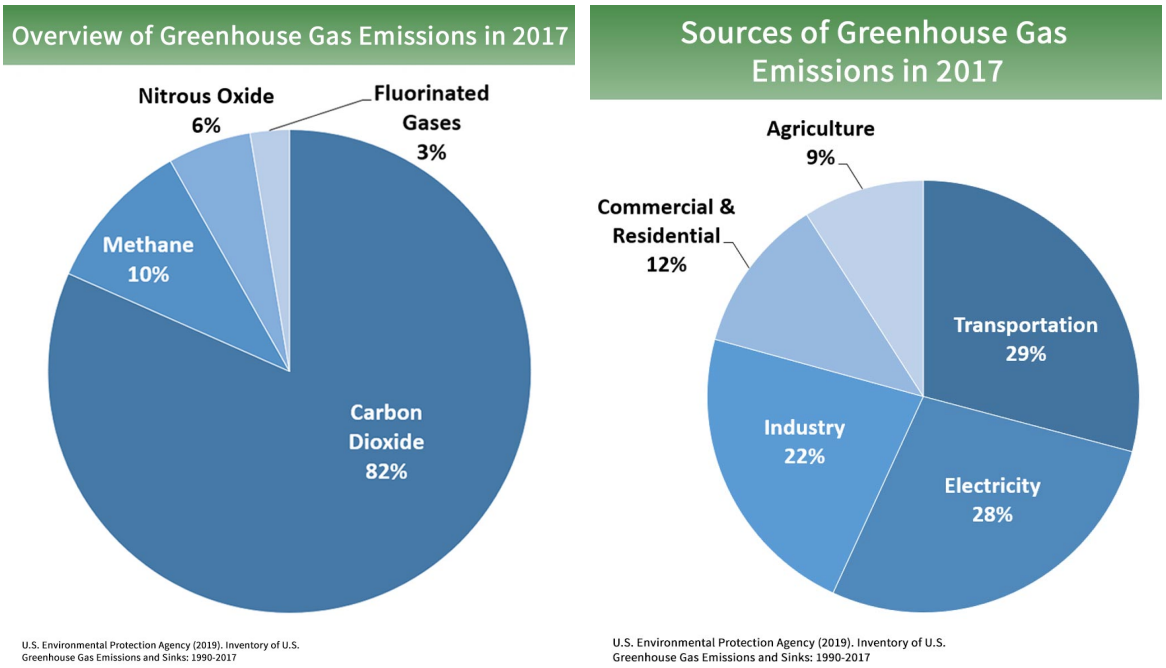
The proposed Project is in an urban area of Los Angeles County with a well-developed road and street network. The Project area is mainly residential, with some light industrial and commercial buildings. Traffic congestion during peak hours is not uncommon in the Project area. An RTP/SCS by SCAG guides transportation and housing development in the Project area. The Los Angeles County Sustainability Plan addresses GHGs in the Project area, as does the City of Long Beach Climate Action and Adaptation Plan.

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the ARB does so for the state, as required by H&SC Section 39607.4.

### 3.3.2.1 National GHG Inventory

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of $CO_2$, $CH_4$, $N_2O$, HFCs, perfluorocarbons, $SF_6$, and nitrogen trifluoride. It also accounts for emissions of $CO_2$ that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store $CO_2$ (carbon sequestration). As shown on Figure 3-1, the 1990-2016 inventory found that of 6,511 $MMTCO_2e$ GHG emissions in 2016, 81 percent consist of CO2, 10 percent are $CH_4$, and 6 percent are $N_2O$; the balance consists of fluorinated gases (EPA 2018a). In 2016, GHG emissions from the transportation sector accounted for nearly 28.5 percent of U.S. GHG emissions.

**Figure 3-1. Greenhouse Gas Overview and Emission Sources**




### 3.3.2.2 State GHG Inventory

ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. As shown on Figure 3-2, the 2019 edition of the GHG emissions inventory found total California emissions of 424.1 $MMTCO_2e$ for 2017, with the transportation sector responsible for 41 percent of total GHGs. As shown on Figure 3-3, it also found that GHG emissions have declined from 2000 to 2017 despite growth in population and state economic output.[5]

AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. ARB adopted the first scoping plan in 2008. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15, issued in April 2015, and SB 32 (2016). The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

[5] California Air Resources Board (ARB). California Greenhouse Gas Emissions Inventory–2019 Edition. https://ww3.arb.ca.gov/cc/inventory/data/data.htm.

**Figure 3-2. California 2017 Greenhouse Gas Emissions**

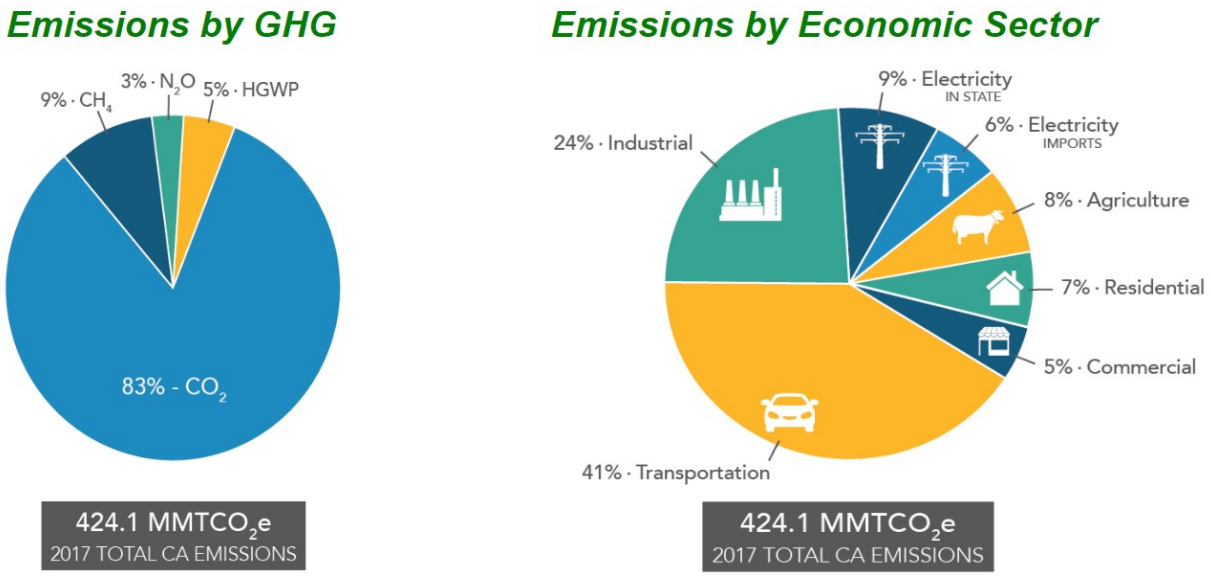
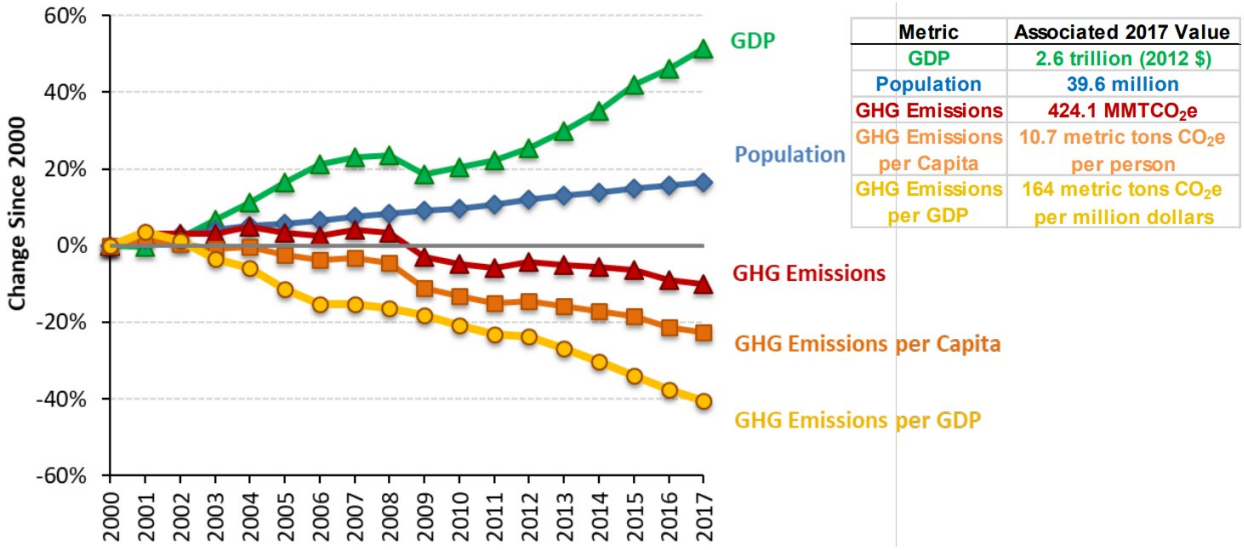



**Figure 3-3. Change in California GDP, Population, and GHG Emissions since 2000**




### 3.3.2.3 Long Beach GHG Inventory

As part of preparing the City's Climate Action and Adaptation Plan (CAAP) Draft Plan, the City developed a baseline GHG emissions inventory for the year 2015. As shown in Table 3-1 below, the City's 2015 total emissions were 3.1 $MMTCO_2e$ with the majority coming from transportation (50 percent) and building energy use (44 percent). The remaining 6 percent comes from solid waste and wastewater.

**Table 3-1. City of Long Beach 2015 Greenhouse Gas Inventory**

| Sector | $CO_2e$ Emissions (metric tons/year) | Percent of Total |
|---|---|---|
| **Energy** | **1,377,291** | **44** |
| Residential | 428,245 | 14 |
| Commercial | 300,818 | 10 |
| Manufacturing/Construction | 399,089 | 13 |
| Energy Industries | 219,899 | 7 |
| Fugitive Emissions (Oil/Natural Gas) | 29,240 | 1 |
| **Transportation** | **1,546,326** | **50** |
| On-road Transportation | 1,213,601 | 39 |
| Railways | 11,883 | <1 |
| Waterborne Navigation | 301,345 | 10 |
| Aviation | 4,550 | <1 |
| Off-road Transportation | 14,947 | <1 |
| **Waste** | **176,850** | **6** |
| Solid Waste | 173,259 | 6 |
| Wastewater | 3,592 | <1 |
| **Total** | **3,100,468** | **100** |

Source: City of Long Beach
Notes:
$CO_2e$=carbon dioxide equivalent

### 3.3.2.4 Regional Plans

ARB sets regional targets for California's 18 MPOs to use in their RTP/SCSs to plan future projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed Project is included in the 2016 SCAG RTP/SCS. The regional reduction target for the SCAG region is 8 percent for 2020 and 19 percent for 2035[6]. In addition, Table 3-2 includes applicable plans for the purpose of reducing the emissions of GHGs and adapting to potential vulnerabilities of climate change impacts.

[6] California Air Resources Board (ARB). SB 375 Regional Plan Climate Targets. https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets.

**Table 3-2. Applicable Local and Regional Greenhouse Gas Reduction or Climate Action Plans**

| GHG Reduction or Climate Action Plan | GHG Reduction Policies or Strategies |
|---|---|
| *San Pedro Bay Ports Clean Air Action Plan (2017)*[1] | GHG reduction strategies for ships, trucks, trains, harbor craft, and cargo-handling equipment. |
| *Los Angeles County 2020 Community Climate Action Plan (October 2015)*[2] | Measures to mitigate and avoid GHG emissions associated with building energy, land use and transportation, water consumption, and waste generation in unincorporated Los Angeles County. |
| *City of Long Beach Climate Action and Adaptation Plan Draft Plan (May 2019)*[3] | Includes GHG mitigation, GHG reduction targets, and adaptations. The City's 2030 target emissions level is 2.1 $MMTCO_2e$ per year. In order to meet the City's 2030 emissions reduction target, 19 priority actions were identified in the transportation, building and energy, and waste sectors. The key vulnerabilities from global climate change that were evaluated in the CAAP were extreme heat, sea level rise, precipitation based flooding, drought, and air quality. |
| *Port of Los Angeles Actions to Reduce GHG Emissions by 2050 (September 2014)*[4] | Overview of ongoing initiatives to reduce GHG emissions from sources that the Harbor Department directly controls, in response to City Council Motion No. 14-0907, dated June 27, 2014. |

Notes:

[1] San Pedro Bay Port Clean Air Action Plan (CAAP). https://www.portoflosangeles.org/environment/air-quality/san-pedro-bay-ports-clean-air-action-plan.

[2] Los Angeles County Department of Regional Planning. Los Angeles County 2020 Community Climate Action Plan. http://planning.lacounty.gov/CCAP.

[3] City of Long Beach Development Services Planning Team. CAAP Draft Plan. http://www.longbeach.gov/lbds/planning/caap/documents/.

[4] City of Los Angeles Harbor Department. Actions to Reduce Greenhouse Gas Emissions by 2050. https://www.portoflosangeles.org/pola/pdf/doc/pv_final_pola_ghg_assessment_sept_2014.pdf.

CAAP=Clean Air Action Plan; GHG=greenhouse gas; $MMTCO_2e$=million metric tons of carbon dioxide equivalent

### 3.3.3 Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the SHS and those produced during construction. The primary GHGs produced by the transportation sector are $CO_2$, $CH_4$, $N_2O$, and HFCs. $CO_2$ emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of $CH_4$ and $N_2O$ are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself." (Cleveland National Forest Foundation *v.* San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines Sections 15064(h)(1) and 15130)).

To make this determination, the incremental impacts of the Project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

The following discussion incorporates the results of the *Air Quality Assessment Report* (Caltrans 2019g) prepared for the Project. The *Air Quality Assessment Report* contains detailed methodology, modeling files, and calculation worksheets.

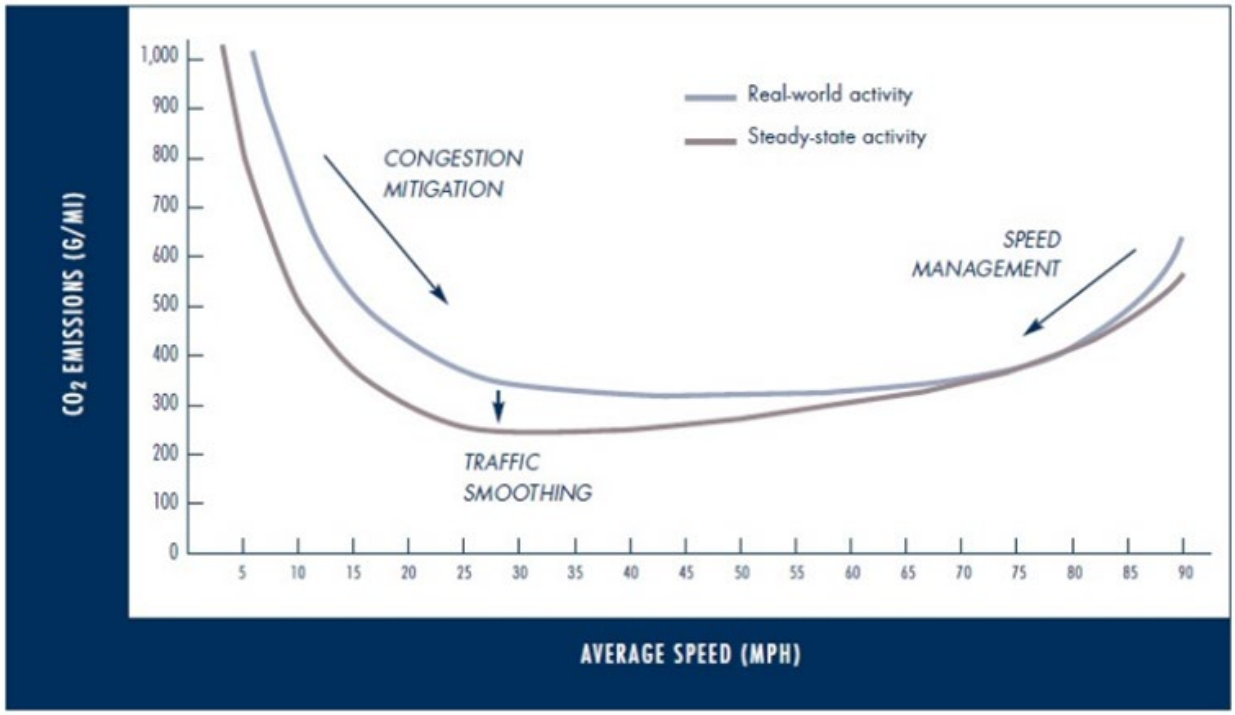
### 3.3.4 Operational Emissions

$CO_2$ accounts for 95 percent of transportation GHG emissions in the U.S. The largest sources of transportation-related GHG emissions are passenger cars and light-duty trucks, including sport utility vehicles, pickup trucks, and minivans. These sources account for over half of the emissions from the sector. The remainder of GHG emissions comes from other modes of transportation, including freight trucks, commercial aircraft, ships, boats, and trains, as well as pipelines and lubricants. Because $CO_2$ emissions represent the greatest percentage of GHG emissions it has been selected as a proxy within the following analysis for potential climate change impacts generally expected to occur.

As shown on Figure 3-4, the highest levels of $CO_2$ from mobile sources such as automobiles occur at stop-and-go speeds (0–25 miles per hour) and speeds over 55 miles per hour; the most severe emissions occur from 0–25 miles per hour. To the extent that a project relieves congestion by enhancing operations and improving travel times in high-congestion travel corridors, GHG emissions, particularly $CO_2$, may be reduced.

Four primary strategies can reduce GHG emissions from transportation sources: (1) improving the transportation system and operational efficiencies, (2) reducing travel activity, (3) transitioning to lower GHG-emitting fuels, and (4) improving vehicle technologies/efficiency. To be most effective, all four strategies should be pursued concurrently.

**Figure 3-4. Possible Use of Traffic Operation Strategies in Reducing On-Road Carbon Monoxide Emissions**




Source: Barth and Boriboonsomsin 2010

Under the Alternatives 2 and 3 (Design Options A and B), there would be localized areas where VMT would increase when compared to the Alternative 1 (No Build), which could contribute to increased GHG emissions. However, compared to the existing condition, these increases would be substantially reduced in the future because of implementation of fuel regulations, improved fleet average fuel economy, and the gradual removal of older vehicles from the roads (see Quantitative Analysis below for supporting data).

The proposed Project under Alternatives 2 and 3 (Design Options A and B) would provide significant new pedestrian and bicycle facilities, enhancing modal alternatives for getting across the bridge and along surrounding roadways. Alternatives 2 and 3 would provide new sidewalk access along Broadway and Golden Shore. In addition, as shown in Figure 1-3, in Chapter 1, the proposed Project under Alternatives 2 and 3 (Design Options A and B) would also provide new Class 1 bike paths. A new Class 1 bike path would be constructed at the new 6th Street terminus, which would provide connections between Cesar E. Chavez Park, Drake Park, and the LARIO Trail. The Project would also include a bicycle and pedestrian observation platform/vista point along the south side of the new Shoemaker Bridge, which would provide connections to the existing bike path on the eastside of the LA River and future connection to the bike trail on the west side of the LA River. Alternatives 2 and 3 (Design Options A and B) would provide meandering pathways around the existing 6th Street Pump Station. The Project would also provide grade-separated access to Cesar E. Chavez Park and the LARIO Trail from the new 3rd Street/Broadway bike route. Thus, the Project would provide new and improved bike paths that are consistent with the City's planned projects (as discussed in Section 2.1, Land Use). Therefore, although no VMT reduction was accounted for in the quantitative analysis

discussed below, the proposed Project would aid the City in improving its bikeway and pedestrian infrastructure.

#### 3.3.4.1 Quantitative Analysis

The regional VMT data for the existing, No Build, and build alternatives, along with the CT-EMFAC2017 emission rates, were used to calculate the $CO_2$ emissions for the Existing (2015), 2025, and 2035 conditions. The results of the modeling are summarized in Table 3-3. As shown in Table 3-3, all of the future No Build and build condition emissions are lower than the existing baseline. When compared with the No Build conditions, the build alternatives would result in a minimal increase in emissions. As such, the Project would improve connectivity from the Downtown Long Beach area to surrounding communities and improve operations for all modes of transportation.

**Table 3-3. Modeled Annual $CO_2e$ Emissions and Vehicle Miles Traveled, by Alternative**

| Alternative | $CO_2e$ Emissions (metric tons/year) | Annual VMT[1] |
|---|---|---|
| **Existing/Baseline (2015)** | 10,662 | 17,785,832 |
| **Open to Traffic (2025)** | | |
| Alternative 1 (No Build) | 9,468 | 18,548,538 |
| Alternative 2 and 3 (Design Options A and B) | 9,475 | 19,620,768 |
| **Horizon/Design-Year (2035)** | | |
| Alternative 1 (No Build) | 9,010 | 19,502,094 |
| Alternative 2 and 3 (Design Options A and B) | 9,082 | 20,579,529 |

Source: CT-EMFAC2017

Notes:

[1] Annual VMT values derived from Daily VMT values multiplied by 347, per ARB methodology (ARB 2008).

$CO_2e$=carbon dioxide equivalent; VMT=vehicle miles traveled

While EMFAC has a rigorous scientific foundation and has been vetted through multiple stakeholder reviews, its emission rates are based on tailpipe emission test data. The numbers are estimates of $CO_2$ emissions and not necessarily the actual $CO_2$ emissions. The model does not account for factors such as the rate of acceleration and the vehicles' aerodynamics, which would influence $CO_2$ emissions. To account for $CO_2$ emissions, ARB's GHG Inventory follows the Intergovernmental Panel on Climate Change guideline by assuming complete fuel combustion, while still using EMFAC data to calculate $CH_4$ and $N_2O$ emissions. Though EMFAC is currently the best available tool for use in calculating GHG emissions, it is important to note that the $CO_2$ numbers provided are only useful for a comparison of alternatives.

### 3.3.5 Construction Emissions

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

The construction emissions were estimated for the Project under Alternatives 2 and 3 (Design Options A and B) using the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, Version 9.0.0. While the model was developed for Sacramento conditions in terms of fleet emission factors, silt loading, and other modeling assumptions, it is considered adequate for estimating road construction emissions by the SCAQMD in its CEQA guidance and is used for that purpose in this analysis. Construction-related emissions for Alternative 2 are presented in Table 3-4. Construction-related emissions for Alternative 3 are presented in Table 3-5. The emissions presented below are based on the best information available at the time of calculations and assume that the schedule for all improvements is anticipated to begin in 2022 and end in 2024. Default equipment assumptions for the Road Construction Emissions Model were used in developing the emissions estimates; these estimates can be refined once final engineering has been completed for the Project. The emissions listed in Table 3-4 and Table 3-5 are applicable to Design Options A and B.

**Table 3-4. Construction Emissions for Alternative 2 (Design Options A and B)**

| Project Phase | $CO_2e$ (pounds/day) |
|---|---|
| Grubbing/land clearing | 7,246.39 |
| Grading/excavation | 20,711.04 |
| Drainage/utilities/sub-grade | 15,582.23 |
| Paving | 7,173.12 |
| Maximum daily or average daily | 20,711.04 |
| Project total (tons) | 4,169.94 |

Notes:
$CO_2e$=carbon dioxide equivalent

**Table 3-5. Construction Emissions for Alternative 3 (Design Options A and B)**

| Project Phase | $CO_2e$ (pounds/day) |
|---|---|
| Grubbing/land clearing | 7,972.81 |
| Grading/excavation | 20,711.04 |
| Drainage/utilities/sub-grade | 15,582.23 |
| Paving | 7,173.12 |
| Maximum daily or average daily | 20,711.04 |
| Project total (tons) | 4,189.12 |

Notes:
$CO_2e$=carbon dioxide equivalent

## 3.3.6 CEQA Conclusion

The methodology, analysis, and determinations in relation to Climate Change addressed in this section are under the purview of City, as the City serves as the CEQA lead for the proposed Project. For the purposes of determining whether or not GHG emissions from affected projects are adverse, project emissions must include direct, indirect, and, to the extent information is available, life cycle emissions during construction and operation. For the project analysis, construction emissions were amortized over the life of the project (defined as 30 years), added to the operational emissions, and compared to the existing and no build conditions. Table 3-4 and Table 3-5 quantify the expected GHG emissions from construction activities for Alternatives 2 and 3, respectively. As shown in Table 3-4, construction of Alternative 2 would generate 4,170 MT of $CO_2e$. Amortized over a 30-year period, the approximate life of the Project, the yearly contribution to GHG from the construction of Alternative 2 would be 139 MT of $CO_2e$ per year. As shown in Table 3-5, construction of Alternative 3 would generate 4,189 MT of $CO_2e$. Amortized over a 30-year period the yearly contribution to GHG from the construction of Alternative 3 would be 139.6 MT of $CO_2e$ per year. When compared to the Alternative 1 (No Build) conditions, the Project build alternatives would increase the GHG emissions by 7 MT of $CO_2e$ per year in 2025 and 72 MT of $CO_2e$ per year in 2035. Therefore, the combined construction and operational GHG emissions of the Project would be 146 to 212 MT of $CO_2e$ per year. When compared to the Existing (2015) conditions, Alternatives 2 and 3 would reduce the GHG emissions by 1,187 MT of $CO_2e$ per year in 2025 and 1,580 MT of $CO_2e$ per year in 2035. Therefore, because there is a reduction in future emissions compared to existing emissions, there is evidence of substantial progress in reducing emissions and the impact may be considered less than significant.

The following discusses the consistency of the proposed project to the State's GHG reduction goals, the CARB Scoping Plan, and SCAG's 2016 RTP/SCS in addition to the City's CAAP.

### 3.3.6.1 Consistency with the Long-Term Goal of AB 32 and SB 32

AB 32 established a 2020 target of 1990 emission levels by 2020 (ARB Scoping Plan and 2014 update). SB 32 established 2030 target of 40 percent below 1990 levels by 2030 (ARB Scoping Plan 2017 update). Strategies to achieve these statewide targets are outlined in the ARB Climate Change Scoping Plan, the State's plan for mitigating the impacts of climate change. As shown in Table 3-3, all of the future No Build and Build Condition emissions are 11 and 16 percent lower than the existing baseline in 2025 and 2035, respectively. Therefore, the proposed Project would be consistent with the long-term goal of AB 32 and SB 32.

### 3.3.6.2 CARB Scoping Plan

In accordance with AB 32, CARB developed the Scoping Plan to outline the State's strategy to achieve 1990-level emissions by year 2020. Since adoption of the 2008 and 2017 Scoping Plans, State agencies have adopted programs identified in the Scoping Plan, and the legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the LCFS and changes in the corporate average fuel economy standards (e.g., Pavley I and 2017–2025 Corporate Average Fuel Economy [CAFE] standards). These statewide measures are applicable uniformly throughout the State, and all future on-road vehicles would be in compliance. Therefore, the proposed Project would be consistent with the Scoping Plan.

#### 3.3.6.3 SCAG's 2016 Regional Transportation Plan/Sustainable Communities Strategies

SCAG's 2016 RTP/SCS is a regional growth-management strategy that targets per capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region. The 2016 RTP/SCS incorporates local land-use projections and circulation networks in city and county general plans. The projected regional development pattern, including locations of land uses and residential densities included in local general plans, when integrated with the proposed regional transportation network identified in the 2016 RTP/SCS, would reduce per capita vehicular travel-related GHG emissions and achieve the GHG reduction per capita targets for the SCAG region of 8 percent per capita from 2005 GHG emission levels by 2020 and 19 percent per capita from 2005 GHG emission levels by 2035. The strategies, programs, and projects outlined in the 2016 RTP/SCS are projected to result in GHG emissions reductions in the SCAG region that meet or exceed these targets. The proposed Project is included in the 2016 SCAG RTP/SCS. In addition, the proposed Project includes local improvements to the pedestrian and bicycle infrastructure. Therefore, the proposed Project is consistent with SCAG's 2016 RTP/SCS.

#### 3.3.6.4 City of Long Beach Draft Climate Action and Adaption Plan

The City is currently in the process of preparing a CAAP. The goal of the CAAP is to reduce future GHG emissions, to prepare the City for the impacts of climate change, and to ensure that the City continues on a trajectory that aligns with the short-term, interim, and long-term State GHG reduction goals. The proposed Project is in compliance with the following Priority Mitigation Actions that are applicable to a bridge replacement project:

- Action T-4: Increase bikeway infrastructure
- Action T-5: Expand/improve pedestrian infrastructure citywide

In addition, as discussed above, the Project would be consistent with the long-term goal of AB 32 and SB 32. Therefore, the proposed Project is consistent with the City's CAAP.

### 3.3.7 Greenhouse Gas Reduction Strategies

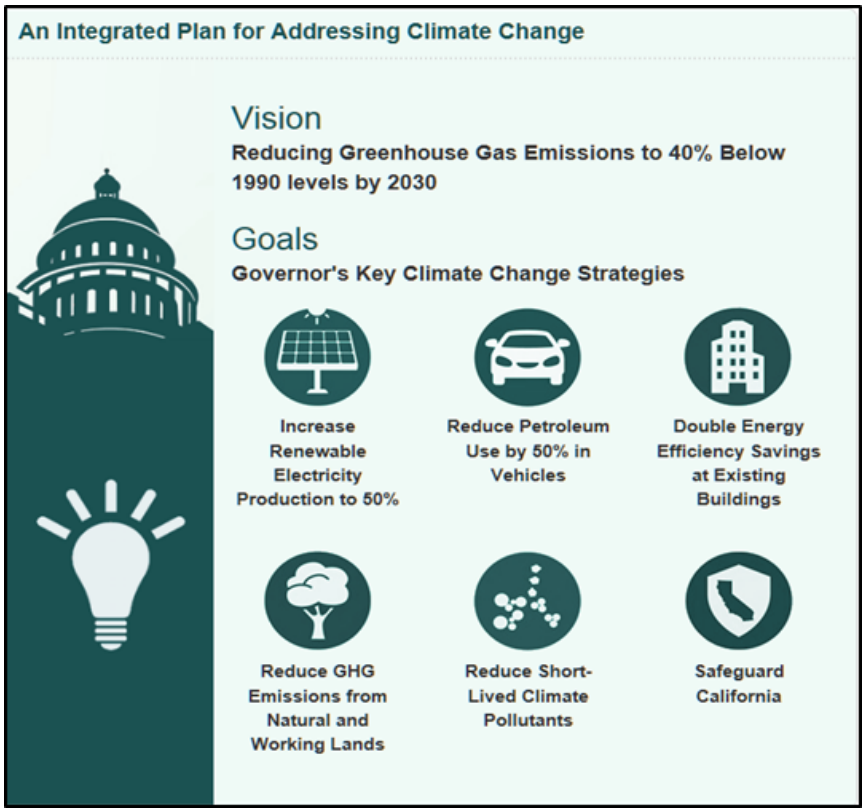
#### 3.3.7.1 Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California*.

In an effort to further the vision of California's GHG reduction targets outlined an AB 32 and SB 32, Governor Brown identified key climate change strategy pillars (concepts). These pillars, shown in Figure 3-5, highlight the idea that several major areas of the California economy will need to reduce emissions to meet the 2030 GHG emissions target. These pillars are (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing

buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farm and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California*.

**Figure 3-5. California Climate Strategy**




The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that we build on our past successes in reducing criteria and toxic air pollutants from transportation and goods movement activities. GHG emission reductions would come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled (VMT). A key state goal for reducing greenhouse gas emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030.

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

### California Transportation Plan (CTP 2040)

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. The CTP defines performance-based goals, policies, and strategies to achieve our collective vision for California's future statewide, integrated, multi-modal transportation system. It serves as an umbrella document for all of the other statewide

transportation planning documents. Over the next 25 years, California will be working to improve transit and reduce long-run repair and maintenance costs of roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies rather than continuing to expand capacity on existing roadways.

SB 391(Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

### 3.3.7.2 Local Efforts

#### City of Long Beach Climate Action and Adaptation Plan

The City of Long Beach's Climate Action and Adaptation Plan (Plan) is a comprehensive planning document outlining the City's proposed approach both to address climate impacts to the city and to reduce the city's impact on the climate through reducing greenhouse gas emissions. This Plan will guide the City to best prepare and protect for future climate impacts, while ensuring the City and all its residents and businesses contribute towards both the State of California's climate goals, and global efforts to address the current climate crisis that the world is facing.

The CAAP identified transportation as the number one form of GHG emissions in Long Beach (50%), followed by building energy (44%) and waste (6%). The CAAP provides a framework for creating or updating policies, programs, practices, and incentives for Long Beach residents and businesses to reduce the City's GHG footprint, and ensure the community and physical assets are better protected from the impacts of climate change. There are 19 priority strategies with many additional supportive strategies to meet these GHG reduction goals. Priority actions for the transportation sector include:

- Increase frequency, connectivity, and safety of transit options
- Increase employment and residential development along primary transit corridors
- Increase bikeway infrastructure
- Expand/improve pedestrian infrastructure citywide
- Develop an Electric Vehicle Infrastructure Master Plan
- Update the Transportation Demand Management 0rdinance
- Increase density and mixing of land uses
- Integrate SB 743 planning with CAAP process

### 3.3.7.3 Project-Level GHG Reduction Strategies

The following measures would also be implemented in the Project to reduce GHG emissions and potential climate change impacts from the Project.

- Landscaping reduces surface warming, and through photosynthesis, decreases $CO_2$. Landscaping would be provided where necessary within the corridor to provide aesthetic treatment, replacement planting, or mitigation planting for the Project. The landscape planting would help offset any Project $CO_2$ emissions.

- The Project would incorporate the use of energy-efficient lighting, such as light-emitting diode (LED) traffic signals and street lights, to the extent feasible. LED lights consume 10 percent of the electricity of traditional lights, which would also help reduce the Project's $CO_2$ emissions.
- Project Feature PF-3 – The City will require the construction contractor to develop and implement a transportation management plan (TMP) to minimize traffic delays and emissions during construction. The TMP will include the following measures:
- PR-1: A Maintenance of Traffic (MOT) Plan will be established that provides at least one lane of traffic in each direction on roads during construction.
- PR-3: Pedestrian access points to businesses, parks, and schools within the construction area will be maintained throughout the construction period, where feasible. If usual access points are lost, provisions for alternative access to the affected parcels will be made.
- PR-4: During construction, appropriate signage and advanced warning will be developed and displayed to direct pedestrian, bicycle, and vehicular traffic alternate routes.
- Measure PR-10 – Vegetation removed from temporary construction easements will be revegetated, with vegetation plans developed in consultation with property owners to ensure compatibility with existing vegetation. Maintaining vegetation helps reduce surface warming and absorbs $CO_2$.
- Measure AQ-4 / Project Feature PF-60 – The contractor will adhere to Caltrans Standard Specifications Section 14.9-02, Air Pollution Control. To the extent that compliance with rules, regulations, ordinances, and statutes reduces emissions of CO2, CH4, N2O, and black carbon, these specifications can reduce GHG emissions during construction.
- Project Feature PF-64 – During construction, the City's Resident Engineer or designated contractor will ensure that construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by CCR Title 17, Section 93114.
- Project Feature PF-71 – To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.

### 3.3.8 Adaptation

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects would vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

### 3.3.8.1 Federal Efforts

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program (USGRCP) delivers a report to Congress and the president every 4 years, in accordance with the Global Change Research Act of 1990 (15 U.S.C. ch. 56A § 2921 et seq). The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways." Chapter 12, "Transportation," presents a key discussion of vulnerability assessments. It notes that "asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime."

U.S. DOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions."[7]

FHWA order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events,* December 15, 2014)[8] established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems.

FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels.[9]

### 3.3.8.2 State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment* (2018) is the state's latest effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- *Adaptation* to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- *Adaptive capacity* is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."
- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.

[7] https://www.fhwa.dot.gov/environment/sustainability/resilience/policy_and_guidance/usdot.cfm
[8] https://www.fhwa.dot.gov/legsregs/directives/orders/5520.cfm
[9] https://www.fhwa.dot.gov/environment/sustainability/resilience/

- Resilience is the "capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience." Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt." Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to: ethnicity, class, sexual orientation and identification, national origin, and income inequality.2 Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions for how state agencies could incorporate "sea-level rise (SLR) projections into planning and decision making for projects in California" in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California – An Update on Sea-Level Rise Science* was published in 2017 and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.[10]

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multi-disciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multi-disciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

[10] http://www.opc.ca.gov/updating-californias-sea-level-rise-guidance/

### 3.3.8.3 Regional/Local Efforts

#### City of Long Beach Climate Action and Adaptation Plan

The City Long Beach's CAAP identifies adaptation strategies to improve the ability of the City and its residents and businesses to adapt to the climate change and related impacts now and in the future. Thirty-seven adaptation strategies are identified and broken into four sectors:

- Extreme Heat
- Air Quality
- Drought
- Flooding

### 3.3.8.4 Climate Change Adaptation

#### Caltrans Vulnerability Assessments

Caltrans is conducting climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- Exposure – Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- Consequence – Determine what might occur to system assets in terms of loss of use or costs of repair.
- Prioritization – Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

### Sea Level Rise Analysis and Adaptation Efforts

According to the State of California Sea-level Rise Guide (California Natural Resources Agency 2018), climate change has the potential to raise sea levels near Los Angeles by 5.4 to 6.7 feet by 2100. The City in its CAAP uses inundation scenarios of 11" of seal level rise for 2030, 24" for midcentury and an end-of-century mid-range scenario of 37" and high range scenario of 66" (5.5 feet). Components of harbor infrastructure and the Ports of Los Angeles and Long Beach may be vulnerable to sea level rise. Sea level rise of this magnitude could inundate portions of the local coastline. The Project location is at a coastal location; however, Shoemaker Bridge is elevated within the Project limits, which would reduce the potential of inundation from higher sea levels. In addition, at its midpoint the new Shoemaker Bridge structure would be approximately 10 feet higher than the existing Shoemaker Bridge structure while high-range sea level rise estimates for 2100 are less than 7 feet. Therefore, the proposed project would help the City meet the following Sea Level Rise and Flooding Adaptation Strategies:

- Action FLD-11: Relocate/elevate critical infrastructure
- Action FLD-17: Elevate streets/pathways

Frequent monitoring and coordination with local, regional, state and federal agencies, especially City of Long Beach Public Works, Port of Long Beach (POLB), Los Angeles County (Public Works and the Department of Beaches and Harbors), Los Angeles County Flood Control, and the U.S. Army Corps of Engineers would ensure that the Project will be resilient to the effects of sea level rise and potential flood events.

The proposed Shoemaker Bridge structure is designed to withstand a 130 year flood event and the bridge deck maintains 1 foot of freeboard above the existing flood wall. In addition, the proposed Project would not alter the heights or locations of the existing levees. Therefore, the Project would not affect the location of the existing or future floodplains.

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# Chapter 4 Comments and Coordination

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation, the level of analysis required, and identify potential impacts, mitigation measures, and related environmental requirements. Agency consultation and public participation for this Project have been accomplished through a variety of formal and informal methods, including monthly PDT meetings, interagency coordination meetings, and consultation with interested parties. This chapter summarizes the City and Caltrans' efforts to fully identify, address, and resolve Project-related issues through early and continuing coordination (Table 4-1).

**Table 4-1. Coordination with Resource Agencies**

| Timing | Activity |
|---|---|
| **AB 52**<br>April 11, 2016<br>December 20, 2016<br>May 4, 2017<br>April 5, 2018<br>April 23, 2018<br><br>**Section 106**<br>March 28, 2018<br>April 23, 2018<br>April 26, 2018 | The NAHC conducted searches of the SLF and provided lists of Native Americans on April 11, 2016 (for CEQA/AB 52) and March 16, 2018 (for Section 106). No cultural resources were identified on the SLF within or adjacent to the Project. The NAHC and the City recommended contacting ten Native American groups/individuals as part of AB 52 consultation requirements. The following Native American groups/individuals were contacted based on the lists provided by the NAHC and the City of Long Beach.<br>• Gabrieleno/Tongva San Gabriel Band of Mission Indians- Anthony Morales<br>• Gabrielino/Tongva Nation- Sam Dunlap and Sandonne Goad<br>• Gabrielino Tongva Indians of California Tribal Council- Robert Dorame<br>• Gabrielino-Tongva Tribe- Linda Candelaria, Bernie Acuna and Charles Alvarez<br>• Ti'At Society/Inter-Tribal Council of Pima- Cindi Alvitre<br>• Soboba Band of Luiseño Indians- Joseph Ontiveros<br>• Gabrieleño Band of Mission Indians-Kizh Nation- Andrew Salas<br>• L.A. City/County Native American Indian Commission- Ron Andrade<br>• Tongva Ancestral Territorial Tribal Nation- John Tommy Rosas<br>For AB 52, the City sent letters via U.S. certified mail on April 11, 2016, December 20, 2016, and May 4, 2017, and follow-up emails on April 5, 2018 and April 23, 2018. Phone calls were also attempted on April 23, 2018, and April 26, 2018.<br>Caltrans' Section 106 Native American consultation policy is that Caltrans consults only with the tribes and tribal representatives who are on the NAHC list for the area. Therefore, for the purposes of Section 106, Caltrans letters were sent via U.S. certified mail on March 28, 2018 to the groups/representatives listed on the NAHC Section 106 list for the Long Beach area. Phone calls were attempted along with follow-up emails on April 23, 2018, and April 26, 2018. |

## Table 4-1. Coordination with Resource Agencies

| Timing | Activity |
|---|---|
| | As of November 28, 2018, responses have been received from Anthony Morales, Andrew Salas, and Robert Dorame regarding the AB52 and Section 106 consultation. Their responses are below.<br>• In April and November 2018, Mr. Morales expressed a concern for the Project's location near the ocean and the cultural significance the area holds for his people. He wishes to be consulted and prefers to have a native monitor on-site. This draft report was forwarded to Mr. Morales on December 3, 2018 for comment and a meeting is being set up to facilitate consultation with the lead agencies. In January 2019 he stated that he would like to be consulted if the lead agencies will allow a Native American monitor or if any human remains are discovered. Consultation with Mr. Morales is on-going.<br>• In April 2018, Mr. Salas stated that the area is sensitive for cultural resources and would like to consult with the City and Caltrans regarding this Project. This draft report was forwarded to Mr. Salas on December 3, 2018 for comment and a meeting is being set up to facilitate consultation with the lead agencies. Several attempts were made to consult with Mr. Salas in January and February 2019; however, we were not able to get any input from him. Consultation with Mr. Salas is on-going.<br>• In April 2018, Mr. Dorame expressed his concern for the cultural sensitivity of the general area. He requested to have a native monitor present on-site and would like to be consulted by the agencies involved. On November 14, 2018, Mr. Dorame stated he would decline to meet with the lead agencies unless he was paid for his time. Mr. Dorame previously forwarded his recommended language pertaining to post-review discoveries for consideration in October 2018.<br>o In October 2018, Mr. Dorame provided Caltrans with a number of documents that outline the Gabrielino Tongva Indians of California's recommendations for Native American monitoring, treatment and disposition of human remains and associated grave goods, and recovery and reburial procedures. Caltrans staff understand that this information is confidential and that these can be included in confidential appendices to our technical reports only. We are very appreciative of the information Mr. Dorame shared with us.<br>o On December 3, 2018, this draft report was forwarded to Mr. Dorame for comment. A follow-up email was sent on April 19, 2019; to date there been no response from him. Consultation with Mr. Dorame is on-going.<br>As of April 26, 2018, responses have been received from John Tommy Rosas and Joseph Ontiveros regarding AB52 consultation.<br>• The City of Long Beach is continuing AB52 consultation with John Tommy Rosas. Mr. Rosas stated that he would contact the City. Mr. Rosas has not yet contacted the City and there has been no consultation as of the date of this report.<br>• Mr. Ontiveros responded to the City's AB2 consultation letter that the Soboba Band "does not have any specific concerns regarding known cultural resources," "requests that approved Native American Monitor(s) be present during any future ground disturbing proceedings," and "wishes to defer to Gabrieleño Tribal Consultants." |

**Table 4-1. Coordination with Resource Agencies**

| Timing | Activity |
|---|---|
| | As of January 2019, five responses from the Native American groups/representatives during the AB 52 and Section 106 consultation process requested formal consultation with the City and Caltrans, as well as the provision of a Native American monitor during Project construction. Copies of the ASR were sent out to the Native American groups/representatives in January 2019 and Native American consultation summary letters sent in June 2019. |

Notes:
AB=Assembly Bill; ASR=Archeological Survey Report; CEQA=California Environmental Quality Act; NAHC=Native American Heritage Commission; SLF=Sacred Lands File

## 4.1 Notice of Preparation

The scoping process for the proposed Project was initiated with the preparation and distribution of a Notice of Preparation (NOP).

The NOP was posted at the SCH (No. 2016041007) and circulated to public agencies and other interested parties in compliance with Section 15082 of the CEQA Guidelines on April 1, 2016. The NOP notified the public of the EIR/EA being prepared, along with the scoping meeting location and ways in which the public could provide comments on the Project. A copy of the NOP and the responses to the NOP are provided in Appendix F, *Notice of Preparation*, of the EIR.

Twelve comments were received from federal, state, and regional/county agencies, and 22 comment letters were received from the general public in response to the NOP.

Public agency comments received in response to the NOP:

- Native American Heritage Commission: A standard comment letter to the NOP was issued, which discussed requirements under AB 52 consultation. NAHC requires a 14-day period to respond to the initial notice to initiate AB 52 consultation. In addition, it requested that the agency must begin consultation within 30 days of receiving a Tribe's request for consultation and before releasing a negative declaration, mitigated negative declaration, or EIR.
- United States Coast Guard (USCG): The USCG indicated that the LA River conforms to advance approval criteria under Title 33 CFR, Part 115.70 at the Project site. USCG indicated that an individual Coast Guard bridge permit would not be required for the Project. USCG also requested post construction documents, which would consist of a photograph and as-built plan and elevation drawings of the bridge.
- Gabrieleno Band of Mission Indians - Kizh Nation: The Gabrieleno Band of Mission Indians-Kizh Nation indicated that the Project lies in an area where the ancestral territories of the Kizh Gabrieleno's villages adjoined and overlapped with each other, at least during the Late Prehistoric and Prehistoric Periods. Therefore, it requested that one of their certified Native American Monitors to be on site during any and all ground disturbances to protect any cultural resources that may be affected during construction or development.
- SCAQMD: The SCAQMD requested a copy of the Draft EIR appendices or technical documents related to the air quality and GHG analyses and electronic versions of all air quality

modeling and health risk assessment files. The SCAQMD staff also requested the lead agency quantify criteria pollutant emissions and compare the results to the recommended regional significance thresholds. SCAQMD also recommended when preparing the air quality analysis for the proposed Project, the lead agency perform a localized analysis by either using localized significance thresholds (LST) developed by SCAQMD or perform dispersion modeling, as necessary. In addition, SCAQMD indicated that in the event that the proposed Project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended the lead agency perform a mobile source health risk assessment.

- Long Beach Water Department: The Long Beach Water Department stated it does not have any objections to the proposed scope and contents of the notification. It does, however, have active water and sewer facilities within the Project limits and requests to be notified for any Project conflicts with these facilities.
- Los Angeles County of Sanitation District: The Los Angeles County Sanitation District has determined the proposed Project may impact existing and/or proposed Los Angeles County of Sanitation District's trunk sewers located within the proposed Project limits; therefore, it cannot issue a detailed response to or provide a permit for construction until Project plans and specifications incorporate its sewer lines and are provided to the Los Angeles County Sanitation District for review. The agency requests the submittal of a detailed map of the proposed limits to the attention of Mr. Michael Tatalovich of the Los Angeles County Sanitation District's sewer design section.
- County of Los Angeles Department of Public Works Flood Maintenance Division (LADPW Flood Control District): The LADPW Flood Control District determined that an encroachment permit from its office is required for any encroachment within the LA River. Therefore, the environmental document must discuss the encroachments to the LA River along with any applicable mitigation measures if impacts occur. The agency required that the proposed bridge have sufficient clearance underneath to allow maintenance truck activity to occur along the channel access road. The LADPW Flood Control District requested to review the approved plans when available to assure the proposed bridge improvements do not have any adverse structural effect on its facilities and maintenance activities. Lastly, the LADPW Flood Control District requested that the environmental document provide a schedule of construction activities to avoid potential conflicts with their maintenance activities.
- California State Lands Commission (CSLC): The CSLC staff stated it does not assert jurisdiction at this time. Therefore, no lease or other authorization would be required from the CSLC for the Project. CSLC requests that the City prepare a feasibility report on providing public access to the waterway, for recreational purposes, and determine if such public access would be provided. CSLC also determined that the subject waterway involved in the Project study area is subject to a public navigational easement.
- Long Beach Unified School District (LBUSD): LBUSD requested the EIR contain enough information and analysis to clearly identify impacts on students and schools related to traffic, noise, air quality, community impacts, Section 4(f), and ROW so appropriate measures can be proposed to avoid or mitigate them. LBUSD requested that the City and Caltrans commit to a process that leads to appropriate mitigation for impacts on schools.

- Caltrans: Caltrans requested to actively participate in the lead agency's CEQA process, review the lead agency's CEQA document, and use that document when making a decision on the Project. Caltrans would like the agency to be aware that it follows highway capacity methods to analyze its facilities and requested that the agency refer to its traffic engineers to follow the *Guide for the Preparation of Traffic Impact Analysis Studies* (Caltrans 2002). Caltrans stated it does not consider the Los Angeles County's Congestion Management Plan criteria alone for the analysis of transportation impacts pursuant to a CEQA review and Caltrans guidelines for the preparation of traffic impact analyses should be followed.

  Assuming there is a need for federal money on this proposed Project, Caltrans stated that the environmental document will undergo Caltrans Environmental Document Quality Control and NEPA Assignment Review Procedures for environmental documentation. Caltrans noticed that the Initial Study does not include recreation as an issue study area in the draft environmental impact report (DEIR). However, the NOP states that Recreation could have potentially significant effects to recreation resources. Caltrans recommended that the DEIR include an in-depth analysis of impacts on recreation resources.

- USFWS: USFWS was concerned about the potential impact on migratory birds and would like a description of the proposed Project's impacts on migratory birds and their habitats, as well as any conservation measures that would be used to offset impacts on migratory birds be included in the DEIR. In addition, USFWS would like a description of the proposed Project and the environment in the vicinity of the Project, from both local and regional perspectives, including all practicable alternatives that have been considered to avoid and/or reduce Project impacts on federally listed and other sensitive species and vegetation types to be included in the DEIR.

  USFWS also requested the inclusion of specific acreages and descriptions of the types of wetlands, riparian, and other sensitive habitats that may be affected by the Project alternatives, as well as aerial photographs, mapping, and tables to summarize such information. It also requested the inclusion of detailed information on the number and distribution of all federal candidate, proposed, and listed species; state-listed species; and locally sensitive species on or near the Project site that may be affected by the proposed Project or Project alternatives.

  USFWS stated that Project information is to be collected on a sufficiently wide region such that the DEIR addresses the entire Project footprint, including borrow and fill sites, staging areas, fuel modification and maintenance zones, and potentially extensive manipulation of adjacent habitat areas, including potential relocation of stretches of the LA River, as well as areas that may be restored to offset these impacts. USFWS requested that an analysis of cumulative effects from proposed developments in the surrounding area be included in the DEIR. USFWS would like the City to be aware that there are numerous historic records for the federally-endangered Lyon's pentachaeta and salt marsh bird's beak, as well as federal candidate Brand's phacelia, in the vicinity of the proposed Project. If any suitable remnant habitat occurs within the proposed Project footprint, focused plant surveys should be conducted during the appropriate time of year by a qualified botanist.

A summary of main topics of concern from the general public that were received in response to the NOP are provided below:

- Concern for the potential of increased traffic and refuse truck trips within the Project area as a result of the proposed Project
- Concern for the cost of the proposed Project and funding sources
- Concern that the removal of 9th Street and the lack of access to 6th Street would disrupt surrounding residents
- Concern on how 7th Street traffic would flow if it is a two-way and the impact on the nearby schools
- Request to reserve jobs for the proposed Project to City residents with a wage of at least $20 per hour
- Concern about the potential for existing flooding conditions on Maine Avenue and Edison Elementary School that may worsen because of the proposed Project
- Concern about the loss of access between the west side of the City and Downtown Long Beach
- Concern about the speed limit of traffic exiting the bridge into the residential area
- Concern about the roundabout to potentially cause more accidents from speeding, drunk drivers, etc.
- Concern for the potential of decreased air quality resulting from construction of the proposed Project
- Support for the increased connectivity within Cesar E. Chavez Park
- Concern that noise impacts on marine life would occur as a result of the construction of the proposed Project
- Concern about noise impacts associated with increased traffic through the Project area
- Requests that if the existing bridge is used for recreation, it should be ADA compliant
- Requests for continued or similar access to and from Seaside Way to Shoreline Drive/Shoemaker Bridge/SR-710 on ramp facilities
- Concerns with the impact the park improvements would have on parking and noise in surrounding neighborhoods

## 4.2 Scoping Meeting

Public scoping meetings were held April 13, 2016, from 4:30 to 7:30 p.m. at the Jenny Oropeza Community Center at Cesar E. Chavez Park, located at 401 Golden Avenue, Long Beach, California. Several methods of notification were used, in addition to the publication of the NOP, to notify the public of the scoping period and meetings, including mail and a posting in the Long Beach Press-Telegram. Approximately 35 people attended the public scoping meeting. Spanish and Cambodian translators were at the public scoping meeting, in addition to sign language interpreters.

The public scoping meeting included exhibit stations and presentations explaining the purpose of scoping, the Project background, the Shoemaker Bridge Project limits, the need and purpose of the proposed Project, Project alternatives, and key environmental issues to be addressed in the DEIR. Verbal comments were received at the scoping meeting, as well as 34 written comments. Key issues submitted by individuals included the following:

- Increased traffic within the Project area, especially in adjacent neighborhoods as a result of the proposed Project
- Cost of the proposed Project and funding sources
- The potential for existing flooding conditions on Maine Avenue and Edison Elementary School to worsen because of the proposed Project
- Concern about the loss of access between the west side of the City and downtown Long Beach because of the removal of the 9th and 10th Street ramps
- Speed limit of traffic exiting the bridge into the residential area
- The potential for air quality impacts resulting from construction of the proposed Project
- Noise impacts on marine life caused by the construction of the proposed Project
- Noise impacts associated with increased traffic through the Project area as a result of the proposed Project

## 4.3 Public Circulation

The Draft EIR/EA prepared for the Project was circulated for public review for a period of 45 days between September 27, 2019, and November 12, 2019. Caltrans, in cooperation with the City, held a public hearing on October 17, 2019 discussed below in Section 4.3.1.

Copies of the Draft EIR/EA were distributed to the State Clearinghouse, the Governor's Office of Planning and Research (15 copies of summary form), and other federal, State, and local agencies. Copies of the Draft EIR/EA were available for public review at Caltrans District 7, City of Long Beach Department of Public Works, the Billie Jean King Main Library, and Mark Twain Neighborhood Library. A copy of the distribution list for the Draft EIR/EA is provided in Chapter 6 of this document.

During the public review period twelve comment letters were received. Comments after the close of the public circulation period were accepted through November 15, 2019. Comments and their responses have been provided within Appendix K of this Final EIR/EA.

### 4.3.1 Public Hearing

Caltrans, in coordination with the City, held a public hearing for the proposed Project in the Cesar Chavez Elementary School Gymnasium located at 730 W. Third Street, Long Beach, CA 90802 on Thursday, October 17th, 2019 from 6:30pm to 8:30pm.

The public hearing allowed the public to engage directly with Project team members to obtain more information about the Project, and provided the public an opportunity to submit comments. The public hearing was conducted on a date during the public review period (September 27, 2019 through November 12, 2019) to maximize the solicitation of public feedback and to expand project awareness within adjacent communities. The total of 18 agency and consultant staff attended the public hearing.

Fact sheets, frequently asked questions (FAQs), comment cards, and speaker cards were made available to attendees at the welcome station at the entrance of the public hearing venue.

The public hearing was held as an open house format with 10 exhibit boards and technical staff stationed available to engage and interface with the public about the proposed Project. The Project exhibit boards were provided at the Environmental, Engineering, and ROW stations. The public hearing stations were set up throughout the venue. A PowerPoint presentation with an overview of the Project background, purpose and need, alternatives evaluated, current status of the Project, and the Project schedule, commenced at 7:00 pm. Attendees were encouraged to provide a verbal comment after the conclusion of the PowerPoint presentation between 7:15pm and 8:30 pm. A court reporter documented all the verbal comments given at the public hearing in addition. Participants were also encouraged to submit written comments through the comment card available, project email, or verbally through the court reporter provided at the public hearing. The City provided two American Sign Language, one Spanish, two Tagalog, and two Khmer interpreters.

A total of 24 members of the public attended the public hearing including six residents, one representative from the Downtown Long Beach Alliance, two representatives from the Willmore City Heritage Association, one representative from the West Long Beach Association, and two representatives from the Port of Long Beach. Five members of the public provided verbal comments during the public hearing. One comment card and six speaker cards were completed and collected. The comment cards, speaker cards, and verbal comments as well as the responses to these comments are provided in Appendix K of this Final EIR/EA. Comments provided had the following key themes: public support of the proposed Project, public concerns regarding safety at schools (crosswalks, drop-off/pick-up areas), the location of adjacent projects and the coordination of these projects along with cumulative effects, and the request to notify the public of all on-going projects within the City. Overall the public comments received at the public hearing were in support of the Project.

## 4.4 Consultation and Coordination with Agencies and Organizations

### 4.4.1 Project Team Coordination

#### 4.4.1.1 Project Development Team Meetings

A PDT was identified to ensure collaborative communication among the stakeholders, which includes representatives from Caltrans, the City and Gateway Cities Council of Government. PDT meetings have occurred on a monthly basis at either Caltrans District 7 offices or the City Department of Public Works (DPW) office and are attended by the engineering and environmental consultant teams from the City and Caltrans. The larger PDT Team consists of engineers, environmental generalists, biologists, archaeologists, paleontologists, and air quality and noise specialists.

#### 4.4.1.2 Value Analysis Workshops

A value analysis workshop has not been conducted at this time.

#### 4.4.1.3 Native American Consultation

A summary of AB 52 and Section 106 Consultation efforts is provided in Table 4-1. As stated in Table 4-1, as of January 2019, five responses from the Native American groups/representatives during the AB 52 and Section 106 consultation process requested formal consultation with the City and

Caltrans, as well as the provision of a Native American monitor during Project construction. Copies of the ASR were sent out to the Native American groups/representatives in January 2019 and Native American consultation summary letters sent in June 2019.

### 4.4.2 Consultation with Resource Agencies

No consultation with resource agencies has been initiated for the Project. When consultation with resource agencies begins, this section will be updated accordingly. Table 4-2 includes permits, reviews, and approvals that will be required prior to the construction of the proposed Project.

### 4.4.3 Coordination with Local Agencies and Organizations

#### 4.4.3.1 Downtown Long Beach Alliance

A meeting with the Downtown Long Beach Alliance was held July 19, 2019. The Project engineering and environmental consultant teams provided an overview of the Project updates since the 2016 scoping meetings including the update that public circulation is anticipated to start at end of 2019. The purpose of the meeting was gather information and to listen to concerns that the Downtown Long Beach Alliance had based on their knowledge of the downtown area. The Downtown Long Beach Alliance provided insights on several project occurring within and adjacent to the Project limits as well as several neighborhood and business groups that the Project team should be in contact with. The main concerns included the Project's integration with public and development projects that would be implemented prior to the Project, as well as the Project's effect on parking, traffic circulation, and access to project adjacent active public spaces and businesses within the downtown area. The City will continue its coordination with the Downtown Long Beach Alliance throughout the PS&E phase.

#### 4.4.3.2 Long Beach Unified School District

A meeting with LBUSD was held July 19, 2019. The Project engineering and environmental consultant teams provided an overview of the Project updates since the 2016 scoping meetings, including the update that public circulation is anticipated to start at the end of 2019. LBUSD representatives' main concerns were related to the existing pedestrian bridge on 7th Street, the existing and proposed drop-off locations for students, and the general flow and function around the schools. LBUSD representatives were in agreement that the change of traffic circulation along 3rd, 6th, and 7th Streets and the proposed linkages through Cesar E. Chavez Park would be beneficial to the students. However, LBUSD suggested that a follow-up meeting be scheduled in September so that they could observe drop-off and pick-up locations and the general flow of school traffic to provide more informed insights on potential impacts as a result of the proposed Project improvements along 3rd, 6th, and 7th Streets. The 2019-2020 school year for Cesar Chavez Elementary and Edison Elementary School are scheduled to begin in August. Coordination with LBUSD will continue throughout the PS&E phase.

A follow-up meeting with LBUSD representatives occurred on November 8, 2019. The Shoemaker Team discussed additional details and coordination in regards to Cesar Chavez Park and Thomas A. Edison Elementary School. The City will continue their coordination efforts with constru throughout PS&E phase.

## Table 4-2. Required Permits, Reviews, and Approvals

| Agency | Permit/Approval | Status |
|---|---|---|
| FHWA | Air Quality Conformity Determination | Prior to approval of the FONSI. |
| USACE | Section 404 Permit for modification to USACE facility (levees)<br>Section 408 Permit for modification to USACE facility (levees) | Application would be submitted after environmental document approval.<br>Application would be submitted after environmental document approval. |
| CDFW | 1602 Lake or Streambed Alteration Agreement | Permit would be obtained after certification of environmental document and prior to construction. |
| CCC | CZMA consistency certification | Consistency Certification is needed prior to issuance of the Final Environmental Document pursuant to NEPA. |
| SWRCB | Section 402 NPDES/Caltrans NPDES Permit CAS000003 and CAS000002 (Construction General Permit) | The Construction General Permit has been adopted and was effective as of July 1, 2010. The Caltrans NPDES Permit was effective as of July 1, 2013. |
| Los Angeles RWQCB | NPDES Permit No. CAG994004 (Dewatering Permit) | Permit will be acquired prior to construction. |
| Los Angeles RWQCB | NPDES Permit No. CAG914001<br>(Dewatering Permit for Contaminated Sites) | Permit will be acquired prior to construction. |
| Affected utilities | Approvals to relocate, protect in place, or remove utility facilities | Prior to any construction that would affect utility facilities. |
| Los Angeles County RWQCB | Section 401 Water Quality Certification<br>Section 402 NPDES (Construction Activity) | Section 401 Water Quality Certification would be obtained after certification of environmental document and prior to construction.<br>Section 402 NPDES (Construction Activity) Application would be submitted after environmental document approval. |
| LACFCD | Encroachment Permit | Letter or permit would be obtained prior to construction. |
| City of Long Beach | Approval of encroachment permits and street construction permits, street closures and rerouting, and associated improvements in the public ROW | Actions/permits would be obtained prior to the start of construction.<br>Section 4(f) concurrence was received from the City on December 14, 2019.<br>Prior to start of construction. |

| | | |
|---|---|---|
| | Section 4(f) consultation for Cesar E. Chavez Park.<br><br>Water Quality Management Plan | |
| City of Long Beach LCP/ CCC | CDP application for consistency determination | Application would be submitted after approval of the Final Environmental Document pursuant to CEQA/NEPA. A CDP is required prior to any ground breaking activities. |
| POLB | HDP | Application would be submitted after approval of the Final Environmental Document pursuant to CEQA. An HDP is required prior to any ground breaking activities. |
| Sanitation District of Los Angeles | Construction Work Discharge Permit | Required for discharge of construction water into local sewer system. To be applied for prior to construction. |

Notes:

Caltrans=California Department of Transportation; CCC=California Coastal Commission; CDFW=California Department of Fish and Wildlife; CDP=Coastal Development Permit; CEQA=California Environmental Quality Act; CZMA=Coastal Zone Management Act; FHWA=Federal Highway Administration; HDP=Harbor Development Permit; LACFCD=Los Angeles County Flood Control District; LCP=Local Coastal Program; NEPA=National Environmental Policy Act; No.=Number; NPDES=National Pollutant Discharge Elimination System; POLB=Port of Long Beach; ROW=right-of-way; RWQCB=Regional Water Quality Control Board; SWRCB=State Water Resources Control Board; USACE=United States Army Corps of Engineers

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The Walker Building HOA, Inc.
115 W. 4th St.,
Long Beach, CA 90802

## Citywide Community Organizations

Action Sports Kids Foundation (ASK)
6245 E. Golden Sands Dr.,
Long Beach, CA 90803

Assistance League of Long Beach
6220 E. Spring St.,
Long Beach, CA 90815

Citizens About Responsible Planning (CARP)
6444 E. Spring St.,
Long Beach, CA 90815

Community Action Team (CAT)
Justin Rudd
275 Saint Joseph Ave.,
Long Beach, CA 90803

Council of Neighborhood Organizations
2815 E. Broadway,
Long Beach, CA 90803

Disability Resources Center Advocacy Group (DRC Advocacy Group)
2750 E. Spring St., #100,
Long Beach, CA 90806

Educated Men with Meaningful Messages (EM3)
Chan Ladine
411 E. 10th St., Ste. 207,
Long Beach, CA 90813

Families Uniting Families – Project Fatherhood (FUF-PF)
525 E. 7th St.,
Long Beach, CA 90813

Farmstand 59
2714 California Ave.,
Long Beach, CA 90755

Friends of Long Beach Animals
3815 Atlantic Ave.,
Long Beach, CA 90807

The Growing Experience (TGE)
750 E. Via Carmelitos,
Long Beach, CA 90805

Khmer Parent Association (KPA)
1069 Cerritos Ave.,
Long Beach, CA 90813

Kiwanis Club of Long Beach (KCLB)
6285 E. Spring St., Box 532,
Long Beach, CA 90808

Latinos in Action (LIA)
1635 Locust Ave.,
Long beach, CA 90813-5617

NAACP – Long Beach Branch
P.O. Box 1594
Long Beach, CA 90801

Long Beach Gray Panthers
1150 E. 4th Str.,
Long Beach, CA 90802

Long Beach Heritage (LBH)
953 Park Cir.,
Long Beach, CA 90813

Long Beach Neighborhood Foundation (LBNF)
3715 Monogram Ave.,
Long Beach, CA 90808

Long Beach Neighborhoods First (LBNF)
3933 Lemon Ave.,
Long Beach, CA 90807

Long Beach Residents Empowered (LiBRE)
333 W. Broadway, #204,
Long Beach, CA 90802

Long Beach Section National Council of Negro Women (NCNW)
P.O. Box 91914,
Long Beach, CA 90809

Long Beach Time Exchange
920 Atlantic Ave., #102,
Long Beach, CA 90813

Los Angeles / Long Beach Area Chapter
P.O. Box 1988,
Long Beach, CA 90801-1988

Partners of Parks (PoP)
1150 E. 4th St.,
Long Beach, CA 90802

Rebuilding Together – Long Beach
P.O. Box 3823,
Long Beach, CA 90803

Saint Luke's Teaching Garden
525 E. 7th St.,
Long Beach, CA 90813

Stopping Pressure on Teens (S.P.O.T)
1011 E. Market St., #5027,
Long Beach, CA 90805

Urban Community Outreach (UCO)
241 Cedar Ave.,
Long Beach, CA 90802

Walk Long Beach (WLB)
425 E. 4th St., Unit E,
Long Beach, CA 90802

Wrap the Kids (WTK)
Susanna Twaite, President
17 E. Ellis St.,
Long Beach, CA 90805

## Business Associations

4th Street Business Improvement Association
2210 E. 4th St.,
Long Beach, CA 90814-1051

Apartment Association, California Southern Cities (AACSC)
333 W. Broadway, Ste. 101,
Long Beach, CA 90802-4438

Bixby Knolls Business Improvement Association (BKBIA)
4321 Atlantic Ave.,
Long Beach, CA 90807-2803

Downtown Long Beach Alliance (DLBA)
100 W. Broadway, Ste. 120,
Long Beach, CA 90802-4488

Executives Association of Long Beach (EALB)
6285 E. Spring St.,
Long Beach, CA 90808

Fair Trade Long Beach (FTLB)
65 S. Pine Ave., #109,
Long Beach, CA 90802

Uptown Business Improvement District (Uptown PBID)
6082 Atlantic Ave.,
Long Beach, CA 90805

Westside Project Area Council (WestPAC)
1415 Cota Ave.,
Long Beach, CA 90813

Zaferia Business Association (ZAB)
2727 E. Anaheim St., #4735,
Long Beach, CA 90804

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# Appendix A. Section 4(f) and Section 6(f) Analysis

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# Acronyms and Abbreviations

| | |
|---|---|
| APE | area of potential effect |
| BMP | best management practice |
| Caltrans | California Department of Transportation |
| CFR | Code of Federal Regulations |
| EA | Environmental Assessment |
| EIR | Environmental Impact Report |
| FHWA | Federal Highway Administration |
| I-710 | Interstate 710 |
| LA River | Los Angeles River |
| LARIO | Los Angeles River and Rio Hondo |
| LB MUST | Long Beach Municipal Urban Stormwater Treatment |
| L&WCF | Land and Water Conservation Fund |
| NB | northbound |
| NHPA | National Historic Preservation Act |
| NRHP | National Register of Historic Places |
| Project | Shoemaker Bridge Replacement Project |
| ROW | right-of-way |
| RV | recreational vehicle |
| SAFETEA-LU | Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users |
| SB | southbound |
| SCE | Southern California Edison |
| SHPO | State Historic Preservation Officer |
| SR-91 | State Route 91 |
| SR-710 | State Route 710 |
| TCE | temporary construction easement |
| TMP | traffic management plan |
| USC | United States Code |

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# 1 Section 4(f) *De Minimis* Determinations

This section of the document discusses proposed *de minimis* impacts under Section 4(f). Section 6009(a) of SAFETEA-LU amended Section 4(f) legislation at 23 United States Code (USC) 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This amendment provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. FHWA's final rule on Section 4(f) *de minimis* findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to Caltrans pursuant to 23 USC 326 and 327, including *de minimis* impact determinations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

## 1.1 De Minimis

If it is determined that there would be a "use" of a property or properties protected by Section 4(f), that "use" would be *de minimis* if it meets the following definitions (23 CFR 774.17) of *de minimis* impacts:

- De minimis impacts on publicly-owned parks, recreation areas, and wildlife and waterfowl refuges are defined as those that do not adversely affect the activities, features, and attributes of the Section 4(f) resource.
    - The *de minimis* finding considers avoidance, minimization, compensation, and/or enhancement measures addressing the project impacts on the Section 4(f) property.
    - Following an opportunity for public review and comment, the official(s) with jurisdiction over the property must provide written concurrence on the determination that the project impacts on the resource are *de minimis*. The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA), makes the final determination on the *de minimis* finding.
- De minimis impacts on historic sites are defined as the determination of either "No Adverse Effect" or "No Historic Properties Impacted" in compliance with Section 106 regulations, including the State Historic Preservation Officer's (SHPO) and the Advisory Council on Historic Preservation's written concurrence, when applicable.

Under the Section 106 Programmatic Agreement (Caltrans 2014), Caltrans must inform the SHPO in writing that a nonresponse for the purposes of a "No Adverse Effect" or a "No Historic Properties Affected" determination will be treated as the written concurrence for the *de minimis* determination. Caltrans, as assigned by FHWA, makes the final determination on the *de minimis* finding.

The following Section 4(f) properties would be directly impacted by the Shoemaker Bridge Replacement Project (Project), resulting in permanent incorporation into a transportation facility and/or temporary occupancy. In each of these cases, the use of property does not adversely affect the activities, features, and attributes of the Section 4(f) resource. Therefore, a proposed *de minimis* finding for each of these Section 4(f) resource impacts is outlined in this section.

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# 2 Requirements of Section 6(f)

State and local governments can obtain grants through the Land and Water Conservation Fund (L&WCF) Act to acquire land for, or make improvements to, public parks and recreation areas. Section 6(f)(3) of the L&WCF Act prohibits the conversion of property acquired or developed with these grants to a nonrecreation or parkland purpose without the approval of the United States Department of the Interior National Park Service. Section 6(f) directs the Department of the Interior to assure that replacement lands of equal value, location, and usefulness are provided as conditions to the conversion of lands acquired or developed with L&WCF Act funds. Consequently, where conversions of Section 6(f) lands are proposed for highway projects, replacement of the affected land is required. If L&WCF Act funds were used for the acquisition of land for or development of improvements at public recreation or park lands, the following prerequisites per 36 CFR Part 59.3 must be met prior to the conversion of any land from that resource for a nonrecreation or park use:

- All practical alternatives to the proposed conversion must be evaluated.
- The fair market value of the property to be converted must be established.
- The replacement property must be of at least equal value to the land converted for nonrecreation and park land uses.
- The replacement property must be of reasonably equivalent usefulness and location to that being converted.
- The property that is being proposed for substitution must meet the eligibility requirements for L&WCF Act-assisted acquisition.
- In the case of assisted sites that are partially rather than wholly converted, the impact of the converted part on the remainder shall be considered. If such a conversion is approved, the unconverted area must remain recreationally viable or be replaced.
- The National Park Service Regional Office is assured that all environmental review requirements related to the proposed project have been met.

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# 3 Description of Section 4(f) and 6(f) Properties

## 3.1 Section 4(f) Properties

### 3.1.1 Applicability of Section 4(f) for Cesar E. Chavez Park

Cesar E. Chavez Park is located at 401 North Golden Avenue, east of the Los Angeles River (LA River). The existing park is open to the public and owned by the City of Long Beach Department of Parks, Recreation, and Marine. Therefore, the park is subject to protection under the requirements of Section 4(f).

Cesar E. Chavez Park encompasses 25.6 acres, comprised of six discontinuous parcels separated by streets crossing the park, including West Shoreline Drive, 5th Street, 3rd Street, and West Broadway. Pedestrian and vehicle access is available to the western portion of the park from North Golden Avenue, 6th Street, and 3rd Street. However, no access is available to the western portion of the park because the parcels are bounded by West Shoreline Drive, which currently does not provide opportunities for vehicular or pedestrian access to the adjacent parkland.

Cesar E. Chavez Park contains several amenities for public use, including two basketball courts, playground equipment, picnic areas, grass areas, restrooms, an outdoor amphitheater, a community center (Jenny Oropeza Community Center), and a weight room. In addition, the Cesar Chavez Elementary School's gymnasium, located just east of Cesar E. Chavez Park, is accessible to the public during nonschool hours. Through a joint use agreement between the Long Beach Unified School District and Long Beach Department of Parks, Recreation, and Marine, one block of the park, including two half-court basketball courts are available for use by the students of Cesar Chavez Elementary School during school hours. In exchange for use of the park as a play area for the school, the school's gymnasium is available to the public during after school hours (City of Long Beach Department of Parks, Recreation, and Marine n.d.). Cesar E. Chavez Park also provides a direct connection to the LA River and Rio Hondo (LARIO) Trail, located adjacent to and west of the park.

### 3.1.2 Applicability of Section 4(f) for Los Angeles River and Rio Hondo Trail

The LARIO Trail is located along the east side of the LA River within the Project limits. The LARIO Trail is open to the public and owned by the Los Angeles County Department of Public Works and the Los Angeles County Parks and Recreation Department. Therefore, the property is subject to protection under the requirements of Section 4(f).

The trail is approximately 28 miles in length and consists of an unpaved path used mainly for equestrian activities and a paved Class I bike path. The Los Angeles County Department of Public Works owns and operates the paved portions of the LARIO Trail, and the Los Angeles County Parks and Recreation Department owns and operates the unpaved portions of the LARIO Trail. These two paved and unpaved trails parallel one another on the east side of the LA River. However, the unpaved trail ends at De Forest Avenue and 26th Way. Therefore, the unpaved portion of the LARIO Trail does not traverse through the Project limits, nor is the unpaved portion of the LARIO Trail impacted by the Project. The portion of the trail in the Project limits is the paved Class I bike path, which extends to the downtown Marina and Shoreline Pedestrian Bike Path. Within the Project limits, the bike path is accessible from West 7th Street, Shoreline Pedestrian Bike Path, and Queensway Bridge Bike Path. A connection to the bike path is also available from Cesar E. Chavez Park, which is located adjacent to and east of the bike path.

### 3.1.3 Applicability of Section 4(f) for Long Beach Municipal Urban Stormwater Treatment Facility

The Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility is a planned capital improvement project located on east bank of the LA River and State Route 71 (SR-710)/Interstate 710 (I-710), extending from downtown Long Beach and approximately 8 miles from State Route 91 (SR-91) to the north. The purpose of the project is to improve water quality associated with urban runoff in the project area, which ultimately flows into the LA River. The LB MUST facility would be open to the public and owned by the City of Long Beach.

Caltrans, as assigned by FHWA, must comply with 23 CFR 774.11(i) when determining if Section 4(f) applies to a property jointly planned for development with a future transportation corridor. To apply the joint planning provision, Question #24 in the FHWA Section 4(f) Policy Paper states the following: *Evidence that the reservation was contemporaneous with or prior to the establishment of the Section 4(f) property should be documented in the project file. Subsequent statements of intent to construct a transportation project within the resource should not be considered sufficient documentation. All measures which have been taken to jointly develop the transportation corridor and the park should be completely documented in the project files.* The LB MUST facility is scheduled to be constructed prior to the Shoemaker Bridge Replacement Project. As of this writing, the City of Long Beach is currently finalizing the design of the facility, while considering the components of the Shoemaker Bridge Replacement Project, to ensure that the LB MUST facility is designed to accommodate the Shoemaker Bridge Replacement Project. However, the *Long Beach Municipal Urban Stormwater Treatment Initial Study/Mitigated Negative Declaration* (City of Long Beach Department of Parks, Recreation, and Marine 2017) shows no evidence that the LB MUST facility has specifically reserved land for the Shoemaker Bridge. Therefore, the joint development provisions in 23 CFR 774.11(i) are not being applied.

The primary components of the LB MUST facility include a treatment facility; conveyance facilities, which would convey urban runoff into the treatment facility; and post treatment detention ponds. The treatment facility would be located along the east bank of the LA River, immediately north of the existing Shoemaker Bridge. The facility would be constructed on approximately 11.5 acres of vacant land owned by the City of Long Beach, state of California, and Southern Pacific Transportation.

The post treatment detention ponds and conveyance facilities would also serve as a park/water feature amenity, resulting in an improvement in recreational opportunities and aesthetics in the project area. The project would be integrated with the Drake/Chavez Park Master Plan improvements by providing pedestrian and bicycle access to the LA River, as well as detention ponds. These detention ponds would be located just south of the existing bridge and surround the eastern terminus support structure of the proposed Shoemaker Bridge.

Other proposed features at the facility include:

- Exercise par course with outdoor fitness stations providing exercise equipment
- Pad area for passive recreation, such as picnicking and outdoor events
- Educational/interpretive signage
- New decomposed granite multi-use trail that provides access around the ponds and connects to the LARIO Trail

- Wetland plants around ponds, including water-wise vegetation and slope planting, creating natural habitat
- Gated emergency vehicle access

### 3.1.4 Applicability of Section 4(f) for Los Angeles River Flood Channel

According to the Historical Resources Evaluation Report prepared for the Project (GPA Consulting 2018), one historic site in the Project's area of potential effect (APE) meets the criteria as a Section 4(f) resource: the LA River Flood Channel. The channel is a trapezoidal reinforced concrete channel constructed between 1938 and 1960.

The LA River Flood Channel is presumed eligible for listing in the National Register of Historic Places (NRHP), but the full evaluation of the entire channel is precluded by the resource's large size and the limited potential for effects. Presumption of eligibility for listing in the NRHP was approved after consultation with the Caltrans Cultural Study Office on October 12, 2017, pursuant to Stipulation VIII.C.4 of the FHWA Section 106 Programmatic Agreement. Therefore, the property is subject to protection under the requirements of Section 4(f).

The segment of the LA River Flood Channel within the APE is an approximately 1,000-foot-long portion of the larger 51-mile resource that passes beneath the Shoemaker Bridge. Like other portions of the river, the channel generally follows the historic-era natural river path. At this segment, it is approximately 480 feet wide and has sloped banks constructed out of reinforced concrete that form a trapezoidal shape. Rocks and various small plants, grasses, and mosses that have been left to grow wild cover the banks. A concrete parapet wall borders the channel on the east and west banks. This segment of the LA River Flood Channel is part of one of only three portions of the channel with an earthen bottom.

The segment located within the APE for the proposed undertaking was individually determined not eligible for listing in the NRHP. However, for the purposes of this undertaking, this segment is presumed to be a contributing feature to a potential district that includes the larger 51-mile resource of the LA River Flood Channel. The LA River Flood Channel has not been recorded and evaluated as a whole. Segments of the channel have been previously evaluated as contributing to a potential district for its association with flood control in the region and its role in the development of river-adjacent areas in the greater Los Angeles area, as well as representing a significant and distinguishable entity whose components may lack individual distinction. Full evaluation of the entire channel is beyond the scope of a reasonable level of effort for this undertaking due to its large size and the limited potential for effects as a result of the Project. Therefore, for the purposes of the Project only, the subject segment of the LA River Flood Channel is presumed to be eligible for listing in the NRHP as a contributor to a potential district.

The segment of the Los Angeles Flood Channel within the APE retains integrity of location, design, materials, workmanship, feeling, and association. Its setting has been slightly compromised but not to such a degree that the segment is unable to convey its significance as part of the larger LA River Flood Channel. It continues to convey its importance due to its association with flood control in the region that facilitated the continued development of river-adjacent areas during and after World War II and because it is a significant and distinguishable entity whose components may lack individual distinction. The segment continues to contribute to the overall significance of the entire LA River Flood Channel.

## 3.2 Section 6(f) Properties

### 3.2.1 Applicability of Section 6(f) for Cesar E. Chavez Park

In 2012, the City of Long Beach confirmed that funding for the development of improvements at Cesar E. Chavez Park included L&WCF Act funds. The funds were used to develop a teen and senior center building, Jenny Oropeza Community Center, and landscaping within that portion of the park (California Department of Parks and Recreation 2017). However, the City and Caltrans were unable to locate or obtain documentation from local records or the California Department of Parks and Recreation that verifies whether the 6(f) boundary is applicable to the entire park or specifically to the portion of the park that was improved upon using L&WCF Act funds. Therefore, it is assumed that the entire park is considered a 6(f) property.

# 4 Proposed *De Minimis* Impacts

The Project's *de minimis* impacts on, and uses of, Section 4(f) resource properties are described in Table 4-1. As shown in Table 4-1 and discussed in the following sections, the Project would result in a use of the following properties, but with avoidance, minimization, and mitigation or enhancement measures incorporated into the Project, the Project would not adversely affect the activities, features, and attributes that qualify the properties for protection under Section 4(f):

- Parks and Recreation Areas
    - Cesar E. Chavez Park (officials with jurisdiction: City of Long Beach Department of Parks, Recreation, and Marine
    - LARIO Trail (officials with jurisdiction: Los Angeles County Department of Public Works and Los Angeles County Parks and Recreation Department)
    - LB MUST facility (official with jurisdiction: City of Long Beach)
- Historic Site
    - LA River Flood Channel (official with jurisdiction: SHPO)

The City has coordinated with Caltrans on the potential uses of these Section 4(f) resources under Alternatives 2 and 3 (see Chapter 1 of Shoemaker Bridge Replacement Project Environmental Impact Report (EIR)/Environmental Assessment (EA) for a description of the Project alternatives). Because the Project would not adversely affect the activities, features, and attributes that qualify the properties for protection under Section 4(f), the City, in coordination with Caltrans, proposes that the Project would result in *de minimis* impacts on these properties.

For parks, recreation areas, or wildlife and waterfowl refuges, the official(s) with jurisdiction over the properties must be informed of the proposed *de minimis* impacts, after which an opportunity for public review and comment must be provided. During the consultation process, the relevant information from this report will be provided to these agencies for their concurrence that the Project would not adversely affect the activities, features, or attributes that qualify the properties for protection under Section 4(f).

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## Table 4-1. Use Determinations for Section 4(f) and Section 6(f) Properties

| Project Impacts | Preliminary Use Determination |
|---|---|
| ***Cesar E. Chavez Park*** | |
| ***Permanent Impacts on Cesar E. Chavez Park*** | |
| • **Permanent Incorporation**: Under Alternatives 2 and 3, Design Option A would require the construction of new roadway improvements on 1.62 acre of parkland in Cesar E. Chavez Park, and Design Option B would require the construction of new roadway improvements on 1.60 acre of parkland in the park, which would be considered the permanent incorporation of the parkland into the transportation facility. Roadway improvements would include the consolidation of NB and SB West Shoreline Drive along the western edge of the park, realignment of Golden Shore Street to connect to West Broadway, reconfiguration of West Broadway for two-way traffic, and road improvements along West 3rd Street and Queens Way between West Ocean Boulevard and West 3rd Street. While some parkland would be incorporated into the transportation facility, several roadways would be removed and converted into park space under Alternatives 2 and 3. Therefore, the Project would result in the addition of 5.57 acres of parkland under Design Options A and B as a result of the roadway conversion, allowing for a larger, more functional park with a net increase of 3.95 acres of parkland under Design Option A and a net increase of 3.97 acres under Design Option B at Cesar E. Chavez Park.<br>• **Permanent Utility Easement:** Under Alternatives 2 and 3, a permanent utility easement would be required to extend by 0.21 acre within existing parkland for the SCE Seabright Substation access road.<br>• **Slope Easement:** Under Alternatives 2 and 3, a permanent slope easement would be required where remedial grading is necessary to protect the roadway from slope failures or landslides.<br>• **Temporary Use:** Under Alternatives 2 and 3, Design Option A would require the temporary use of 6.30 acres of parkland in Cesar E. Chavez Park, and Design Option B would require the temporary use of 6.29acres of parkland in the park for grading and a staging area in the southern portion of the park during construction. The areas to be graded include small portions of the park where roads would be removed, requiring temporary grading activities adjacent to the removed roadways. The 7.49-acre staging area, a portion of which includes existing roadways that were removed from the calculation of the temporary use area, would be used to stage construction equipment, vehicles, and supplies, such as gravel. Following construction, the temporary use area would be revegetated and improved as park space.<br>• **Section 4(f) Use Determination:** The permanent incorporation and temporary use of parkland in the park under Design Option B would not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). As discussed in Section 2.1.3.4 of the Shoemaker Bridge Replacement Project EIR/EA and below in Section 4.1.5, minimization measures would be implemented to minimize harm to the property. With implementation of these measures, Caltrans proposes that the Project would result in a *de minimis* impact on Cesar E. Chavez Park.<br>• **Section 6(f) Use Determination:** These roadway improvements would be considered permanent incorporation under Section 4(f) and an acquisition that would result in the conversion a portion of a 6(f) property into the transportation facility or nonrecreational use. Additionally, the use of parkland for temporary construction staging would be considered a temporary nonconforming use within Section 6(f)(3). However, the Project would not affect the specific areas that were improved using funding from the L&WCF Act. The Project would result in substantially more parkland than the amount of existing parkland that would be converted into a transportation facility as a result of 5.57 acres of roadway conversion. The Project and proposed replacement land as a result of converting roadways that segment the park into parkland meet the prerequisites for conversion approval per 36 CFR 59.3. As | *De Minimis* Impact<br><br>Section 6(f) Conversion and Temporary Nonconforming Use |

## Table 4-1. Use Determinations for Section 4(f) and Section 6(f) Properties

| Project Impacts | Preliminary Use Determination |
|---|---|
| discussed in Section 2.1.3.4 of the Shoemaker Bridge Replacement Project EIR/EA and below in Section 4.1.5, minimization measures would be implemented to minimize harm to the property. | |
| ***LARIO Trail*** | |
| ***Permanent Impacts on the LARIO Trail*** | |
| • **Permanent Incorporation**: Alternatives 2 and 3 (Design Options A and B) would include the construction of the new bridge that would require the closure and realignment of 0.24 acre of land on the LARIO Trail to maintain the height clearance between the new structure and the trail. This realigned portion of the trail would be shifted east of its current location and into property that is part of LB MUST.<br>• **Temporary Use**: Under Alternatives 2 and 3, Design Option A would require a partial removal of the existing bridge and convert the remaining portion into open space, and Design Option B would remove the existing bridge entirely. However under both Design Option A and B, the LARIO trail that undercrosses the existing bridge would result in a temporary use of 0.11 acre of land on the LARIO Trail during construction activities for the existing bridge. These areas of the trail would be temporarily closed for 2 years of the 3-year construction period. During the temporary closures, detours would be provided to ensure uninterrupted access for bicyclists and other trail users during construction.<br>• **Section 4(f) Use Determination**: As discussed in Section 2.1.3 of the Shoemaker Bridge Replacement Project EIR/EA, the permanent incorporation and temporary use of land on the LARIO Trail under Design Options A and B would not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). As discussed in Section 2.1.3.4 of the Shoemaker Bridge Replacement Project EIR/EA and below in Section 4.2.3, minimization measures would be implemented to minimize harm to the property. With implementation of these measures, Caltrans proposes that the Project would result in a *de minimis* impact on the LARIO Trail. | *De Minimis* Impact |
| ***LB MUST Facility*** | |
| ***Permanent Impacts on the LB MUST Facility*** | |
| • **Permanent Incorporation**: Under Alternatives 2 and 3, Design Option A would require the permanent incorporation of 1.11 acre of land from the LB MUST facility, and Design Option B would require the permanent incorporation of 0.73 acre of land from the facility to construct columns, footings, and retaining walls associated with the roadway improvements.<br>• **Temporary Use:** Under Alternatives 2 and 3, Design Option A would require the temporary use of 3.83 acres of land in the LB MUST facility, and Design Option B would require the temporary use of 4.14 acres of land in the facility. The area would be temporarily used for construction of the new bridge and bridge terminus, grading, and staging of construction equipment, vehicles, and supplies. Following construction, the temporary use area would be revegetated and improved as recreational space.<br>• **Section 4(f) Use Determination**: As discussed in Section 2.1.3 of the Shoemaker Bridge Replacement Project EIR/EA, the permanent incorporation and temporary use of land from the LB MUST facility would not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). As discussed in Section 2.1.3.4 of the Shoemaker Bridge Replacement Project EIR/EA and below in Section 4.3.3, minimization measures would be implemented to minimize harm to the property. With implementation of these measures, Caltrans proposes that the Project would result in a *de minimis* impact on the LB MUST facility. | *De Minimis Impact* |

## Table 4-1. Use Determinations for Section 4(f) and Section 6(f) Properties

| Project Impacts | Preliminary Use Determination |
|---|---|
| ***LA River Flood Channel*** | |
| • **Permanent Incorporation**: Under Alternatives 2 and 3 (Design Options A and B), the Project includes grade-separated crossing improvements to the assumed eligible segment of the historic the LA River Flood Channel located within the undertaking's APE, which consist of the construction of a single pier under the single pylon bridge design or two piers under the segmented bridge design within the boundary of the LA River Flood Channel on the earthen, channel floor. The single pylon bridge design is only applicable to Design Option A. With the implementation of the single pylon, the Project would result in a permanent incorporation of 0.54 acre of land within the LA River Flood Control Channel. With the implementation of the segmented bridge design, the Project would result in a permanent incorporation of 0.51 acre of land within the LA River Flood Control Channel. No direct physical changes to the segment's intact character-defining features would result from the Project. The new structure would not have a substantial effect on the segment's physical design or setting, nor will it reduce the integrity of the segment to the degree that it is no longer eligible for the NRHP. Therefore, the proposed undertaking will not cause an adverse effect on the segment of the LA River Flood Channel located within the APE, as defined in 36 CFR 800.5(b).<br>• **Temporary Use**: Under Alternatives 2 and 3 (Design Options A and B), a work area around the pier or piers is required during construction. Dewatering and construction of the pier(s) would occur within the estimated work area resulting in a temporary use of the LA River Flood Control Channel. With the implementation of the single pylon, the Project would result in a temporary use of 0.30 acre of land within the LA River Flood Control Channel. With the implementation of the segmented bridge design, the Project would result in a temporary use of 0.41 acre of land within the LA River Flood Control Channel.<br>• **Section 4(f) Use Determination**: As discussed in Section 2.1.3 of the Shoemaker Bridge Replacement Project EIR/EA, the permanent incorporation and temporary use of land within the LA River Flood Control Channel would have no adverse effects on this historic resource under Section 106 of the NHPA, and written concurrence from SHPO is anticipated. Therefore, the City, in coordination with Caltrans, proposes that the Project would result in a *de minimis* impact on the LA River Channel. | *De Minimis* Impact |

Notes:
APE=area of potential effect; Caltrans=California Department of Transportation; CFR=Code of Federal Regulations; EA=Environmental Assessment; EIR=Environmental Impact Report; LA River=Los Angeles River; LARIO=Los Angeles River and Rio Hondo; LB MUST=Long Beach Municipal Urban Stormwater Treatment; NB=northbound; NHPA=National Historic Preservation Act; NRHP=National Register of Historic Places; SB=southbound; SCE=Southern California Edison

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## 4.1 Description of Use of Cesar E. Chavez Park

### Permanent Incorporation of Cesar E. Chavez Park

As shown on Figure 4-1 and Figure 4-2 under Alternatives 2 and 3, Design Option A would require the construction of new roadway improvements on 1.62 acre of parkland in Cesar E. Chavez Park, and Design Option B would require the construction of new roadway improvements on 1.60 acre of parkland in the park, which would be considered the permanent incorporation of parkland into the transportation facility. Roadway improvements would include the consolidation of northbound (NB) and southbound (SB) West Shoreline Drive along the western edge of the park, realignment of Golden Shore Street to connect to West Broadway, reconfiguration of West Broadway for two-way traffic, and road improvements along West 3rd Street and Queens Way between West Ocean Boulevard and West 3rd Street.

Under Alternatives 2 and 3, a permanent utility easement of 0.21 acre would also be required under both Design Options A and B to extend the Southern California Edison (SCE) Seabright Substation access road because an existing access point would be removed along with the existing NB West Shoreline Drive that runs through the park. In addition, a permanent slope easement would be required where remedial grading is necessary to protect the roadway from slope failures or landslides.

While some parkland would be incorporated into the transportation facility, the following roadways would be removed from the park and converted into park space under Alternatives 2 and 3 (Design Options A and B):

- The existing NB West Shoreline Drive would be removed and consolidated into one corridor to the west of the park.
- Third Street would be realigned to end at Golden Avenue, and the section of 3rd Street that curves into the park would be removed.
- The loop ramp connector between NB West Shoreline Drive and Ocean Boulevard would also be removed.
- The segment of West Broadway from West Shoreline Drive to Maine Avenue would be removed, and the connection would be replaced by a controlled intersection at West Shoreline Drive and West Broadway.

As discussed in Section 2.1.3 of the Shoemaker Bridge Replacement Project EIR/EA, Cesar E. Chavez Park currently encompasses 25.6 acres, comprised of six discontinuous parcels separated by streets crossing the park. The 25.6 acres in the park does not include several of the roadways crossing the park, with the exception of 1 acre of roadway that segments the portion of the park that is bounded by West Broadway to the north, Ocean Boulevard to the south, SB West Shoreline Drive to the west, and Golden Avenue to the east. The roadways that segment this portion of the park are currently included in the existing park acreage and boundaries as identified by the City of Long Beach.

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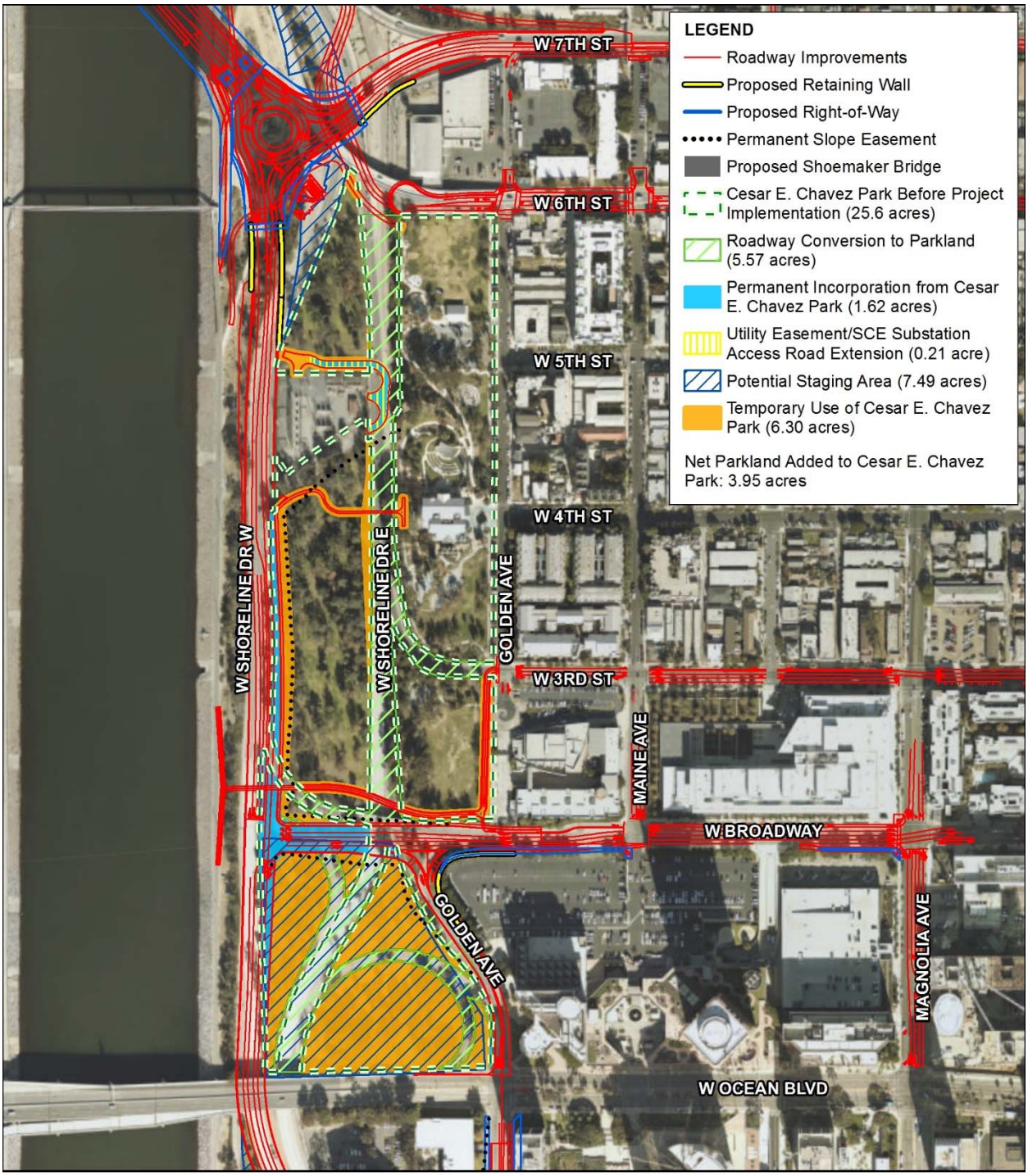


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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 4-1. Section 4(f) Use of Cesar E. Chavez Park (Design Option A)**

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**Figure 4-2. Section 4(f) Use of Cesar E. Chavez Park (Design Option B)**

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The acreage permanently used in the park for transportation improvements would be 1.62 acre under Design Option A, and 1.60 acre under Design Option B; however, 5.57 acres would be added to the park through the removal of roads throughout the park. Because roadways would be removed and converted into park space, the Project would result in the addition of 5.57 acres of parkland under Design Options A and B, with a net gain in acreage of 3.95 acres of parkland under Design Option A and 3.97 acres under Design Option B, after subtracting out areas that would be permanently incorporated into the transportation facility and for entire utility easement for the Seabright Substation access road. Because the existing roadways that transect the park would be removed, the Project would result in a larger, more functional park with 28.55 acres of parkland under Design Option A and 28.57 acres of parkland under Design Option B, after subtracting out approximately 1 acre of roadway in the south of the park that is already included within the park boundaries.

**Temporary Use of Cesar E. Chavez Park**

As shown on Figure 4-1 and Figure 4-2, under Alternatives 2 and 3, Design Option A would require the temporary use of 6.30 acres of parkland in Cesar E. Chavez Park, and Design Option B would require the temporary use of 6.29 acres of parkland in the park for new recreational bike path connections within the park, grading, and a staging area in the portion of the park south of West Broadway.

The areas to be graded include small portions of the park where roads would be removed, requiring temporary grading activities adjacent to the removed roadways. The 7.49-acre staging area south of West Broadway is a portion of the park that includes existing roadways that were subtracted from the City's park boundary to calculate the temporary use of parkland in this southern area. This portion of the park is bounded by West Broadway to the north, Ocean Boulevard to the south, SB West Shoreline Drive to the west, and Golden Avenue to the east. This southern portion of the park is open space that is not currently developed with any recreational facilities; however, the open space area includes trees and ground cover. The staging area would be used to stage construction equipment, vehicles, and supplies, such as gravel. Following construction, the temporary use area would be revegetated and improved as park space.

### 4.1.1 Applicability of *De Minimis* Finding of Cesar E. Chavez Park

**Permanent Incorporation of Cesar E. Chavez Park**

Activities, features, and attributes that qualify properties for protection under Section 4(f) include the facilities, functions, and/or activities at the resource; accessibility; visual, noise; vegetation; wildlife; air quality; and water quality. The permanent incorporation of a portion of Cesar E. Chavez Park would be *de minimis* because the Project would not adversely affect the activities, features, and attributes that qualify Cesar E. Chavez for protection under Section 4(f), as discussed in the following sections.

*Facilities, Functions, and/or Activities Potentially Affected*

Facilities, functions, and activities in the park include two basketball courts, playground equipment, picnic areas, grass areas, restrooms, an outdoor amphitheater, a community center, and a weight room.

Design Option A would result in the permanent incorporation of 1.62 acre of parkland from Cesar E. Chavez Park, and Design Option B would result in the permanent incorporation of 1.60 acre of parkland from the park. No developed recreational facilities are located in the areas to be permanently incorporated. These areas include open grassy areas with scattered trees, which could be used for general recreation activities (e.g., picnics and passive recreation). However, because several

roadways transect the park, these areas are not easily accessible to the general public because no parking facilities or vehicle/pedestrian routes provide access to these areas.

Because the existing roadways that transect the park would be removed, the Project would result in a larger, more functional park with 28.55 acres of parkland under Design Option A and 28.57 acres of parkland under Design Option B after subtracting out approximately 1 acre of roadway in the south of the park that is already included within the park boundaries. As part of the Project, improvements would be made to this additional parkland in coordination with the City of Long Beach Department of Parks, Recreation, and Marine (Section 2.1.3.4 of the Shoemaker Bridge Replacement Project EIR/EA and below in Section 4.1.1). Therefore, the permanent incorporation would not adversely affect the facilities, functions, or activities at Cesar E. Chavez Park.

*Accessibility*

Cesar E. Chavez Park encompasses 25.6 acres, comprised of six discontinuous parcels separated by streets crossing the park, including West Shoreline Drive, 5th Street, 3rd Street, and West Broadway. Currently, no access is available to the western portion of the park because the parcels are bounded by a major street, West Shoreline Drive. The Project would result in removal of the West Shoreline Drive and other roadways, which would facilitate pedestrian access through the park. In addition, the Project would improve accessibility and connectivity between several Section 4(f) resources. A new roadway would extend from the proposed 6th Street terminus to Drake Park, enhancing connectivity between the LARIO Trail, Cesar E. Chavez Park, and Drake Park. Therefore, the permanent incorporation would not adversely affect accessibility at Cesar E. Chavez Park.

*Visual*

Existing views from Cesar E. Chavez Park include green space and surrounding roadways. Trees are scattered throughout the park, and protective berms of trees and shrubs provide a barrier between NB West Shoreline Drive and the park. Three grade separations in the park at West 6th Street, West Broadway, and West Ocean Boulevard are visible to park visitors.

The Project would include the removal of roadways in the park, which would provide a more continuous viewshed in the park and improve visual quality. The West Broadway grade separation would be realigned, but the views from the park would not change substantially. Therefore, the permanent incorporation would not adversely affect the visual quality at Cesar E. Chavez Park.

*Noise*

Cesar E. Chavez Park is generally bounded by West 6th Street to the north, SB West Shoreline Drive to the west, Golden Avenue to the east, and Ocean Boulevard to the south. The park is intersected by several roadways, including NB West Shoreline Drive, West Broadway, West 3rd Street, and West 5th Street. The surrounding transportation corridors currently contribute to the existing noise in the park. The Project would include the removal of roadways in the park, which would be expected to decrease noise for park visitors. Therefore, the permanent incorporation would not adversely affect noise levels at Cesar E. Chavez Park.

*Vegetation*

The park is currently landscaped with moderately dense tree cover and shrubs. Vegetation in the area to be permanently incorporated would be removed to implement the Project. However, this area is currently not accessible to the public for recreational use because of the roadways that transect the park. As part of the Project, the roadways would be removed and improved as additional parkland with

new vegetation, which would enhance overall vegetation in the park. Therefore, the permanent incorporation would not adversely affect vegetation at Cesar E. Chavez Park.

*Wildlife*

Cesar E. Chavez Park is not a wildlife refuge and is used for active recreation purposes. Therefore, this attribute does not qualify the park for protection under Section 4(f).

*Air Quality*

Several roadways currently transect Cesar E. Chavez Park. The Project would include the removal of some of these roadways, which would be expected to reduce vehicle emissions within the park. The Project would not increase the capacity of the existing roadway network and would, therefore, not result in increased vehicle emissions. Therefore, the permanent incorporation would not adversely affect air quality at Cesar E. Chavez Park.

*Water Quality*

Cesar E. Chavez Park does not contain any water resources. Therefore, this attribute does not qualify the park for protection under Section 4(f).

**Temporary Use of Cesar E. Chavez Park**

Activities, features, and attributes that qualify properties for protection under Section 4(f) include the facilities, functions, and/or activities at the resource; accessibility; visual; noise, vegetation; wildlife; air quality; and water quality. The permanent incorporation of, and temporary use in, a portion of Cesar E. Chavez Park would be *de minimis* because the Project would not adversely affect the activities, features, and attributes that qualify Cesar E. Chavez for protection under Section 4(f), as discussed in the following sections.

*Facilities, Functions, and/or Activities Potentially Affected*

Facilities, functions, and activities in the park include two basketball courts, playground equipment, picnic areas, grass areas, restrooms, an outdoor amphitheater, a community center, and a weight room.

No amenities would be temporarily or permanently affected by Project construction because no developed recreational facilities are currently in the temporary use area. The temporary use area would be used for grading associated with roadway removal and construction access, as well as staging of construction equipment, vehicles, and supplies.

The land being used for grading and the staging area would be returned to the Long Beach Department of Parks, Recreation, and Marine and the Long Beach Unified School District (because of its joint use agreement to use one block of the park during school hours) in a condition as good as, or better than, prior to the use of that area for the staging area. Following construction, the entire temporary use area would be revegetated and improved as park space. Therefore, the temporary use would not adversely affect the facilities, functions, or activities at Cesar E. Chavez Park.

*Accessibility*

During construction, access to and from the park may be affected by construction vehicles and equipment. However, with implementation of a traffic management plan (TMP), alternate pedestrian, and vehicle access points would be provided to ensure that accessibility is not substantially disrupted during construction. Therefore, the temporary occupancy would not adversely affect accessibility at Cesar E. Chavez Park.

*Visual*

During construction, temporary visual impacts would result from vehicles, equipment supplies, and activities that would be visible from surrounding segments of the trail and nearby trail connections. However, following construction, these temporary visual impacts associated with construction would cease. Therefore, the temporary use would not adversely affect the visual quality at Cesar E. Chavez Park. It is Caltrans' policy to restore the temporary use areas to conditions as good as, or better than, the preconstruction condition. Caltrans will coordinate with the City of Long Beach to ensure that park restoration efforts are carried out according to the Caltrans' restoration policy.

*Noise*

Additional noise and vibration impacts at the park may result from construction activities because of vehicles, equipment, and earth-disturbing activities. However, following construction, temporary noise and vibration impacts associated with construction would cease. Therefore, the temporary use would not adversely affect noise levels at Cesar E. Chavez Park.

*Vegetation*

During construction, tree and shrub removal would be required in the staging area. However, the temporary use area would be restored following construction in a condition that is as good as, or better than, prior to the use of the area. Therefore, the temporary use would not adversely affect vegetation at Cesar E. Chavez Park.

*Wildlife*

Cesar E. Chavez Park is not a wildlife refuge and is used for active recreation purposes. Therefore, this attribute does not qualify the park for protection under Section 4(f).

*Air Quality*

Additional air quality impacts may result from construction activities because of vehicle and equipment emissions, as well as dust from earth-disturbing activities. However, following construction, temporary air quality impacts associated with construction would cease. Therefore, the temporary use would not adversely affect air quality at Cesar E. Chavez Park.

*Water Quality*

Cesar E. Chavez Park does not contain any water resources. Therefore, this attribute does not qualify the park for protection under Section 4(f).

### 4.1.2 Preliminary *De Minimis* Impact Finding for Cesar E. Chavez Park

**Permanent Incorporation of Cesar E. Chavez Park**

As discussed in Section 2.1.3 of the Shoemaker Bridge Replacement Project EIR/EA, Cesar E. Chavez Park currently encompasses 25.6 acres, comprised of six discontinuous parcels separated by streets crossing the park. The 25.6 acres in the park does not include several of the roadways crossing the park, with the exception of 1 acre of roadway in the south of park that is currently included in the existing park acreage.

The acreage permanently used in the park for transportation improvements would be 1.62 acre under Design Option A and 1.60 acre under Design Option B. However, 5.57 acres would be added to the park through the removal of roads throughout the park. Because roadways would be removed and converted into park space, the Project would result in the addition of 5.57 acres of parkland under

Design Options A and B, with a net gain in acreage of 3.95 acres of parkland under Design Option A and 4.07 acres under Design Option B, after subtracting out areas that would be permanently incorporated into the transportation facility and for entire utility easement for the Seabright Substation access road. Because the existing roadways that transect the park would be removed, the Project would result in a larger, more functional park with 28.55 acres of parkland under Design Option A and 28.57 acres of parkland under Design Option B, after subtracting out approximately 1 acre of roadway in the south of the park already included within the park boundaries.

Because the Project would result in a net gain of acreage of parkland, the permanent use of parkland in the park would not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). As discussed in Section 2.1.3.4 of the Shoemaker Bridge Replacement Project EIR/EA and below in Section 4.1.5, minimization measures would be implemented to minimize harm to the property. With implementation of these measures, Caltrans proposes that the Project would result in a *de minimis* impact on Cesar E. Chavez Park.

#### Temporary Use of Cesar E. Chavez Park

The temporary occupancy of 6.30 acres of parkland in Cesar E. Chavez Park under Design Option A and 6.28 acres of parkland under Design Option B would not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). As discussed in Section 2.1.3.4 of the Shoemaker Bridge Replacement Project EIR/EA and below in Section 4.1.5, minimization measures would be implemented to minimize harm to the property. With implementation of these measures, Caltrans proposes that the Project would result in a *de minimis* impact on Cesar E. Chavez Park.

### 4.1.3 Section 6(f) Consideration for Cesar E. Chavez Park

As discussed above, Section 6(f) is assumed to be applicable to the entirety of Cesar E. Chavez Park. The City is the official with jurisdiction over Cesar E. Chavez Park under Section 4(f). In 2012, the City confirmed that funding for the development of improvements at Cesar E. Chavez Park included L&WCF Act funds. The funding was issued within the 2002-2003 fiscal year for a total of $251,086. The funds were used to develop a teen and senior center building, Jenny Oropeza Community Center, and landscaping within that portion of the park.

#### 4.1.3.1 Permanent Incorporation and Section 6(f) Conversion of Cesar E. Chavez Park

As discussed above and shown on Figure 4-1 and Figure 4-2 under Alternatives 2 and 3, Design Option A would require the construction of new roadway improvements on 1.62 acre of parkland in Cesar E. Chavez Park, and Design Option B would require the construction of new roadway improvements on 1.60 acre of parkland in the park. These roadway improvements would be considered permanent incorporation under Section 4(f) and acquisition that would result in the conversion a portion of a 6(f) property into the transportation facility or nonrecreational use. Under Alternatives 2 and 3, a permanent utility easement of 0.21 acre would also be required under both Design Options A and B to extend the SCE Seabright Substation access road because an existing access point would be removed along with the existing NB West Shoreline Drive that runs through the park. In addition, a permanent slope easement would be required where remedial grading is necessary to protect the roadway from slope failures or landslides.

Although a portion of the park would be acquired under Design Options A and B, 5.57 acres would be added to the park through the removal of roads that segment the park into multiple sections that are inaccessible to the public. The 5.57 acres of roadway being removed would be converted into useable

park space and result in a net gain of 3.95 acres of parkland under Design Option A and 3.97 acres under Design Option B, after subtracting out areas that would be permanently incorporated and converted into a transportation facility and for the entire utility easement for the Seabright Substation access road. Because the existing roadways that transect the park would be removed, the Project would result in a larger, more functional park with 28.55 acres of parkland under Design Option A and 28.57 acres of parkland under Design Option B, after subtracting out approximately 1 acre of roadway in the south of the park that is already included within the park boundaries. As shown on Figure 4-1 and Figure 4-2, recreational pathways are proposed within the park and would enhance connections to the Class I bike path of the Los Angeles River and Rio Hondo Trail. However, these pathways are recreation facilities that do not constitute a conversion.

#### 4.1.3.2 Temporary Use of Cesar E. Chavez Park

As shown on Figure 4-1 and Figure 4-2, under Alternatives 2 and 3, Design Option A would require the temporary use of 6.30 acres of parkland in Cesar E. Chavez Park, and Design Option B would require the temporary use of 6.28 acres of parkland in the park for new recreational bike path connections within the park, grading, and a staging area in the portion of the park south of West Broadway. The graded areas include small portions of the park where roads would be removed, requiring temporary grading activities adjacent to the removed roadways. The 7.49-acre construction staging area south of West Broadway is the southernmost portion of the park that includes existing roadways of approximately 1 acre that was subtracted from the City's park boundary to calculate the temporary use of parkland in this southern area. This portion of the park is bounded by West Broadway to the north, Ocean Boulevard to the south, SB West Shoreline Drive to the west, and Golden Avenue to the east. This southern portion of the park is currently inaccessible to the public due to the existing roadway connections that segment this area, and does not include any recreational facilities. However, this portion of the park is an open space area with trees and ground cover. These temporary uses under Section 4(f) are considered temporary nonconforming uses within Section 6(f)(3).

### 4.1.4 Preliminary Section 6(f) Impact Findings for Cesar E. Chavez Park

The Project would not affect the specific areas that were improved using funding from the L&WCF Act, and the Project would result in substantially more parkland as a result of roadway conversions than the amount of existing parkland that would be converted into a transportation facility. The Project and proposed replacement land as a result of converting roadways that segment the park into parkland meet the prerequisites for conversion approval per 36 CFR 59.3, as listed in Section 2. The temporary nonconforming use of the park may extend beyond 6 months but would not result in temporary closures of the main active recreational area of the park, which includes the amphitheater, community center, playground, weight room, picnic area, or restrooms. As listed below in Section 4.1.5, minimization measures would be implemented to minimize harm to the property. During construction, access to and from the park may be affected by construction vehicles and equipment; however, a TMP, which would include alternate pedestrian and vehicle access points, would be provided to ensure that accessibility is not substantially disrupted during construction. Additionally, once construction is complete, temporary nonconforming use areas would be restored to existing conditions.

### 4.1.5 Avoidance, Minimization, and/or Mitigation Measures for Cesar E. Chavez Park

The following minimization measures will be needed to make the *de minimis* impact finding for Cesar E. Chavez Park and minimize impacts on a Section 6(f) property:

**PR-1** If Alternatives 2 or 3 (Design Options A and B) are selected, the City of Long Beach (City) will continue to identify and incorporate design refinements to avoid or minimize the permanent incorporation of land from Cesar E. Chavez Park in the final design of the build alternatives.

**PR-2** If Alternatives 2 or 3 (Design Options A and B) are selected, the City of Long Beach (City) During final design, the City of Long Beach (City) will define the final boundaries of Cesar E. Chavez Park that will be the basis for the transfer of land from the public street right-of-way (ROW) for Shoreline Drive through Cesar E. Chavez Park (currently owned by the City) to within the boundary of the park. This will be an internal transfer, as the City currently owns the land for both Shoreline Drive and Cesar E. Chavez Park.

**PR-3** If Alternatives 2 or 3 (Design Options A and B) are selected, the City of Long Beach (City) After the City has identified the new boundaries of Cesar E. Chavez Park, including the consolidation of the six discontinuous parcels into three larger parcels, the California Department of Transportation (Caltrans) will coordinate with the City to:

- Identify park improvements for the new areas added to the park, including removal of pavement and other materials from Shoreline Drive, the landscaping of those areas, and the provision of sidewalks and bicycle paths, as appropriate, connecting the consolidated parcels
- Develop a plan for public access to the northwest portion of the park for passive activities, such as wildlife viewing and walking

**PR-4** If Alternatives 2 or 3 (Design Options A and B) are selected, the City of Long Beach (City) During construction, the City of Long Beach (City) will require the construction contractor to maintain vehicular and pedestrian access to recreational areas within the construction area throughout the construction period. If existing access points are disrupted, alternative access will be provided. Appropriate signage and temporary sidewalks will be provided, as needed, throughout construction, and the construction contractor will provide and maintain appropriate signage to direct both pedestrian and vehicular traffic to recreational areas via alternate routes. Disabled access will also be maintained during construction.

**PR-5** If Alternatives 2 or 3 (Design Options A and B) are selected, the City of Long Beach (City) will require the construction contractor to identify all proposed closures of areas within Cesar E. Chavez Park (including streets) no less than 90 days prior to when each closure would begin.

**PR-6** If Alternatives 2 or 3 (Design Options A and B) are selected, the City of Long Beach (City) No less than 90 days prior to when a closure would begin, the City of Long Beach (City) will require the construction contractor to provide the following to the City of Long Beach Parks, Recreation, and Marine Department and the Long Beach Unified School District:

- A map of each proposed closure, clearly showing each park area proposed to be closed temporarily, including identification of any street closures
- A plan for providing signing and notifications through other public information outlets to inform the public and recreational visitors of upcoming closures of areas within the park
- Estimation of the duration of each closure

- Identification of alternative vehicle and trail routes to/through and/or around the park, as appropriate
- Identification of park features that would be unavailable to the public during the closure

**PR-7** If Alternatives 2 or 3 (Design Options A and B) are selected, the City of Long Beach (City) will provide written approval of each proposed closure to the construction contractor no less than 45 days prior to when the closure would begin.

**PR-8** If Alternatives 2 or 3 (Design Options A and B) are selected, the City of Long Beach (City) will require the construction contractor to provide an information telephone number that park visitors can use to contact the contractor for more information regarding individual closures. The contractor may also provide an information website. The contact number and website information are to be provided at the construction site, at/around each closed area, and on information signs discussing the individual closures. The construction contractor will also be required to provide this information to the City of Long Beach Parks, Recreation, and Marine Department and the Long Beach Unified School District.

**PR-9** If Alternatives 2 or 3 (Design Options A and B) are selected, the City of Long Beach (City) will require the construction contractor to return areas of the park closed temporarily during construction to their original, or better, conditions after completion of construction, and those temporarily closed areas will be respectively returned to the City of Long Beach Parks, Recreation, and Marine Department and the Long Beach Unified School District.

**PR-10** If Alternatives 2 or 3 (Design Options A and B) are selected, the City of Long Beach (City) At the completion of construction in the temporary occupancy areas at Cesar E. Chavez Park, the City of Long Beach (City) will require the construction contractor to return the areas to a condition as good as, or better than, prior to its use for the temporary occupancy. The required improvements for the rehabilitation of those areas will be determined in consultation among the City of Long Beach Parks, Recreation, and Marine Department, the Long Beach Unified School District, and the construction contractor.

**PR-11** If Alternatives 2 or 3 (Design Options A and B) are selected, the City of Long Beach (City) For temporary construction easements (TCE) currently vegetated in native and mixed native/nonnative plant materials, those land areas will be revegetated at the completion of construction and returned to the original property owners. The City of Long Beach will develop the revegetation plans in consultation with the property owners to ensure the compatibility of the new vegetation with the existing vegetation in the vicinity of those for the affected properties.

### 4.1.6 Results of Coordination with Official(s) with Jurisdiction for Cesar E. Chavez Park

During the consultation process for the Shoemaker Bridge Replacement Project, the relevant information from this report was provided to City of Long Beach Department of Parks, Recreation, and Marine for their concurrence that the Project will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). Following circulation of the Shoemaker Bridge Replacement Project EIR/EA, which ended November 12, 2019, a letter requesting concurrence with the *de minimis* finding was sent to the City of Long Beach Department of Parks,

Recreation, and Marine on December 3, 2019. On December 14, 2019, the City of Long Beach Department of Parks, Recreation, and Marine provided its concurrence (Attachment 1).

Additionally, in compliance with federal regulation Section 6(f)(3), a letter requesting approval to convert a portion of the L&WCF Act-assisted property to other than public outdoor recreation use and concurrence that the proposed replacement land would conform to the prerequisites set forth in 36 CFR Part 59.3 was sent to from the California Department of Parks and Recreation, Angeles District on December 3, 2019. On February 3, 2020, the Project Officer from the California Department of Parks and Recreation recommended to follow the Park Stewardship Guidelines by the L&WCF.

Since then Caltrans was unable to conclude consultation with the California Department of Parks and Recreation. The City of Long Beach and Caltrans continued to assume that the entirety of Cesar E. Chavez park is protected under Section 6(f)(3). The Project Team followed the Park Stewardship Guidelines set by the Office of Grants and Local Services under the California Department of Parks and Recreation to ensure the portion of the park proposed to the Project met the Park Stewardship Guidelines. The Project features would not significantly change the Cesar E. Chavez Park because the Project proposes to remove a roadway that transects the park and convert the area to a more cohesive recreational park space. There are no existing park facilities that the Project proposes to remove from Cesar E. Chavez Park. The overall acreage net gain is a greater value than if the Project was to not build. As owners of Cesar E. Chavez Park, City of Long Beach will continue to ensure the parks ongoing accessibility to the public, providing safety features, and maintain its attractive and inviting to the general public. As of April 2, 2020, Caltrans still has not received a concurrence letter from the California Department of Parks and Recreation, Angeles District.

## 4.2 Description of Use of Los Angeles River and Rio Hondo Trail

### Permanent Incorporation of Los Angeles River and Rio Hondo Trail

As shown on Figure 4-3 and Figure 4-4, under Alternatives 2 and 3 (Design Options A and B) would permanently incorporate approximately 0.24 acre of an existing portion of the LARIO Trail that would traverse under the new bridge. This portion of the trail would be closed since the height clearance of the trail would not be able to be maintained at the standard height. Therefore, the Project proposes to realign this portion of the trail east of its existing location in order to maintain north and south connections along the LARIO Trail. A portion of the realignment will be within property belonging to LB MUST; therefore, a new easement between the City of Long Beach and the Los Angeles County of Public Works will be required for the portion of the trail that will now traverse through property owned by the City of Long Beach.

### Temporary Use of Los Angeles River and Rio Hondo Trail

As shown on Figure 4-3 and Figure 4-4, under Alternative 2 (Design Options A and B), a portion of existing bridge would remain, and under Alternative 3 (Design Options A and B), the entire existing bridge would be removed. However, under both Alternative 2 and 3 (Design Options A and B), the construction and demolition occurring at the existing bridge would result in the temporary closure of 0.11 acre of land on the LARIO Trail to remove a portion or the entirety of the existing bridge, which would result in the temporary use of the LARIO Trail.

These areas of the trail would be temporarily closed for 2 years of the 3-year construction period to allow construction vehicles and equipment to access the area. No other construction activities would take place on the trail. During the temporary closures, detours would be provided to ensure uninterrupted access for bicyclists and other trail users during construction.

### 4.2.1 Applicability of *De Minimis* Finding for Los Angeles River and Rio Hondo Trail

#### Permanent Incorporation of Los Angeles River and Rio Hondo Trail

Activities, features, and attributes that qualify properties for protection under Section 4(f) include the facilities, functions, and/or activities at the resource; accessibility; visual; noise; vegetation; wildlife; air quality; and water quality. The permanent incorporation of the LARIO trail would be *de minimis* because the Project would not adversely affect the activities, features, and attributes that qualify the LARIO Trail for protection under Section 4(f), as discussed in the following sections.

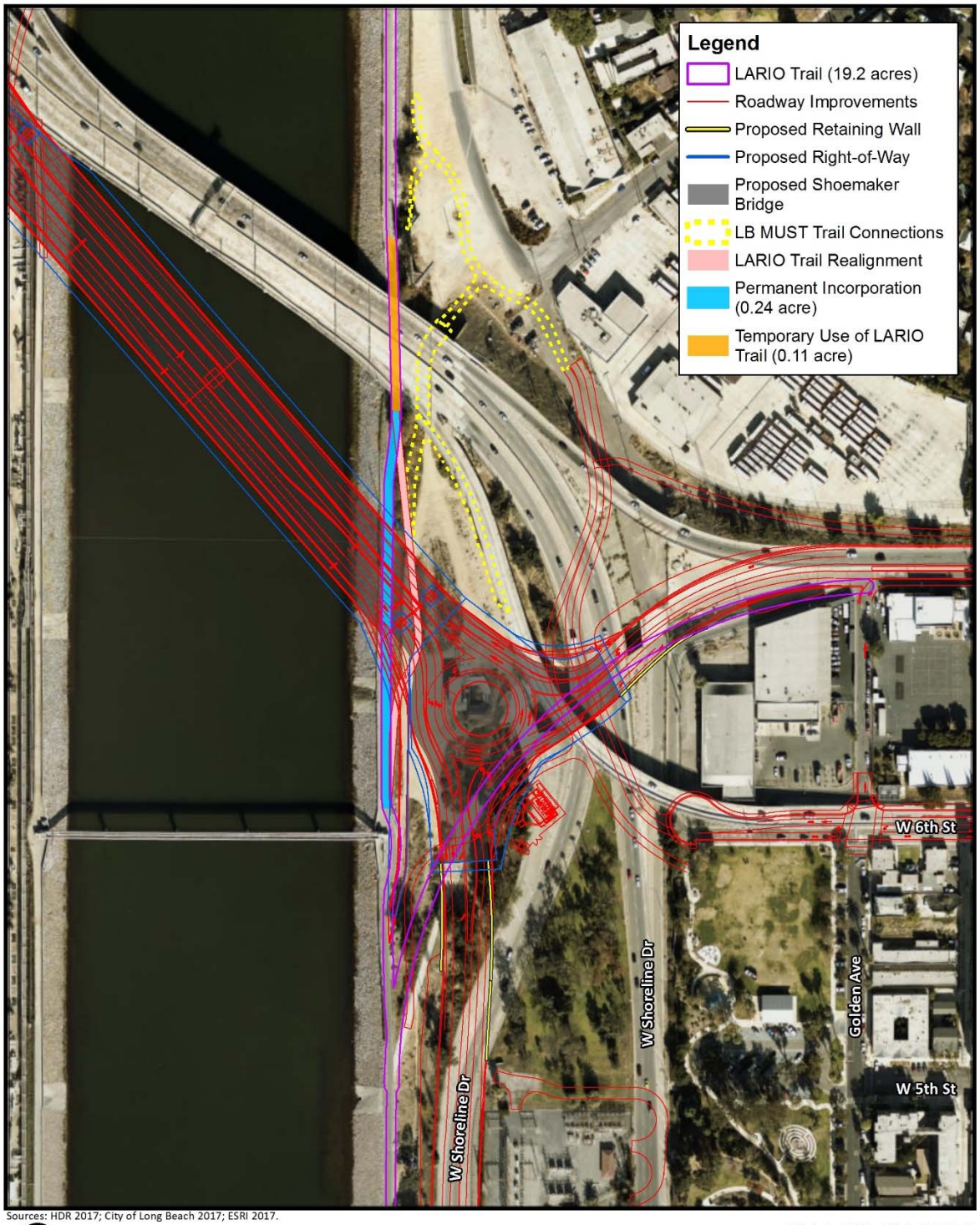


**Figure 4-3. Section 4(f) Use of Los Angeles River and Rio Hondo Trail (Design Option A)**

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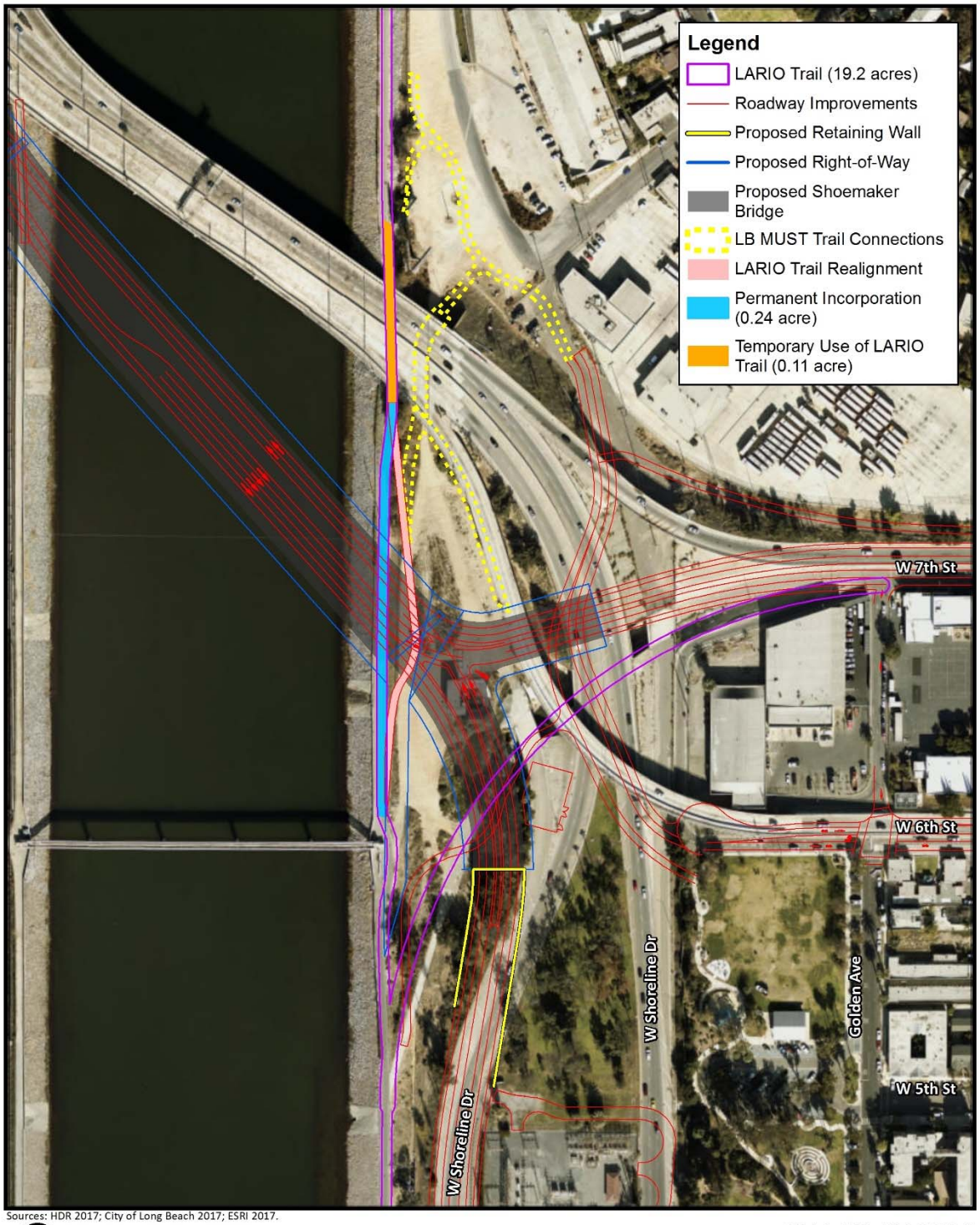


**Figure 4-4. Section 4(f) Use of Los Angeles River and Rio Hondo Trail (Design Option B)**

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*Facilities, Functions, and/or Activities Potentially Affected*

Facilities, functions, and activities on the trail include a Class I bike path that runs along the LARIO Channel. After construction, bicyclists would continue to be able to use the trail beneath the new bridge, and the Project would not affect the continuity of the trail. Temporary closures of the trail for maintenance of the underside of the bridge may be required; however, only occasional closures of the trail would be necessary, and detours would be provided to ensure uninterrupted connectivity along the trail during maintenance of the transportation facility. Therefore, the trail realignment would not adversely affect the facilities, functions, or activities at the LARIO Trail.

*Accessibility*

The construction of the new bridge over the LARIO Trail would not affect access to or from the trail once complete. Accessibility to the trail would be enhanced through new trail connections to be constructed as part of the Project, as shown on Figure 4-3 and Figure 4-4. Although the construction of the new bridge would close a portion of the trail and realign this portion of the trail east of its current location, the Project would not adversely affect accessibility at the LARIO Trail.

*Visual*

The construction of the new bridge and related transportation structures (roundabout or "Y" intersection) would add additional visual elements over and surrounding the trail. However, the trail is used for active recreation by bicyclists, so these visual impacts would be experienced by bicyclists for a limited duration as they are traveling under the new bridge. Therefore, the trail realignment would not adversely affect the visual quality at the LARIO Trail.

*Noise*

In the Project limits, several roadways, including West Anaheim Street, West Shoreline Drive, and West Ocean Boulevard, cross over the LARIO Trail. The surrounding transportation corridors currently contribute to the existing noise on the trail. After the new bridge is constructed over the trail, noise and vibration impacts could result from vehicles travelling over the trail. However, noise levels would not substantially increase above existing levels because the trail is in an urban area and is already adjacent to transportation facilities. Therefore, the trail realignment would not adversely affect noise at the LARIO Trail.

*Vegetation*

The LARIO Trail is completely paved and does not contain any vegetation. Therefore, this attribute does not qualify the trail for protection under Section 4(f).

*Wildlife*

The LARIO Trail is not a wildlife refuge, and the resource is used for active recreation purposes. Therefore, this attribute does not qualify the trail for protection under Section 4(f).

*Air Quality*

The Project would not increase the capacity of the existing roadway network and would, therefore, not result in increased vehicle emissions. The new bridge over the trail would replace the existing bridge, so additional traffic would not be moved closer to the trail that could result in increased emissions at the trail. Therefore, the new bridge would not adversely affect air quality at the LARIO Trail.

*Water Quality*

The LARIO Trail does not contain any water resources but is adjacent to the LARIO Channel. Polluted stormwater runoff from existing roadways in the Project area contributes to water quality impacts in these waterways. As discussed in the Section 2.9 of the Shoemaker Bridge Replacement Project EIR/EA, the Project would result in a net decrease in impervious surface area, which would be expected to reduce runoff within and surrounding the Project area. Therefore, the trail realignment would not adversely water quality at the LARIO Trail.

**Temporary Use of Los Angeles River and Rio Hondo Trail**

Activities, features, and attributes that qualify properties for protection under Section 4(f) include the facilities, functions, and/or activities at the resource; accessibility; visual; noise; vegetation; wildlife; air quality; and water quality. The temporary use of a portion of the LARIO Trail would be *de minimis* because the Project would not adversely affect the activities, features, and attributes that qualify the trail for protection under Section 4(f), as discussed in the following sections.

*Facilities, Functions, and/or Activities Potentially Affected*

Facilities, functions, and activities on the trail include a Class I bike path that runs along the LARIO Channel. Under Alternatives 2 and 3 (Design Options A and B), a 0.11-acre segment of the trail would be temporarily closed for 2 years of the 3-year construction period to construct the new bridge over the trail. Both Alternatives 2 and 3 would require demolition of either a portion or entirety of the existing bridge. During the temporary closures, detours would be provided to ensure uninterrupted access for bicyclists and other trail users during construction. Following construction, the facilities, functions, and/or activities on the trail would be restored to existing conditions. Therefore, the temporary use would not adversely affect the facilities, functions, or activities at the LARIO Trail.

*Accessibility*

Existing connections to the trail from Cesar E. Chavez Park and surrounding roadways may be affected during construction. Detours would be provided along alternate routes to ensure that access would not be substantially affected. Following construction, accessibility to the trail would be enhanced through new trail connections that would be constructed as part of the Project. The Project includes construction of an additional connection to the LARIO Trail from a new terminus at 6th Street. In addition, a new roadway would extend from the proposed 6th Street terminus to Drake Park, enhancing connectivity between the LARIO Trail, Cesar E. Chavez Park, Drake Park. Therefore, the temporary use would not adversely affect accessibility at the LARIO Trail.

*Visual*

During construction, temporary visual impacts would result from vehicles, equipment supplies, and activities that would be visible from surrounding segments of the trail and nearby trail connections. However, following construction, these temporary visual impacts associated with construction would cease. Therefore, the temporary use would not adversely affect the visual quality at the LARIO Trail.

*Noise*

In the Project limits, several roadways, including West Anaheim Street, West Shoreline Drive, and West Ocean Boulevard, cross over the LARIO Trail. The surrounding transportation corridors currently contribute to the existing noise on the trail. Additional noise and vibration impacts on the trail may result from construction activities because of vehicles, equipment, and earth-disturbing activities. However, the segments of the trail immediately beneath the new bridge (Alternative 2 and 3) and

existing bridge (Alternative 3) would be temporarily closed during construction, and detours would be provided so that trail users would not be substantially affected by construction noise and vibration. Following construction, temporary noise and vibration impacts associated with construction would cease. Therefore, the Project would not adversely affect noise levels at the LARIO Trail.

*Vegetation*

The LARIO Trail is completely paved and does not contain any vegetation. Therefore, this attribute does not qualify the trail for protection under Section 4(f).

*Wildlife*

The LARIO Trail is not a wildlife refuge and is used for active recreation purposes. Therefore, this attribute does not qualify the trail for protection under Section 4(f).

*Air Quality*

In the Project limits, several roadways, including West Anaheim Street, West Shoreline Drive, and West Ocean Boulevard, cross over the LARIO Trail. The surrounding transportation corridors currently contribute to the existing air emissions near the trail. Additional air quality impacts may result from construction activities because of vehicle and equipment emissions, as well as dust from earth-disturbing activities. However, the segments of the trail immediately beneath the new bridge (Alternative 2 and 3) and existing bridge (Alternative 3) would be temporarily closed during construction, and detours would be provided so that trail users would not be substantially affected by construction air pollutants. Following construction, temporary air quality impacts associated with construction would cease. Therefore, the temporary use would not adversely affect air quality at the LARIO Trail.

*Water Quality*

The LARIO Trail does not contain any water resources but is adjacent to the LARIO Channel. Water quality impacts may result from construction activities from potential construction materials or soils entering the waterways. However, best management practices (BMP) would be implemented during construction, such as dust suppression activities and appropriate containment of materials, to avoid and minimize potential impacts. Following construction, any water quality impacts associated with construction would cease. Therefore, the temporary occupancy would not adversely affect water quality at the LARIO Trail.

### 4.2.2 Preliminary *De Minimis* Impact Finding for Los Angeles River and Rio Hondo Trail

#### Permanent Use of Los Angeles River and Rio Hondo Trail

As discussed above, the trail realignment would permanently use 0.24 acre of land on the LARIO Trail under Design Options A and B and would not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). As discussed in Section 2.1.3.4 of the Shoemaker Bridge Replacement Project EIR/EA and below in Section 4.2.3, minimization measures would be implemented to minimize harm to the property. With implementation of these measures, Caltrans proposes that the Project would result in a *de minimis* impact on the LARIO Trail.

#### Temporary Use of Los Angeles River and Rio Hondo Trail

As discussed above, the temporary use of 0.11 acre of land on the LARIO Trail under Alternative 2 and 3 would not adversely affect the activities, features, or attributes that qualify the property for protection

under Section 4(f). As discussed in Section 2.1.3.4 of the Shoemaker Bridge Replacement Project EIR/EA and below in Section 4.2.3, minimization measures would be implemented to minimize harm to the property. With implementation of these measures, Caltrans proposes that the Project would result in a *de minimis* impact on the LARIO Trail.

### 4.2.3 Avoidance, Minimization, and/or Mitigation Measures for Los Angeles River and Rio Hondo Trail

The following minimization measures will be needed to make the *de minimis* impact finding for the LARIO Trail:

**PR-12** If Alternative 2 or 3 is selected, the City of Long Beach (City) will continue to identify and incorporate design refinements to avoid or minimize the temporary occupancy of land from the Los Angeles River and Rio Hondo (LARIO) Trail in the final design.

**PR-13** During construction, the City of Long Beach (City) will require the construction contractor to maintain vehicular and pedestrian access to recreational areas within the construction area throughout the construction period. If existing access points are disrupted, alternative access will be provided. Appropriate signage and temporary sidewalks will be provided, as needed, throughout construction, and the construction contractor will provide and maintain appropriate signage to direct both pedestrian and vehicular traffic to recreational areas via alternate routes. Disabled access will also be maintained during construction.

**PR-14** The City of Long Beach (City) will require the construction contractor to identify all proposed closures of areas within the Los Angeles River and Rio Hondo (LARIO) Trail (including streets), no less than 90 days prior to when each closure would begin.

**PR-15** No less than 90 days prior to when a closure would begin, the City of Long Beach (City) will require the construction contractor to provide the following to the Los Angeles County Public Works Department and the Los Angeles County Parks and Recreation Department:

- A map of each proposed closure, clearly showing each recreational area proposed to be closed temporarily, including identification of any street closures
- A plan for providing signing and notifications through other public information outlets to inform the public and recreational visitors of upcoming closures of areas within the recreational area
- Estimation of the duration of each closure
- Identification of alternative vehicle and trail routes to/through and/or around the recreational area, as appropriate
- Identification of recreational features that would be unavailable to the public during the closure

**PR-16** The County of Los Angeles (County) will provide written approval of each proposed closure to the construction contractor no less than 45 days prior to when the closure would begin.

**PR-17** The City of Long Beach (City) will require the construction contractor to provide an information telephone number that recreational visitors can use to contact the contractor for more information regarding individual closures. The contractor may also provide an information website. The contact number and website information are to be provided at

the construction site, at/around each closed area, and on information signs discussing the individual closures. The construction contractor will also be required to provide this information to the Los Angeles County Public Works Department and the Los Angeles County Parks and Recreation Department.

**PR-18** The City of Long Beach (City) will require the construction contractor to return areas of the recreational area closed temporarily during construction to their original, or better, conditions after completion of construction, and those temporarily closed areas will be respectively returned to the Los Angeles County Public Works Department and the Los Angeles County Parks and Recreation Department.

**PR-19** At the completion of construction in the temporary occupancy areas at the Los Angeles River and Rio Hondo (LARIO) Trail, the City of Long Beach (City) will require the construction contractor to return the areas to a condition as good as, or better than, prior to its use for the temporary occupancy. The required improvements for the rehabilitation of those areas will be determined in consultation among the Los Angeles County Public Works Department, the Los Angeles County Parks and Recreation Department, and the construction contractor.

**PR-20** For temporary construction easements (TCE) currently vegetated in native and mixed native/nonnative plant materials, those land areas will be revegetated at the completion of construction and returned to the original property owners. The City of Long Beach (City) will develop the revegetation plans in consultation with the property owners to ensure the compatibility of the new vegetation with the existing vegetation in the vicinity of those for the affected properties.

### 4.2.4 Results of Coordination with Official(s) with Jurisdiction for Los Angeles River and Rio Hondo Trail

During the consultation process for the Shoemaker Bridge Replacement Project, the relevant information from this report was provided to the Los Angeles County Department of Public Works and the Los Angeles County Parks and Recreation Department for their concurrence that the Project will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). Following circulation of the Shoemaker Bridge Replacement Project EIR/EA, which ended November 12, 2019, a letter requesting concurrence with the *de minimis* finding was sent to the Los Angeles County Department of Public Works and the Los Angeles County Parks and Recreation Department on December 3, 2019. On March 25, 2020, the Los Angeles County Department of Public Works and on December 18, 2019, the Los Angeles County Parks and Recreation Department provided their concurrence (Attachment 1).

## 4.3 Description of Use of Long Beach Municipal Urban Stormwater Treatment Facility

**Permanent Incorporation of Long Beach Municipal Urban Stormwater Treatment Facility**

As shown on Figure 4-5 and Figure 4-6**,** under Alternatives 2 and 3, Project activities at the LB MUST facility include the construction of a roundabout under Design Option A or a “Y” intersection under Design Option B, which would be aerial structures above the facility that would require the placement of columns, footings, and retaining walls directly on the facility land, resulting in the permanent incorporation of land from the recreational area. Under Alternatives 2 and 3, Design Option A would

require the permanent incorporation of 1.11 acre of land from the LB MUST facility, and Design Option B would require the permanent incorporation of 0.73 acre of land from the facility. The permanent incorporation of land is required to construct the columns, footings, roadway improvements, and retaining walls associated with the roadway improvements.

To accommodate the roundabout or "Y" intersection, an access agreement would be required to allow maintenance activities beneath the roundabout or "Y" intersection.

**Temporary Use of Long Beach Municipal Urban Stormwater Treatment Facility**

As shown on Figure 4-5 and Figure 4-6, under Alternatives 2 and 3, Design Option A would require the temporary use of 3.83 acres of land in the LB MUST facility, and Design Option B would require the temporary use of 4.14 acres of land in the facility. The Project would not impact the portion of LB MUST facility north of the existing bridge, where the treatment plant and parking lot are located. The temporary use area would be used for grading and staging of construction equipment, vehicles, and supplies. Following construction, the temporary use area would be revegetated and improved as recreational space.

### 4.3.1 Applicability of *De Minimis* Finding for Long Beach Municipal Urban Stormwater Treatment Facility

**Permanent Incorporation of Long Beach Municipal Urban Stormwater Treatment Facility**

Activities, features, and attributes that qualify properties for protection under Section 4(f) include the facilities, functions, and/or activities at the resource; accessibility; visual; noise; vegetation; wildlife; air quality; and water quality. The placement of bridge support features and retaining walls within the LB MUST facility would be *de minimis* because the Project would not adversely affect the activities, features, and attributes that qualify the LB MUST facility for protection under Section 4(f), as discussed in the following sections.

*Facilities, Functions, and/or Activities Potentially Affected*

Facilities, functions, and activities in the LB MUST facility include a water treatment facility; post treatment detention ponds; exercise par course with outdoor fitness stations providing exercise equipment; pad area for passive recreation, such as picnicking and outdoor events; educational/interpretive signage, new decomposed granite multi-use trail that provides access around the ponds and connects to the LARIO Trail; wetland plants around ponds, including water-wise vegetation and slope planting, creating natural habitat; and gated emergency vehicle access.

The columns, footings, and retaining walls placed on facility land would not be located in areas designated for recreational trails and would not affect the connectivity of the trails or the planned linkages with nearby recreational resources, such as Cesar E. Chavez Park and Drake Park. In addition, the design of the LB MUST facility is currently being finalized. Although the LB MUST final design is anticipated to accommodate the proposed roadway improvements by placing any recreational features outside of the proposed Shoemaker Bridge improvements, the *Long Beach Municipal Urban Stormwater Treatment Initial Study/Mitigated Negative Declaration* (City of Long Beach Department of Parks, Recreation, and Marine 2017) does not clearly depict the location of the recreational features; a *de minimis* use determination is being proposed in light of the preservationist purposes and intent of Section 4(f).

Temporary closures of the recreational trails for maintenance of the underside of the roundabout or "Y" intersection may be required; however, detours would be provided to ensure uninterrupted connectivity along the trails during maintenance of the transportation facility.

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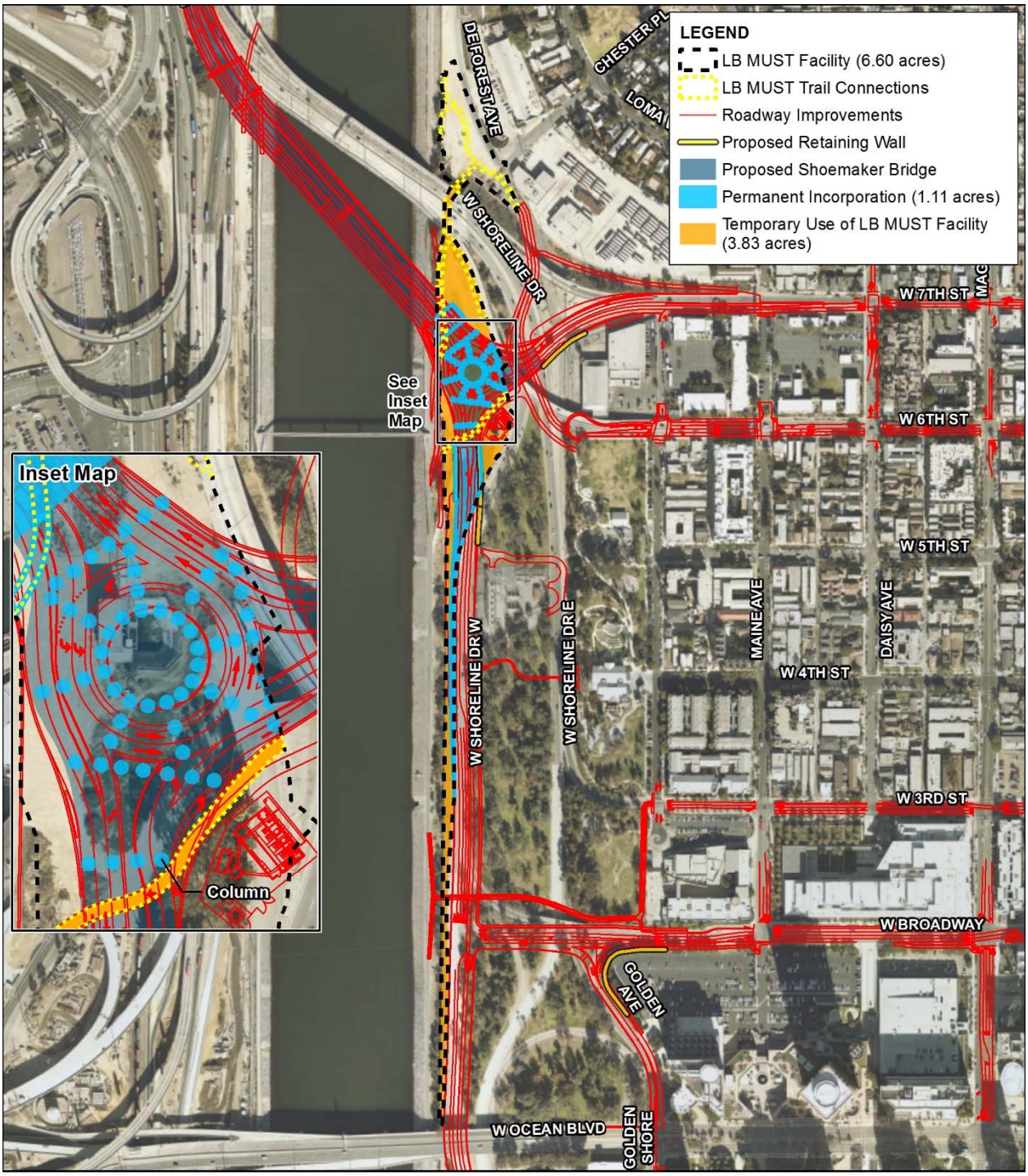


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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 4-5. Section 4(f) Use of Long Beach Municipal Urban Stormwater Treatment Facility (Design Option A)**

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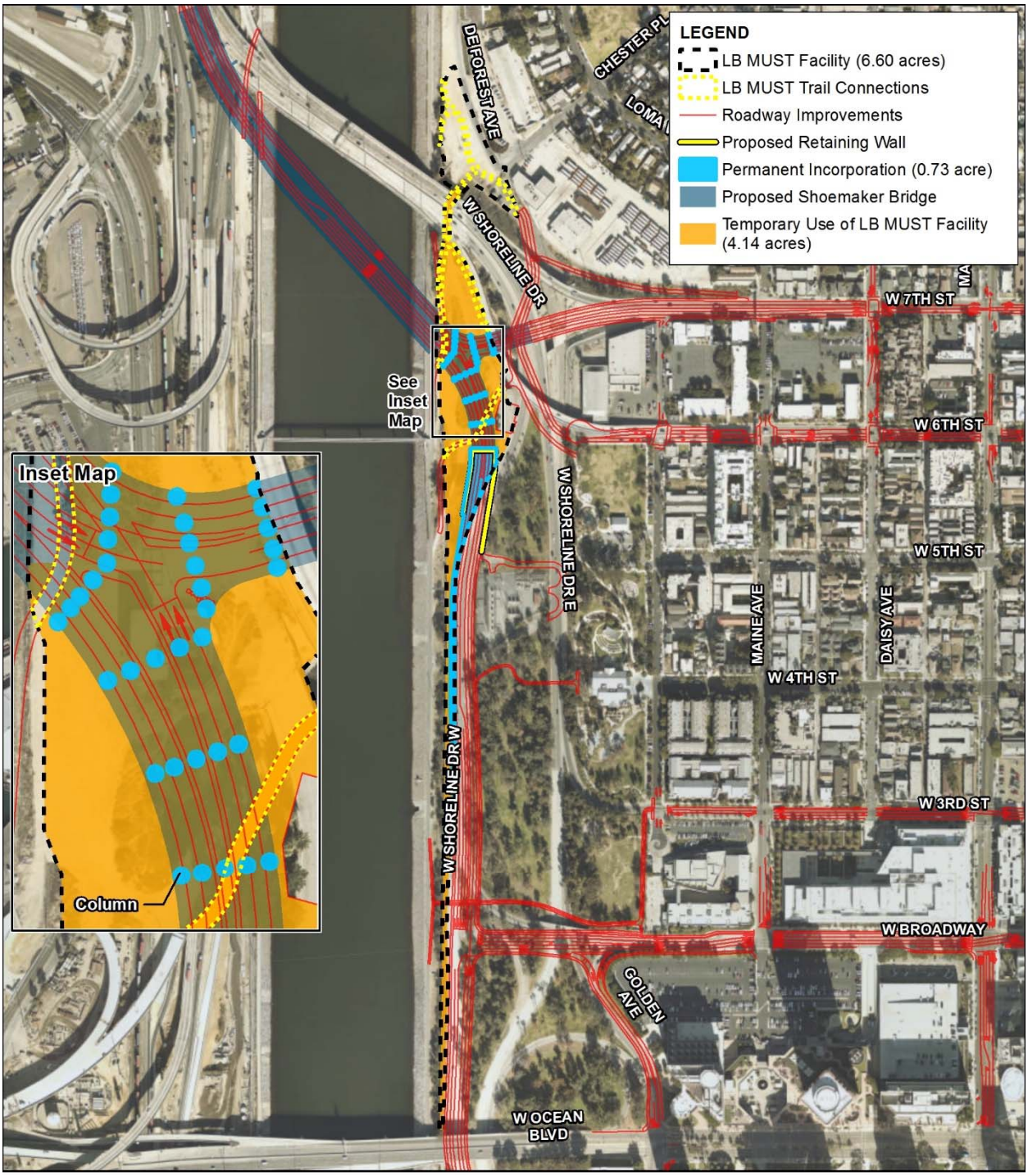


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EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 4-6. Section 4(f) Use of Long Beach Municipal Urban Stormwater Treatment Facility (Design Option B)**

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*Accessibility*

Because the design of the LB MUST facility is currently being finalized and is anticipated to accommodate the proposed roadway improvements, access to recreational features is not anticipated to be affected by the Project. Temporary closures of the recreational trails for maintenance of the underside of the roundabout or "Y" intersection may be required; however, only occasional closures of the trails would be necessary, and detours would be provided to ensure uninterrupted connectivity along the trails during maintenance of the transportation facility. Therefore, the Project would not adversely affect accessibility at the LB MUST facility.

*Visual*

The columns, footings, and retaining walls placed on facility land (roundabout or "Y" intersection) would add additional visual elements adjacent to the recreational features at the LB MUST facility. The trails at the facility would be used for active recreation (biking and walking), and any visual impacts from the proposed roundabout or "Y" intersection would be experienced by trail users for a relatively short duration. The LB MUST facility is currently in an urbanized area surrounded by transportation infrastructure, including the existing Shoemaker Bridge. The proposed improvements and maintenance activities would not result in substantial changes from the existing visual character and quality of the surrounding area. Therefore, the permanent incorporation would not adversely affect visual quality at the LB MUST facility.

*Noise*

In the Project limits, several roadways, including West Shoreline Drive and SR-710/I-710, are in proximity to the LB MUST facility. The surrounding transportation corridors currently contribute to the existing noise at the facility. After the new roadway improvements are constructed over and near the LB MUST facility, noise and vibration impacts could result from vehicles travelling over and near the facility. However, noise levels would not substantially increase above existing levels because the LB MUST facility is in an urban area and is already adjacent to transportation facilities. Therefore, the permanent incorporation would not adversely affect noise levels at the LB MUST facility.

*Vegetation*

The LB MUST facility would include wetland plants around ponds, including water-wise vegetation and slope planting, creating natural habitat. Because the design of the LB MUST facility is currently being finalized and is anticipated to accommodate the proposed roadway improvements, any vegetation is expected to be placed outside of the proposed improvements to ensure that those features are not affected by the Project. Therefore, the permanent incorporation would not adversely affect vegetation at the LB MUST facility.

*Wildlife*

The LB MUST facility would include wetland plants around ponds, including water-wise vegetation and slope planting, creating natural habitat. Because the design of the LB MUST facility is currently being finalized and is anticipated to accommodate the proposed roadway improvements, any wildlife habitat is anticipated be placed outside of the proposed improvements to ensure that those features are not affected by the Project. Therefore, the permanent incorporation would not adversely affect wildlife at the LB MUST facility.

*Air Quality*

The Project would not increase the capacity of the existing roadway network and would, therefore, not result in increased vehicle emissions. Therefore, the permanent incorporation would not adversely affect air quality at the LB MUST facility.

*Water Quality*

The LB MUST facility is being designed to accommodate stormwater flows from the Project. In addition, the Project would include construction of a detention ponds to treat stormwater. As discussed in Section 2.9 of the Shoemaker Bridge Replacement Project EIR/EA, the Project would result in a net decrease in impervious surface area, which would be expected to reduce runoff within and surrounding the Project area. Therefore, the permanent incorporation would not adversely affect water quality at the LB MUST facility.

**Temporary Use of Long Beach Municipal Urban Stormwater Treatment Facility**

Activities, features, and attributes that qualify properties for protection under Section 4(f) include the facilities, functions, and/or activities at the resource; accessibility; visual; noise; vegetation; wildlife; air quality; and water quality. The temporary use of the LB MUST facility would be *de minimis* because the Project would not adversely affect the activities, features, and attributes that qualify the LB MUST facility for protection under Section 4(f), as discussed in the following sections.

*Facilities, Functions, and/or Activities Potentially Affected*

Facilities, functions, and activities in the LB MUST facility include a water treatment facility; coastal post detention ponds; exercise par course with outdoor fitness stations providing exercise equipment; pad area for passive recreation, such as picnicking and outdoor events; educational/interpretive signage, new decomposed granite multi-use trail that provides access around the ponds and connects to the LARIO Trail; wetland plants around ponds, including water-wise vegetation and slope planting, creating natural habitat; and gated emergency vehicle access.

*Accessibility*

Existing connections to the LB MUST facility from the LARIO Trail, Cesar E. Chavez Park, and surrounding roadways may be affected during construction. Detours would be provided along alternate routes to ensure that access would not be substantially affected. Following construction, accessibility to the LB MUST facility would be enhanced through new trail connections that would be constructed as part of the Project. The temporary use during construction may interfere with access to portions of the LB MUST facility for limited time periods but is not anticipated to result in more than *de minimis* impacts on access to the key activities, features, and attributes.

*Visual*

During construction, temporary visual impacts would result from vehicles, equipment supplies, and activities that would be visible from the LB MUST facility. However, following construction, these temporary visual impacts associated with construction would cease.

*Noise*

In the Project limits, several roadways, including West Shoreline Drive and SR-710/I-710, are in proximity to the LB MUST facility. The surrounding transportation corridors currently contribute to the existing noise at the facility. Additional noise and vibration impacts at the facility may result from construction activities because of vehicles, equipment, and earth-disturbing activities. However,

following construction, temporary noise and vibration impacts associated with construction would cease.

*Vegetation*

During construction, vegetation removal may be required in grading and staging areas. However, the temporary occupancy area would be restored following construction in a condition that is as good, as or better, than prior to the use of the area.

*Wildlife*

The LB MUST facility would include wetland plants around ponds, including water-wise vegetation and slope planting, creating natural habitat. Project construction could result in impacts on wildlife at the LB MUST facility. However, as discussed in Sections 2.16, 2.19, and 2.20 of this environmental document, implementing Measures NC-1 through NC-4, AN-1 to AN-3, and TE-1 would minimize impacts to wildlife through monitoring of the construction activities by a Project biologist and installation of barriers around sensitive habitat.

*Air Quality*

In the Project limits, several roadways, including West Shoreline Drive and SR-710/I-710, are in proximity to the LB MUST facility. The surrounding transportation corridors currently contribute to the existing air emissions near the trail. Additional air quality impacts may result from construction activities because of vehicle and equipment emissions, as well as dust from earth-disturbing activities. However, following construction, temporary air quality impacts associated with construction would cease.

*Water Quality*

As discussed in Section 2.9 of the Shoemaker Bridge Replacement Project EIR/EA, the Project would incorporate BMPs and standard measures, such as storm drain inlet protection and control of runoff from waste piles so water quality impacts from construction would be minimized.

### 4.3.2 Preliminary *De Minimis* Impact Finding for Long Beach Municipal Urban Stormwater Treatment Facility

#### Permanent Incorporation of Long Beach Municipal Urban Stormwater Treatment Facility

As discussed above, the permanent incorporation of land (1.11 acre under Design Option A and 0.73 acre under Design Option B) from the LB MUST facility would not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). As discussed in Section 2.1.3.4 of the Shoemaker Bridge Replacement Project EIR/EA and below in Section 4.3.3, measures would be implemented to minimize harm to the property. With implementation of these measures, it is anticipated that the Project would result in a *de minimis* impact on the LB MUST facility.

#### Temporary Use of Long Beach Municipal Urban Stormwater Treatment Facility

As discussed above, the temporary use of 4.51 acres of land in the LB MUST facility under Design Option A and the temporary use of 4.69 acres of land in the facility under Design Option B would not result in a more than *de minimis* impact on the activities, features, or attributes that qualify the property for protection under Section 4(f). As discussed in Section 2.1.3.4 of the Shoemaker Bridge Replacement Project EIR/EA and below in Section 4.3.3, measures would be implemented to minimize harm to the property. With implementation of these measures, it is anticipated that the Project would result in a *de minimis* impact on the LB MUST facility.

### 4.3.3 Avoidance, Minimization, and/or Mitigation Measures for Long Beach Municipal Urban Stormwater Treatment Facility

The following minimization measures will be needed to make the *de minimis* impact finding for the LB MUST facility:

**PR-21** If Alternative 2 or 3 is selected, the City of Long Beach (City) will continue to identify and incorporate design refinements to avoid or minimize the temporary occupancy of land from the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility in the final design.

**PR-22** During construction, the City of Long Beach (City) will require the construction contractor to maintain vehicular and pedestrian access to recreational areas within the construction area throughout the construction period. If existing access points are disrupted, alternative access will be provided. Appropriate signage and temporary sidewalks will be provided, as needed. Throughout construction, and the construction contractor will provide and maintain appropriate signage to direct both pedestrian and vehicular traffic to recreational areas via alternate routes. Disabled access will also be maintained during construction.

**PR-23** The City of Long Beach (City) will require the construction contractor to identify all proposed closures of areas within the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility (including streets) no less than 90 days prior to when each closure would begin.

**PR-24** No less than 90 days prior to when a closure would begin, the City of Long Beach (City) will require the construction contractor to provide the following to the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility:

- A map of each proposed closure, clearly showing each recreational area proposed to be closed temporarily, including identification of any street closures
- A plan for providing signing and notifications through other public information outlets to inform the public and recreational visitors of upcoming closures of areas within the recreational area
- Estimation of the duration of each closure
- Identification of alternative vehicle and trail routes to/through and/or around the recreational area, as appropriate
- Identification of recreational features that would be unavailable to the public during the closure

**PR-25** The Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility will provide written approval of each proposed closure to the construction contractor no less than 45 days prior to when the closure would begin.

**PR-26** The City of Long Beach (City) will require the construction contractor to provide an information telephone number that recreational visitors can use to contact the contractor for more information regarding individual closures. The contractor may also provide an information website. The contact number and website information are to be provided at the construction site, at/around each closed area, and on information signs discussing the

individual closures. The construction contractor will also be required to provide this information to the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility.

**PR-27** The City of Long Beach (City) will require the construction contractor to return areas of the recreational area closed temporarily during construction to their original, or better, conditions after completion of construction, and those temporarily closed areas will be respectively returned to the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility.

**PR-28** At the completion of construction in the temporary occupancy areas at the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility, the City of Long Beach (City) will require the construction contractor to return the areas to a condition as good as, or better than, prior to its use for the temporary occupancy. The required improvements for the rehabilitation of those areas will be determined in consultation among the City, the LB MUST facility, and the construction contractor.

**PR-29** For temporary construction easements (TCE) currently vegetated in native and mixed native/nonnative plant materials, those land areas will be revegetated at the completion of construction and returned to the original property owners. The City of Long Beach (City) will develop the revegetation plans in consultation with the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility to ensure the compatibility of the new vegetation with the existing vegetation in the vicinity of those for the affected properties.

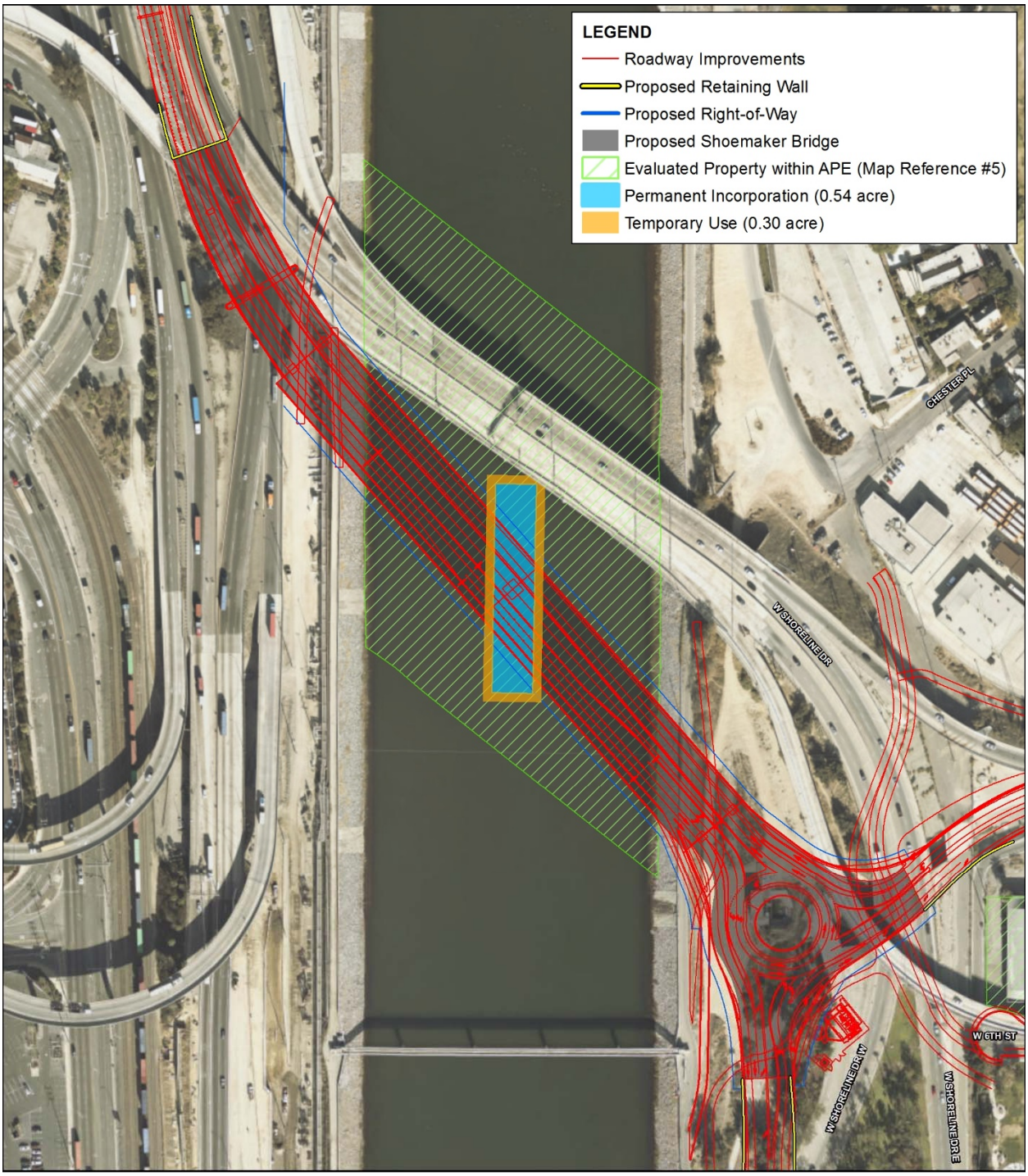
### 4.3.4 Results of Coordination with Official(s) with Jurisdiction for Long Beach Municipal Urban Stormwater Treatment Facility

Further coordination with Caltrans and the City of Long Beach is anticipated and the relevant information from this report was provided to the City of Long Beach for its concurrence that the Project will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). Following circulation of the Shoemaker Bridge Replacement Project EIR/EA, which ended November 12, 2019, a letter requesting concurrence with the *de minimis* finding was sent to the City of Long Beach Department of Parks, Recreation, and Marine on December 3, 2019. On December 14, 2019, the City of Long Beach Department of Parks, Recreation, and Marine provided its concurrence (Attachment 1).

## 4.4 Description of Use of Los Angeles River Flood Channel

### Permanent Incorporation of Los Angeles Flood Channel

As shown on Figure 4-7, Figure 4-8, and Figure 4-9, the Project would require the permanent incorporation in the LA River Flood Channel. Under Alternatives 2 and 3 (Design Options A and B), the Project includes grade-separated crossing improvements to the assumed eligible segment of the historic LA River Flood Channel located within the undertaking's APE. Under Design Option A and B, segmented bridge design, the construction of two pier(s) within the boundary of the LA River Flood Channel on the earthen, channel floor would occur. Under Design Option A, a single pylon cable stay bridge design, only one pier would be located within the boundary of the LA River Flood Channel. The single pylon cable stay bridge is not applicable for Design Option B. Within the LA River Flood Channel, the Project would require the permanent incorporation of 0.51 acre of land within the LA River Flood Control Channel for the two piers associated with the segmented bridge design and 0.54 acre of land within the LA River Flood Control Channel for the single pylon cable stay bridge design consisting of one pier.




07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 4-7. Section 4(f) Use of Los Angeles River Flood Channel (Design Option A – Single Pylon)**

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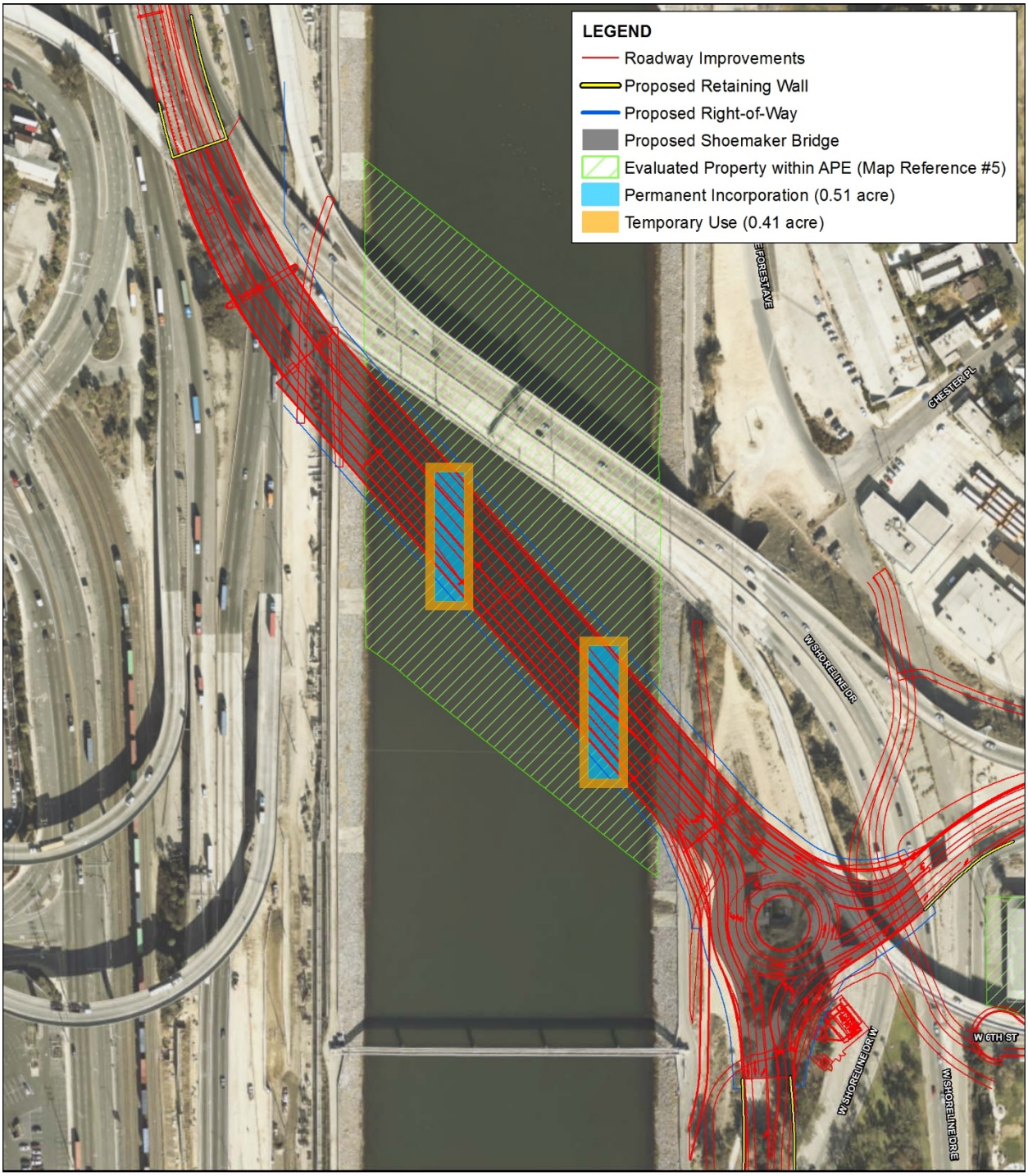


07-LA-710: PM 6.0/6.4
EA No. 27300

*Shoemaker Bridge Replacement Project*

**Figure 4-8. Section 4(f) Use of Los Angeles River Flood Channel (Design Option A – Segmented)**

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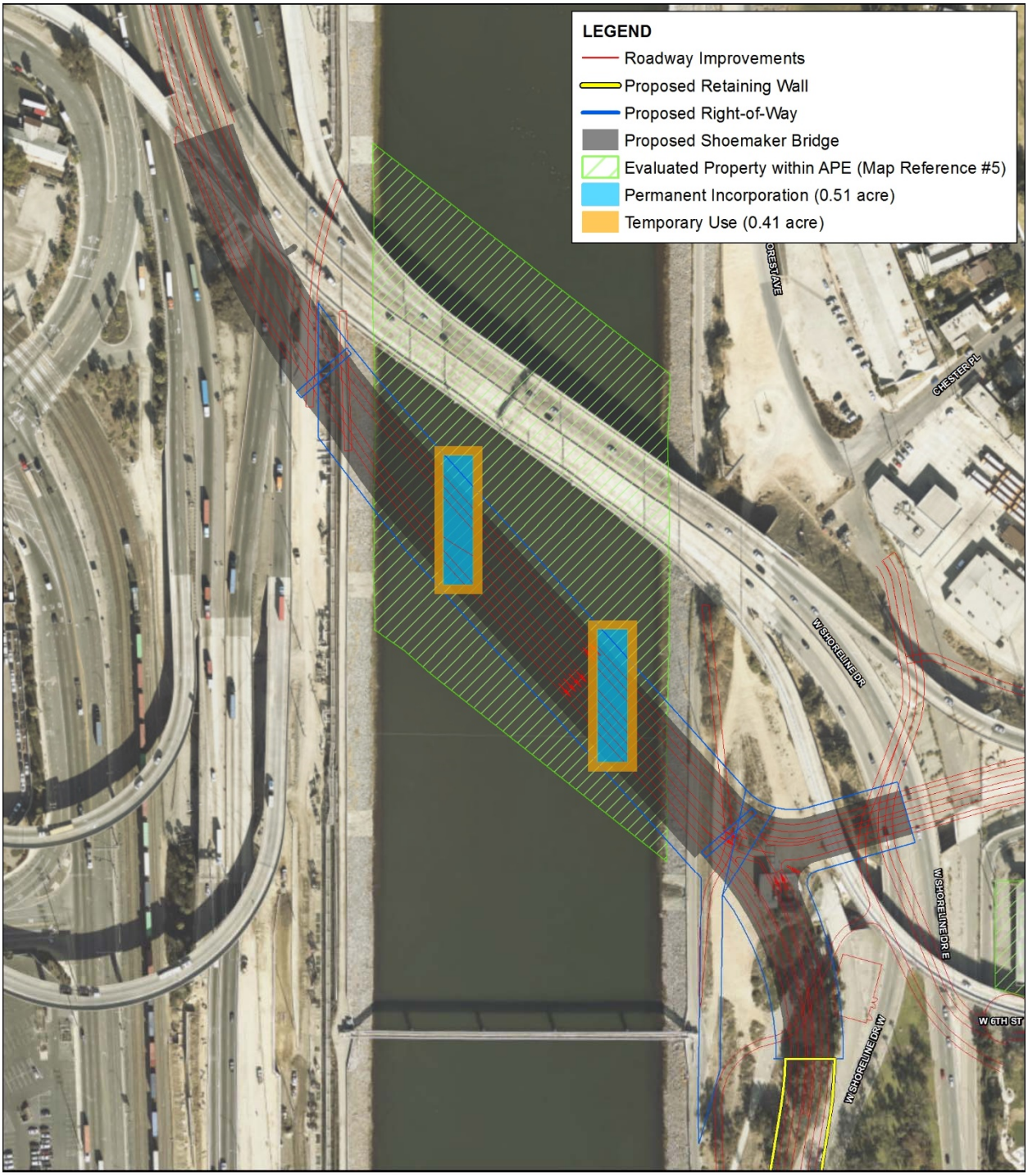


**Figure 4-9. Section 4(f) Use of Los Angeles River Flood Channel (Design Option B)**

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### Temporary Use of Los Angeles River Flood Channel

As shown on Figure 4-7, Figure 4-8, and Figure 4-9, under Alternatives 2 and 3 (Design Options A and B) the Project would require the temporary use of 0.41 acre of land for the two piers associated with the segmented bridge design within the LA River Flood Channel and 0.30 acre of land for the single pylon cable stay bridge consisting of one pier within the LA River Flood Channel. Dewatering and construction of the pier(s) would occur within the estimated work area resulting in a temporary use of the LA River Flood Control Channel.

## 4.4.1 Applicability of *De Minimis* Finding for Los Angeles River Flood Channel

### Permanent Incorporation in Los Angeles River Flood Channel

Activities, features, and attributes that qualify the LA River Flood Channel for protection under Section 4(f) include character-defining features of the resource that qualify it for listing on the NRHP, which are as follows:

- Original alignment of the LA River Flood Channel
- Sloped banks constructed out of reinforced concrete that form a trapezoidal shape
- Concrete parapet wall borders the channel on the east and west banks
- Earthen canal bottom in this segment
- Urban setting characterized by post-World War II development

*Facilities, Functions, and/or Activities Potentially Affected*

No direct physical changes to the segment's intact character-defining features would result from the Project. The new structure would not have a substantial effect on the segment's physical design or setting, nor will it reduce the integrity of the segment to the degree that it is no longer eligible for the NRHP. Therefore, the proposed undertaking will not cause an adverse effect on the segment of the LA River Flood Channel located within the APE, as defined in 36 CFR 800.5(b).

As stated in the Finding of No Adverse Effect (Caltrans 2019) prepared for the Project, the Project would not cause an adverse effect on the segment of the historic LA River Flood Channel within the APE. The proposed Project would alter some aspects of the segment's setting; however, these changes would not be substantial enough to diminish the segment's integrity to the degree that it is no longer eligible for listing in the NRHP. The changes are compatible with the existing setting in terms of size, scale, and the type of development in the area. The segment and the larger LA River Flood Channel would continue to convey their historic significance and continue to be eligible for listing in the NRHP. Accordingly, the proposed Project would not cause an adverse effect on the historic property within the APE or on LA River Flood Channel as a whole. No conditions to ensure that the undertaking will not have an adverse effect on the LA River Flood Channel are recommended or required.

In conclusion, the permanent incorporation would not adversely affect the facilities, functions, and/or activities at the LA River Flood Channel.

*Accessibility*

The permanent incorporation would not result in any changes to accessibility over or in the LA River Flood Channel.

*Visual*

Although the setting is not an essential aspect of integrity for the LA River Flood Channel to convey its significance, the introduction of a new bridge in the setting will not add any new elements to the setting. The LA River Flood Channel was constructed to encourage development in the river-adjacent areas, and the APE for this project has been dominated with large-scale transportation networks, as well as industrial, commercial, and residential development. The new modern bridge will not add a new or incompatible element to the setting. The proposed Project would not diminish the integrity of setting for the LA River Flood Channel.

Under Alternatives 2 and 3, the only physical change to the LA River Flood Channel segment is the addition of one or two piers within the earthen bottom of the river, depending on which bridge design is chosen. The earthen bottom is not a manmade feature, so excavation of the earthen bottom would not diminish the integrity of design, materials, and workmanship.

While the new bridge would introduce new elements to the segment's setting, the changes to the setting alone would not be significant enough to diminish the segment's current integrity of feeling to the degree that it would no longer be eligible for the NRHP. Furthermore, the LA River Flood Channel as a whole derives its sense of feeling as a significant, linear, infrastructure project across the landscape and also from its overall design, which would not be significantly diminished by the proposed improvements. Furthermore, the intent behind the construction of the channel was to allow for and encourage river-adjacent growth. A new bridge within the context of a heavily developed transportation corridor would not diminish the integrity of feeling.

Similar to the integrity of setting, integrity of association would not be diminished as a result of the Project. While the new bridge would introduce new elements to the segment's setting, the changes to the setting alone would not be significant enough to diminish the segment's current integrity of association, to the degree that it would no longer be eligible for the NRHP. Furthermore, the LA River Flood Channel as a whole derives its sense of association as a significant, linear, infrastructure project across the landscape and also from its overall design, which would not be significantly diminished by the proposed improvements. Furthermore, the intent behind the construction of the channel was to allow for and encourage river-adjacent growth. A new bridge within the context of a heavily developed transportation corridor would not diminish the integrity of association.

*Noise*

In the Project limits, several roadways, including West Shoreline Drive and SR-710/I-710, are in proximity to the site. The surrounding transportation corridors currently contribute to the existing noise in the area. After the new bridge is constructed, noise and vibration impacts could result from vehicles travelling over the channel. However, noise levels would not substantially increase above existing levels because the channel is in an urban area and is already adjacent to transportation facilities. Any additional noise from the roadway improvements would not be expected to damage the historic site.

*Vegetation*

The LA River Flood Channel is a historic site that does not require protection from impacts on vegetation. Therefore, this attribute does not qualify the property for protection under Section 4(f).

*Wildlife*

The LA River Flood Channel is a historic site that does not require protection from impacts on wildlife. Therefore, this attribute does not qualify the property for protection under Section 4(f).

*Air Quality*

The LA River Flood Channel is a historic site that does not require protection from air quality impacts. Therefore, this attribute does not qualify the property for protection under Section 4(f).

*Water Quality*

The LA River Flood Channel is a historic site that does not require protection from water quality impacts. Therefore, this attribute does not qualify the property for protection under Section 4(f).

**Temporary Use of Los Angeles River Flood Channel**

*Facilities, Functions, and/or Activities Potentially Affected*

No direct physical changes to the segment's intact character-defining features would result from the Project. Construction of the new structure would not have a substantial effect on the segment's physical design or setting, nor will it reduce the integrity of the segment to the degree that it is no longer eligible for the NRHP. Therefore, the proposed undertaking would not cause an adverse effect on the segment of the LA River Flood Channel located within the APE, as defined in 36 CFR 800.5(b).

As stated in the Finding of No Adverse Effect (Caltrans 2019) prepared for the Project, the Project would not cause an adverse effect on the segment of the historic LA River Flood Channel within the APE. Dewatering and construction of the pier(s) would occur within the estimated work area. The temporary impacts as a result of the proposed Project would not diminish the segment's integrity to the degree that it is no longer eligible for listing in the NRHP. Once construction is complete, the estimated work area within the LA River Flood Channel would be returned to pre-construction conditions.

The segment and the larger LA River Flood Channel would continue to convey their historic significance and continue to be eligible for listing in the NRHP. Accordingly, the proposed Project would not cause an adverse effect on the historic property within the APE or on LA River Flood Channel as a whole. No conditions to ensure that the undertaking will not have an adverse effect on the LA River Flood Channel are recommended or required.

*Accessibility*

The temporary use would not result in any changes to accessibility over or in the LA River Flood Channel.

*Visual*

Although the setting is not an essential aspect of integrity for the LA River Flood Channel to convey its significance, temporary visual impacts that would occur during construction as a result from vehicles, equipment supplies, and construction activities would not add new elements to the setting. Following construction, these temporary visual impacts associated with construction would cease.

The LA River Flood Channel was constructed to encourage development in the river-adjacent areas, and the APE for this project has been dominated with large-scale transportation networks, as well as industrial, commercial, and residential development. The construction of the new modern bridge will not impact the setting. The construction of the proposed Project would not diminish the integrity of setting for the LA River Flood Channel.

Under Alternatives 2 and 3, the estimated work area in order to construct the pier(s) within the LA River Flood Channel segment would temporarily impact the earthen bottom of the river. The earthen bottom is not a manmade feature, so excavation of the earthen bottom would not diminish the integrity

of design, materials, and workmanship. Once construction is complete, the earthen bottom floor will be returned to pre-construction conditions.

The construction of the new bridge would not impact the segment's setting, and would not be significant enough to diminish the segment's current integrity of feeling to the degree that it would no longer be eligible for the NRHP. Furthermore, the LA River Flood Channel as a whole derives its sense of feeling as a significant, linear, infrastructure project across the landscape and also from its overall design, which would not be diminished by temporary construction activities.

Similar to the integrity of setting, integrity of association would not be diminished as a result of the Project construction activities. Construction activities would be temporary and would not diminish the segment's current integrity of association, to the degree that it would no longer be eligible for the NRHP. Furthermore, the LA River Flood Channel as a whole derives its sense of association as a significant, linear, infrastructure project across the landscape and also from its overall design, which would not be significantly diminished by the proposed improvements.

*Noise*

In the Project limits, several roadways, including West Shoreline Drive and SR-710, are in proximity to the site. The surrounding transportation corridors currently contribute to the existing noise in the area. During construction of the new bridge, noise and vibration impacts would result from construction vehicles and activities within and over the channel. However, construction related noise levels would cease once construction is complete. Noise related to construction activities for the roadway improvements would be temporary and would not damage the historic site.

*Vegetation*

The LA River Flood Channel is a historic site that does not require protection from impacts on vegetation. Therefore, this attribute does not qualify the property for protection under Section 4(f).

*Wildlife*

The LA River Flood Channel is a historic site that does not require protection from impacts on wildlife. Therefore, this attribute does not qualify the property for protection under Section 4(f).

*Air Quality*

The LA River Flood Channel is a historic site that does not require protection from air quality impacts. Therefore, this attribute does not qualify the property for protection under Section 4(f).

*Water Quality*

The LA River Flood Channel is a historic site that does not require protection from water quality impacts. Therefore, this attribute does not qualify the property for protection under Section 4(f).

### 4.4.2 Preliminary *De Minimis* Impact Finding for Los Angeles River Channel

As discussed above, the Project would have no adverse effects on this historic resource under Section 106 of the National Historic Preservation Act (NHPA), and written concurrence from SHPO is anticipated. Therefore, it is anticipated that the Project would result in a *de minimis* impact on the LA River Flood Channel.

### 4.4.3 Avoidance, Minimization, and/or Mitigation Measures for Los Angeles River Flood Channel

Under Design Option A and B, the segmented bridge design would construct two piers within the boundary of the LA River Flood Channel on the earthen, channel floor. Under Design Option A, single pylon cable stay bridge design is also being considered, which would construct one pier within the boundary of the LA River Flood Channel on the earthen, channel floor. Since the Project has been designed to minimize impacts on the LA River Flood Channel and would not result in adverse effects on the historic site, no avoidance, minimization, and/or mitigation measures are required for impacts on this resource.

### 4.4.4 Results of Coordination with Official(s) with Jurisdiction for Los Angeles River Flood Channel

As part of Section 106 of the Shoemaker Bridge Replacement Project, consultation with the SHPO was conducted regarding the HPSR. Concurrence on the eligibility of cultural properties evaluated in the HPSR by the SHPO was provided in a letter dated July 3, 2019. SHPO has agreed with the determination that the LA River Flood Channel is eligible for the NRHP for the purposes of this Project. On October 16, 2019, Caltrans Cultural Studies Office (CSO) reviewed the Finding of No Adverse Effect (FNAE) with Standard Conditions with the Secretary of the Interior's Standards (SOIS) Plan for the Treatment of Historic Properties (SOIS), and had no objections to the Section 4(f) de minimis determination for use and permanent incorporation of the LA River Flood Channel. Since CSO provided concurrence with no objections, Caltrans was able to move forward in the Section 106 process without written concurrence from the SHPO on individual undertakings.

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# 5 Resources Evaluated Relative to the Requirements of Section 4(f): No-Use Determination(s)

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 United States Code (USC) 303, declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

This section of the document discusses parks, recreational facilities, wildlife refuges, and historic properties found within or next to the project area that do not trigger Section 4(f) protection because: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, or 4) the project does not permanently use the property and does not hinder the preservation of the property.

## 5.1 Constructive Use

FHWA must comply with 23 CFR 774.15 to determine whether or not there is a constructive use of Section 4(f) property. Constructive use of Section 4(f) property is only possible in the absence of a permanent incorporation of land or a temporary occupancy of the type that constitutes a Section 4(f) use (FHWA 2012).

A constructive use involves an indirect impact where no actual physical use of the Section 4(f) property via permanent incorporation of land or a temporary occupancy of land into a transportation facility. A constructive use occurs when the proximity impacts of a proposed project adjacent to, or nearby, a Section 4(f) property result in substantial impairment to the property's activities, features, or attributes that qualify the property for protection under Section 4(f). Therefore, the value of the resource, in terms of its Section 4(f) purpose and significance, will be meaningfully reduced or lost. However, a project's proximity to a Section 4(f) property is not in itself an impact that results in constructive use.

Section 1 documents the direct impacts, use, and findings associated with the permanent incorporation and temporary use of land from the Cesar E. Chavez Park, LARIO Trail, the LB MUST facility, and the LA River Flood Channel. Therefore, as defined above, an evaluation of a constructive use to these Section 4(f) properties is not applicable.

The indirect, proximity impacts associated with other properties which have been evaluated relative to the requirements of Section 4(f) and documented within 0.5 mile of the Project that do not result in a substantial impairment are discussed below.

### 5.1.1 No Constructive Use: LARIO Trail, LB MUST Facility, and Los Angeles River Flood Channel

The principle proximity impacts associate with bridge structures that could potential rise to the level of substantial impairment are those related to vertical clearance, noise, and shadow effects. The bridge structures over these properties will vary between 14 feet to 40 feet and would not restrict the vertical clearances associated with the properties protected activities, features, and attributes. While the structures will have some shading effects to these properties, in no case will the structures shade the entire properties or interfere with the protected recreational activities, features, or attributes. Similarly,

noise levels are predicted to decrease at many of the model receptors nearest these properties. Therefore, there are no proximity impacts that would rise to the level of substantial impairment and there is no constructive use of these resources.

## 5.2 Other Resources with No Section 4(f) Use

The location of each resource that would be identified as Section 4(f) property within 0.5 mile of the Project limits is shown on Figure 5-1. As shown on Figure 5-1, the resources are numbered as B-1, B-2, etc. for bike paths; P-1, P-2, etc. for parks; R-1, R-2, etc. for recreation centers; and S-1, S-2, etc. for school recreational facilities open to the public and serve organized or walk-on recreational purposes. Section 1 documents the use and impacts associated with the permanent incorporation and temporary use of land from the Cesar E. Chavez Park, LARIO Trail, the LB MUST facility, and the LA River Flood Channel. Table 5-1 documents the remaining resources within 0.5 mile of the Project limits that have been determined to not result in a Section 4(f) use because the Project does not result in a permanent incorporation of the property, does not hinder the preservation of the property, or result in a constructive use due to proximity impacts.

For these resources, no use is anticipated because of the resources' distance from the Project limits, and/or because measures to minimize harm would be implemented, which would prevent any proximity impacts after mitigation that would be so severe that the activities, features, and/or attributes that qualify those properties for protection under Section 4(f) would be substantially impaired. Substantial impairment occurs when the activities, features, and/or attributes of the property are substantially diminished resulting in the value of the resource in terms of its Section 4(f) significance being meaningfully reduced or lost.

A review of the technical analyses in the Shoemaker Bridge Replacement Project EIR/EA did not identify any Project-related proximity impacts that would be so severe after mitigation as to result in substantial diminishment of the activities, features, and/or attributes that qualify the properties listed in Table 5-1 for protection under Section 4(f). Although the properties listed in Table 5-1 are considered Section 4(f) properties, no "use" will occur. Therefore, the provisions of Section 4(f) do not apply.

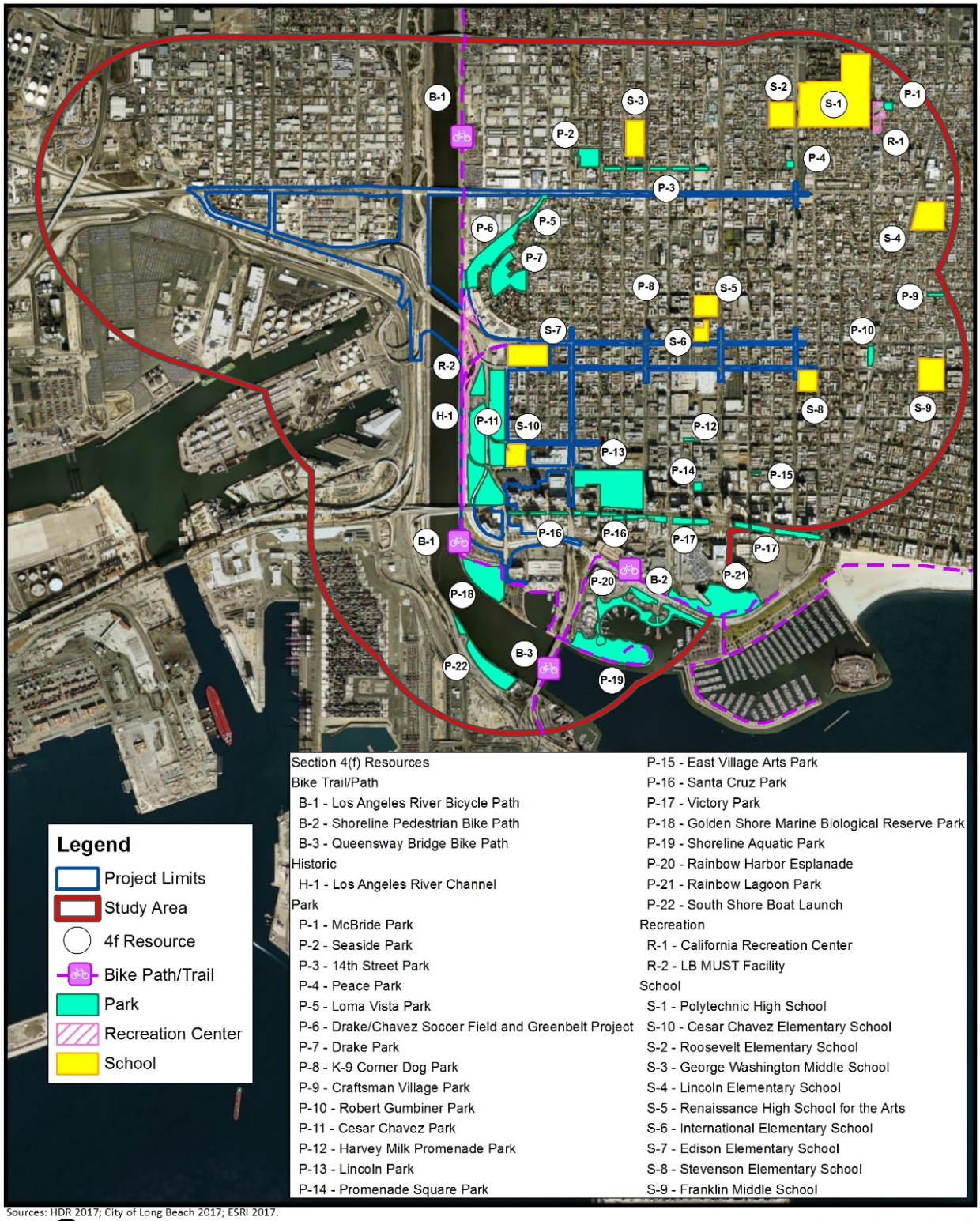


**Figure 5-1. Section 4(f) Resources**

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**Table 5-1. Section 4(f) Resources with a No Use Determination**

| Resource Number | Property Name | Distance from Project Limits | Official with Jurisdiction | Project Impacts |
|---|---|---|---|---|
| B-2 | Shoreline Pedestrian Bike Path | 0.16 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The bike path is located approximately 0.16 mile from the Project limits, and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that would rise to a constructive use. Although the bike paths within and surrounding Downtown Long Beach are connected with one another, the use of the Shoreline Pedestrian Bike Path would not be impacted; furthermore, connections to the LARIO Trail, which would be partially closed in order realign a portion of the trail, would be considered temporary. Alternative routes are available for trail users seeking to continue traveling north along the LARIO Trail or south toward the Shoreline Pedestrian Bike Path. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. As bike paths are typically active recreational resources, temporary or permanent impacts from noise and air quality, or to visual resources as a result of the proposed Project would be considered adverse in terms of the preservation and use of this resource as a recreational facility.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| B-3 | Queensway Bridge Bike Path | 300 feet | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The bike path is located approximately 300 feet from the Project limits, and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that would rise to a constructive use. Similar to the Shoreline Pedestrian Bike Path, although the bike paths within and surrounding Downtown Long Beach are connected with one another, the use of the Queensway Bridge Bike Path would not be impacted. Furthermore, connections to the LARIO Trail, which would be partially closed to realign a portion of the trail, would be considered temporary. Alternative routes for trail users seeking to continue traveling north along the LARIO Trail or south toward the Queensway Bridge Bike Path are available. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. As bike paths are typically active recreational resources, temporary or permanent impacts from noise and air quality, or to visual resources as a result of the proposed Project would be considered adverse in terms of the preservation and use of this resource as a recreational facility.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-1 | Ernest McBride Sr. Park | 0.4 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property, The park is located approximately 0.4 mile from the Project limits, and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that would rise to a constructive use. The park is located northeast of the Project limits along Anaheim Street where minor improvements, such as striping, signage, and signal improvements, would occur. Access to and from the park would not be impeded during or after construction considering the park's distance from the Project improvements, and a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. Additionally, no severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-2 | Seaside Park | 0.11 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 0.11 mile from the Project limits, and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that would rise to a constructive use. The park is located north of the Project limits along Anaheim Street where minor improvements, such as striping, signage, and signal improvements, would occur. Access to and from the park would not be impeded during or after construction considering the park's distance from the Project improvements, and a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. Additionally, no severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |

**Table 5-1. Section 4(f) Resources with a No Use Determination**

| Resource Number | Property Name | Distance from Project Limits | Official with Jurisdiction | Project Impacts |
|---|---|---|---|---|
| P-3 | 14th Street Park | 400 feet | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 400 feet from the Project limits, and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that would rise to constructive use. The park is located north of the Project limits along Anaheim Street where minor improvements, such as striping, signage, and signal improvements, would occur. Access to and from the park would not be impeded during or after construction, and a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. Additionally, no severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-4 | Peace Park | 300 feet | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 300 feet from the Project limits, and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that would rise to constructive use. The park is located northeast of the Project Limits along Anaheim Street and Atlantic Avenue where minor improvements, such as striping, signage, and signal improvements, would occur. Access to and from the park would not be impeded during or after construction, and a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. Additionally, no severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-5 | Loma Vista Park | 350 feet | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 350 feet from the Project limits, and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that would rise to constructive use. The park is located south of the Project limits along Anaheim Street where minor improvements, such as striping, signage, and signal improvements, would occur. Access to and from the park would not be impeded during or after construction, and a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. Additionally, no severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-6 | Drake/Chavez Soccer Field and Greenbelt Project | 0 feet<br><br>(adjacent to Project limit) | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. Although the park is adjacent to the Project limits along De Forest Avenue, the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The park is located just east of the Project limits along De Forest Avenue where minor improvements, such as striping, signage, and signal improvements, would occur. Access to and from the park would not be impeded during or after construction, and a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. Additionally, no severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |

**Table 5-1. Section 4(f) Resources with a No Use Determination**

| Resource Number | Property Name | Distance from Project Limits | Official with Jurisdiction | Project Impacts |
|---|---|---|---|---|
| P-7 | Drake Park | 350 feet | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 350 feet from the Project limits and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that would rise to constructive use. The park is located south of the Project limits along Anaheim Street where minor improvements, such as striping, signage, and signal improvements, would occur, and north of 7th Street where realignment of the street will occur. However, even with reconfiguration of 7th Street, access to and from the park would not be impeded during or after construction. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-8 | K-9 Corner Dog Park | 0.13 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 0.13 mile from the Project limits and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that would rise to constructive use. The park is located north of the Project limits along 7th Street and Pacific Avenue where reconfiguration of 7th Street would occur. However, even with reconfiguration of 7th Street, access to and from the park would not be impeded during or after construction considering the park's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-9 | Craftsman Village Park | 0.47 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 0.47 mile from the Project limits, and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that would rise to constructive use. The park is located northeast of the Project limits along 7th Street and Atlantic Avenue. Access to and from the park would not be impeded during or after construction considering the park's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-11 | Dr. Robert Gumbiner Park | 0.23 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 0.23 mile from the Project limits, and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that would rise to constructive use. The park is located east of the Project limits at the 7th Street and Atlantic Avenue intersection, where reconfiguration of 7th Street would occur. However, even with reconfiguration of 7th Street, access to and from the park would not be impeded during or after construction considering the park's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-12 | Harvey Milk Promenade Park | 0.21 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 0.21 mile from the Project limits, and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The park is located south of the Project limits along 3rd Street where reconfiguration of 3rd Street would occur. However, even with reconfiguration of 3rd Street, access to and from the park would not be impeded during or after construction considering the park's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to |

**Table 5-1. Section 4(f) Resources with a No Use Determination**

| Resource Number | Property Name | Distance from Project Limits | Official with Jurisdiction | Project Impacts |
|---|---|---|---|---|
| | | | | minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-13 | Lincoln Park | 0.20 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property because the park is located approximately 0.20 mile from the Project limits, and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The park is located west of the Project limits along the West Broadway and 3rd Street intersections with Magnolia Avenue, where reconfiguration of both West Broadway and 3rd Street would occur. However, even with reconfiguration of West Broadway and 3rd Street, access to and from the park would not be impeded during or after construction considering the park's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. The park has also been demolished, therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-14 | Promenade Square Park | 0.35 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 0.35 mile from the Project limits, and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The park is located east of the Project limits along the West Broadway and Magnolia Avenue intersection where reconfiguration of West Broadway would occur. However, even with reconfiguration of West Broadway, access to and from the park would not be impeded during or after construction considering the park's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-15 | East Village Arts Park | 0.31 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 0.31 mile from the Project limits, and the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The park is located east of the Project limits along West Broadway and Magnolia Avenue where reconfiguration of West Broadway would occur. However, even with reconfiguration of West Broadway, access to and from the park would not be impeded during or after construction considering the park's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-16 | Santa Cruz Park | 0 feet<br><br>(adjacent to Project limit) | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. Although the park is within the Project limits, Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The park is within the Project limits west of the Ocean Boulevard and Golden Shore Intersection where modifications to accommodate two-way traffic on Golden Shore and the removal of the grade separation at Golden Shore and West Shoreline Drive would occur. Nearby improvements related to these modification would also include striping, signage, and signal improvements. However, access to and from the park would not be impeded during or after construction. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated. |

**Table 5-1. Section 4(f) Resources with a No Use Determination**

| Resource Number | Property Name | Distance from Project Limits | Official with Jurisdiction | Project Impacts |
|---|---|---|---|---|
| | | | | **Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-17 | Victory Park | 0.49 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 0.49 mile from the Project limits, and Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The park is located east of the Project limits at the Ocean Boulevard and Golden Shore Intersection where modifications to accommodate two-way traffic on Golden Shore and the removal of the grade separation at Golden Shore and West Shoreline Drive would occur. . However, access to and from the park would not be impeded during or after construction considering the park's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-18 | Golden Shore Marine Biological Reserve Park | 150 feet | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 150 feet from the Project limits, and Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The park is located southwest of the Project limits at the Golden Shore bridge where modifications to accommodate two-way traffic on Golden Shore and the removal of the grade separation at Golden Shore and West Shoreline Drive would occur. Nearby Improvements related to these modification would also include striping, signage, and signal improvements. There may be temporary closures to the northern portion of Golden Shore where the bridge will be removed. However, access to and from the park would not be impeded during or after construction and is still available from the southern portion Golden Shore that connects to Aquarium Way. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-19 | Shoreline Aquatic Park | 0.37 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 0.37 mile from the Project limits, and Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The park is located southeast of the Project limits along the Golden Shore bridge where modifications to accommodate two-way traffic on Golden Shore and the removal of the grade separation at Golden Shore and West Shoreline Drive would occur. However, access to and from the park would not be impeded during or after construction considering the park's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-20 | Rainbow Harbor Esplanade | 0.28 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The harbor esplanade is located approximately 0.28 mile from the Project limits, and Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The harbor esplanade is located southeast of the Project limits along the Golden Shore bridge where modifications to accommodate two-way traffic on Golden Shore and the removal of the grade separation at Golden Shore and West Shoreline Drive would occur. However, access to and from the harbor esplanade would not be impeded during or after construction considering the park's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |

**Table 5-1. Section 4(f) Resources with a No Use Determination**

| Resource Number | Property Name | Distance from Project Limits | Official with Jurisdiction | Project Impacts |
|---|---|---|---|---|
| P-21 | Rainbow Lagoon Park | 0.43 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The park is located approximately 0.43 mile from the Project limits, and Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The park is located southeast of the Project limits along the Golden Shore bridge where modifications to accommodate two-way traffic on Golden Shore and the removal of the grade separation at Golden Shore and West Shoreline Drive would occur. However, access to and from the park would not be impeded during or after construction considering the park's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| P-22 | South Shore Boat Launch Ramp | 0.31 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The boat launch ramp is located approximately 0.31 mile from the Project limits, and Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The boat launch ramp is located south of the Project limits along the Golden Shore bridge where modifications to accommodate two-way traffic on Golden Shore and the removal of the grade separation at Golden Shore and West Shoreline Drive would occur. However, access to and from the boat launch ramp would not be impeded during or after construction considering the launch ramp's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| R-1 | California Recreation Center | 0.35 mile | City of Long Beach Department of Parks, Recreation, and Marine | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The recreation center is located approximately 0.35 mile from the Project limits, and Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The recreation center is located northeast of the Project limits at the Anaheim Street and Atlantic Avenue where minor improvements such as striping, signage, and signal improvements would occur. Access to and from the recreation center would not be impeded during or after construction considering the recreation center's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| S-1 | Polytechnic High School | 0.33 mile | Long Beach Unified School District | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The high school is located approximately 0.33 mile from the Project limit, and Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The high school is located northeast of the Project limits at the Anaheim Street and Atlantic Avenue where minor improvements such as striping, signage, and signal improvements would occur. Access to and from the high school would not be impeded during or after construction considering the school's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |

**Table 5-1. Section 4(f) Resources with a No Use Determination**

| Resource Number | Property Name | Distance from Project Limits | Official with Jurisdiction | Project Impacts |
|---|---|---|---|---|
| S-2 | Roosevelt Elementary School | 0.25 mile | Long Beach Unified School District | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The elementary school is located approximately 0.25 mile from the Project limits, and Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The elementary school is located north of the Project limits at the Anaheim Street and Atlantic Avenue where minor improvements such as striping, signage, and signal improvements would occur. Access to and from the elementary school would not be impeded during or after construction considering the school's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| S-3 | George Washington Middle School | 0.18 mile | Long Beach Unified School District | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The middle school is located approximately 0.18 mile from the Project limits, and Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The middle school is located north of the Project limits along Anaheim Street where minor improvements such as striping, signage, and signal improvements would occur. Access to and from the middle school would not be impeded during or after construction considering the school's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| S-4 | Lincoln Elementary School | 0.42 mile | Long Beach Unified School District | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The elementary school is located approximately 0.42 mile from the Project limits, and Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The elementary school is located southeast of the Project limits at the Anaheim Street and Atlantic Avenue where minor improvements such as striping, signage, and signal improvements would occur. Access to and from the elementary school would not be impeded during or after construction considering the school's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| S-5 | Renaissance High School for the Arts | 228 feet<br><br>(adjacent to Project limit) | Long Beach Unified School District | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The high school is located approximately 228 feet from the Project limits, and Project improvements would avoid this resource<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The high school is located just north of the Project limits at the Long Beach Boulevard and 7th Street intersection. Although 7th Street would be realigned, access to and from the high school would not be impeded during or after construction. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| S-6 | Oropeza Elementary School | 0 feet<br><br>(adjacent to Project limits) | Long Beach Unified School District | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. Although the elementary school is adjacent to the Project limits, the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The elementary school is located just north of the Project limits at the Long Beach Boulevard and 7th Street intersection. Although 7th Street would be realigned, access to and from the elementary school would not be impeded during or after construction. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe |

**Table 5-1. Section 4(f) Resources with a No Use Determination**

| Resource Number | Property Name | Distance from Project Limits | Official with Jurisdiction | Project Impacts |
|---|---|---|---|---|
| | | | | adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| S-7 | Edison Elementary School | 0 feet<br><br>(adjacent to Project limits) | Long Beach Unified School District | **Direct:** The Project would relocate the staff parking lot entrance from 7th Street to 6th Street; however, the Project would have no direct impacts on the use or function of the resource that would result in a permanent incorporation of or temporary use of the property.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The elementary school is located adjacent to the Project limits between 7th Street to the north, 6th Street to the south, Golden Avenue to the west, and Daisy Avenue to east. Both 6th Street and 7th street will be realigned. Nearby improvements associated with the realignment of 7th Street and 6th Street include minor improvements such as striping, signage, and signal improvements would occur. These minor improvements would also be applied to the adjacent daisy Avenue and Golden Avenue. There may be temporary closures to these roadways during construction; however these closures would be intermittent and staggered in order to continually provide access to and from the elementary school during or after construction. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| S-8 | Stevenson Elementary School | 0 feet<br><br>(adjacent to Project limits) | Long Beach Unified School District | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. Although the elementary school is adjacent to the Project limits, the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The elementary school is located just east of the Project limits at the 6th Street and Atlantic Avenue intersection. Realignment of 6th Street will occur and nearby improvements associated with the realignment 6th Street include improvements such as striping, signage, and signal improvements would occur. However, access to and from the elementary school would not be impeded during or after construction considering the school's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |
| S-9 | Franklin Classical Middle School | 0.39 mile | Long Beach Unified School District | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. The middle school is located approximately 0.39 mile from the Project limits along Cerritos Avenue, and Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The middle school is located east of the Project limits at the 6th Street and Atlantic Avenue intersection. Access to and from the middle school would not be impeded during or after construction considering the school's distance from the Project improvements. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |

**Table 5-1. Section 4(f) Resources with a No Use Determination**

| Resource Number | Property Name | Distance from Project Limits | Official with Jurisdiction | Project Impacts |
|---|---|---|---|---|
| S-10 | Cesar Chavez Elementary School | 0 feet (adjacent to Project limits) | Long Beach Unified School District | **Direct:** The Project would have no direct impacts on this resource that would result in a permanent incorporation of or temporary use of the property. Although the elementary school is adjacent to the Project limits, the Project improvements would avoid this resource.<br><br>**Indirect:** The Project would not result in proximity impacts that rise to constructive use. The elementary school is located adjacent to the Project limits along 3rd street to the north, Maine Avenue to the east, and West Broadway to the south. Third Street and West Broadway will be realigned in order to accommodate the changes to SB and NB West Shoreline Drive. Nearby improvements associated with the realignments include striping, signage, and signal improvements. There may be temporary closures to these roadways during construction; however these closures would be intermittent and staggered in order to continually provide access to and from the elementary school during or after construction. Additionally, a TMP would be implemented as part of Project construction to minimize impacts on traffic circulation. No severe adverse temporary or permanent indirect impacts from noise and air quality, or to visual resources would be considered adverse in terms of the preservation and use of this resource as a recreational facility, are anticipated.<br><br>**Conclusion:** No direct or indirect impacts that could result in a permanent incorporation, temporary use, or constructive use of this resource have been identified in the technical analysis conducted for the Project. Therefore, no use of this resource would be required to implement the Project, and no further analysis is required. |

Notes:
LARIO=Los Angeles River and Rio Hondo; NB=northbound; SB=southbound; TMP=traffic management plan

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## 5.3 Other Resources and Historic Sites Not Protected Under Section 4(f)

Table 5-2 includes the parks and recreational areas that do not meet the criteria qualifying them for protection under Section 4(f). Therefore, as these properties are not a Section 4(f) property, the provisions of Section 4(f) do not apply.

**Table 5-2. Other Resources Not Protected Under Section 4(f)**

| Resource | Amenities | Why Resource is not Protected under Section 4(f) |
|---|---|---|
| Golden Shore RV Park | The park includes RV spaces, a picnic area, and a pool that are open to the public. | The parcel of land on which the park is located is owned by the City of Long Beach, but a private organization leases the property and owns the RV facility. Because the RV park is a privately owned and operated facility, the park is not protected under the requirements of Section 4(f). |
| Aquarium of the Pacific | The aquarium includes outdoor green areas and a picnic area that is open to the public. | The City of Long Beach provides funding to the aquarium and owns some of the buildings belonging to the aquarium. However, because the aquarium's recreational facilities are owned and operated by a private nonprofit organization, the aquarium is not protected under the requirements of Section 4(f). |
| Willmore Heritage Garden | The garden is a public green space with low water use plantings, drip irrigation, and park benches. | The garden was constructed by a nonprofit organization, the Willmore City Heritage Association, and is maintained solely by this organization. Because garden is owned and operated by a private nonprofit organization, the garden is not protected under the requirements of Section 4(f). |
| PAAL Academy | This school is an Upper Division Academy of Long Beach Polytechnic High School. | The school is owned and operated by the Long Beach Unified School District. However, the school does not appear to include recreational facilities. Therefore, the school is not protected under the requirements of Section 4(f). |
| Neighborhood Resource Center | The resource center offers access to office equipment, resource library materials, information services, and materials for neighborhood projects and events. | The resource center is owned and operated by the City of Long Beach. However, the center does not appear to include recreational facilities. Therefore, the center is not protected under the requirements of Section 4(f). |
| Long Beach Senior Center | The center includes an auditorium, meeting rooms, a ballroom, and dining facilities. | The center is owned and operated by the City of Long Beach. However, there do not appear to be recreational facilities at this center. Therefore, the center is not protected under the requirements of Section 4(f). |

Notes:
RV=recreational vehicle

Table 5-3 includes the historic sites that do not meet the criteria qualifying them for protection under Section 4(f). Therefore, as these properties are not a Section 4(f) property, the provisions of Section 4(f) do not apply.

**Table 5-3. Historic Sites Not Protected Under Section 4(f)**

| Resource | Description | Year Built | Why Resource is not Protected under Section 4(f) |
|---|---|---|---|
| 620 San Francisco Avenue | One-story industrial warehouse | 1950 | This resource was evaluated and determined not eligible for listing in the NRHP. |
| 621 Golden Avenue | One-story industrial warehouse | 1956 | This resource was evaluated and determined not eligible for listing in the NRHP. |
| 400 Oceangate | 14-story office building | 1975 | This resource was evaluated and determined not eligible for listing in the NRHP. |
| SCE Seabright Substation | Electrical substation near the Long Beach Freeway at West 5th Street | 1950-1951 | This resource was evaluated and determined not eligible for listing in the NRHP. |
| Bridge #53C0932 | LA RIV, UP, HARBOR SCENIC (Shoemaker Bridge) | 1959 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53C0018 | LA RIV/DEFOREST AVE | 1952 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53C0817 | GOLDEN SHORE BLVD | 1970 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53C0931 | 710 FWY/HARBOR SCENIC DRIVE/10TH ST/ FASHION AVE | 1957 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53C0930 | 10TH ST RAMP/10TH ST/HARBOR SCENIC DRIVE | 1960 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53C0885 | LONG BEACH FREEWAY | 1954 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53C0933 | RTD PARKING LOT UC | 1956 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53C0934 | SAN FRANCISCO AND GOLDEN | 1956 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53C0640 | MAINE AVENUE POC | 1958 | This resource was previously determined not eligible for listing in the NRHP. |

**Table 5-3. Historic Sites Not Protected Under Section 4(f)**

| Resource | Description | Year Built | Why Resource is not Protected under Section 4(f) |
|---|---|---|---|
| Bridge #53C0658 | MAINE AVE POC | 1958 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53C0832 | BROADWAY OC | 1958 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53C0903 | 7TH STREET WESTBOUND ON RAMP UC | 1961 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53C1806 | SEASIDE WAY | 1983 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53C0892L | SHORELINE DRIVE AND SEASIDE P | 1967 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53 2785S | PICO AVENUE ON-RAMP OVERHEAD | 1994 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53 2786K | PICO AVENUE OFF-RAMP OVERHEAD | 1994 | This resource was previously determined not eligible for listing in the NRHP. |
| Bridge #53 2934 | HARBOR SCENIC DRIVE OVERHEAD | 1970 | This resource was previously determined not eligible for listing in the NRHP. |

Source: GPA Consulting 2018
Notes:
NRHP=National Register of Historic Places

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# 6 References

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# Attachment 1:
# Concurrence Letters

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State of California • Natural Resources Agency Gavin Newsom, *Governor*

**DEPARTMENT OF PARKS AND RECREATION** Lisa Ann L. Mangat, *Director*
**OFFICE OF HISTORIC PRESERVATION**

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

July 3, 2019

VIA EMAIL

In reply refer to: FHWA_2019_0620_001
CATRA_2019_0620_001

Ms. Kelly Ewing-Toledo
Heritage Resource Coordinator
Caltrans District 7, Division of Environmental Planning
100 S Main Street, Suite 100, MS 16A
Los Angeles, CA 90012

Subject: Determinations of Eligibility for the Proposed Shoemaker Bridge Replacement Project, Long Beach, Los Angeles County, CA

Dear Ms. Ewing-Toledo:

Caltrans is initiating consultation regarding the above project in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA). Caltrans is also consulting in accordance with the Public Resources Code 5024 and pursuant to the *Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code 5024 and Governor's Executive Order W-26-92* (5024 MOU). As part of your documentation, Caltrans submitted a Historic Property Survey Report (HPSR), a Historical Resources Evaluation Report (HRER), and an Archaeological Survey Report for the proposed project.

The City of Long Beach, in cooperation with Caltrans, proposes to replace the existing Shoemaker Bridge (Bridge No. 53C0932) along with several associated improvements. A complete project description and area of potential effect boundaries are located on pages 1-3 of the HPSR.

Pursuant to Stipulation VIII.C.6 of the PA and Stipulation VIII.C.6 of the MOU, Caltrans determined that the following properties are not eligible for the National Register of Historic Places (NRHP):

- 620 San Francisco Avenue, Long Beach, CA

- 621 Golden Avenue, Long Beach, CA
- 400 Oceangate, Long Beach, CA
- SCE Seabright Substation, Long Beach, CA

In accordance with Stipulation VIII.C.4 for the PA and Stipulation VIII.C.4 of the MOU, Caltrans is assuming that the Los Angeles River Flood Channel is eligible for the NRHP for the purposes of this project. It is outside of the scope of this project for Caltrans to evaluate the entirety of this resource.

Based on review of the submitted documentation, I concur with the above determinations.

If you have any questions, please contact Natalie Lindquist at (916) 445-7014 with e-mail at natalie.lindquist@parks.ca.gov or Alicia Perez at (916) 445-7020 with e-mail at alicia.perez@parks.ca.gov .

Sincerely,

Julianne Polanco
State Historic Preservation Officer

# CITY OF LONG BEACH

DEPARTMENT OF PARKS, RECREATION & MARINE

2760 N. Studebaker Road, Long Beach, CA 90815-1697
(562) 570-3100 • FAX (562) 570-3109
www.LBParks.org


December 17, 2019

Mr. Ronald Kosinski
Deputy District Director
California Department of Transportation
District 7, Division of Environmental Planning
100 South Main Street, Mail Stop 16A
Los Angeles, CA 90012

Subject: Shoemaker Bridge Replacement Project Request of Written Concurrence, Los Angeles County, California

Dear Mr. Kosinski:

On December 3, 2019, the State of California Department of Transportation (Caltrans) submitted a letter to the City of Long Beach Department of Parks, Recreation and Marine (Department) requesting temporary and permanent construction easements to Cesar E. Chavez Park and the Long Beach Municipal Stormwater Treatment Facility (LB MUST) under Section 4(f) of the USDOT Act of 1966, accompanied with implementation of mitigation measures intended to make a *de minimis* determination for the permanent use of Cesar E. Chavez Park and the Long Beach Municipal Stormwater Treatment Facility (LB MUST) Project. This letter is included as Attachment A.

Department staff have reviewed the request for written concurrence. The Department has determined that applying the *de minimis* finding for temporary and permanent uses (23 CFR 774.13(d)) is appropriate. As the official with jurisdiction over this Section 4(f) property, I hereby confirm that I have been informed of Caltrans' intent to apply a *de* minimis finding for temporary use and permanent incorporation of LB MUST and Cesar E. Chavez Park. My signature below, represents written concurrence that all of the conditions for a *de minimis* finding are met and that the Shoemaker Bridge Replacement Project would not adversely affect the activities, features and attributes that qualify LB MUST and Cesar E Chavez Park for protection under Section 4(f). The signature is conditions upon the Section 4(f) impacts and avoidance/minimization measures as included in the Section 4(f) Analysis.

# CITY OF LONG BEACH

DEPARTMENT OF PARKS, RECREATION & MARINE

2760 N. Studebaker Road, Long Beach, CA 90815-1697
(562) 570-3100 • FAX (562) 570-3109
www.LBParks.org


If there are questions about the comments the Department has provided herein, please contact Meredith Reynolds, Park Planning and Partnerships Manager at meredith.reynolds@longbeach.gov or 562.570.3165.

Thank you,

GERARDO MOUET, DIRECTOR
LONG BEACH DEPARTMENT OF PARKS, RECREATION AND MARINE

ATTACHMENTS:
A. State of California Department of Transportation Letter (December 3, 2019)

CC:
Jason Roach (Jason.Roach@dot.ca.gov)
Ron Kosinski, Caltrans Deputy District Director
Kevin Jackson, Long Beach Deputy City Manager
Craig Beck, Long Beach Director of Public Works
Alvin Papa, Long Beach City Engineer
Stephen Scott, Long Beach Deputy Director of Parks, Recreation and Marine

COUNTY OF LOS ANGELES
DEPARTMENT OF PARKS AND RECREATION
*"Parks Make Life Better!"*
John Wicker, Director
Norma E. Garcia, Chief Deputy Director

December 18, 2019

Sent via email: ron_kosinski@dot.ca.gov

Mr. Ronald J. Kosinski
Deputy District Director
California Department of Transportation
Division of Environmental Planning, Caltrans District 7
100 S. Main Street, MS 16-A
Los Angeles, CA 90012

Dear Mr. Kosinski:

**SHOEMAKER BRIDGE REPLACEMENT PROJECT**
**SECTION 4(F)/6(F) CONSULTATION**

The Los Angeles County Department of Parks and Recreation (DPR) appreciates the opportunity to be consulted as part of the Section 4(f) concurrence process for the Shoemaker Bridge Replacement Project. DPR has determined that the Project would not impact the County's Los Angeles River Multi-Use Trail which terminates outside of the Project area to the north near West Willow Street in the City of Long Beach.

If you have any questions, please contact Clement Lau of my staff at (626) 588-5301 or clau@parks.lacounty.gov.

Sincerely,

Alina Bokde
Deputy Director

AB:CL:cl

c: Caltrans (J. Roach)
Parks and Recreation (C. Lau, M. O'Connor, N. Krakowiak)

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# COUNTY OF LOS ANGELES

## DEPARTMENT OF PUBLIC WORKS

*"To Enrich Lives Through Effective and Caring Service"*

MARK PESTRELLA, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460


IN REPLY PLEASE
REFER TO FILE: TPP-1

March 25, 2020

Mr. Ronald Kosinski, Deputy District Director
Division of Environmental Planning
California Department of Transportation
District 7 – Los Angeles and Ventura Counties
100 South Main Street, Mail Stop 16-A
Los Angeles, CA 90012

Attention Mr. Jason Roach

Dear Mr. Kosinski:

**SHOEMAKER BRIDGE REPLACEMENT PROJECT**
**SECTION 4(F) RESOURCES CONCURRENCE**

Los Angeles County Flood Control District and Los Angeles County Public Works appreciates the opportunity to participate in the Section 4(f) concurrence process as requested in your letter dated December 3, 2019, for the Shoemaker Bridge Replacement project. The District and Public Works has no comments and concurs with the Caltrans de minimis finding for the project.

Caltrans has determined that applying the de minimis finding for temporary and permanent uses (23 CFR 774.13(d)) is appropriate and would be maintained with regards to potential impacts on the activities, features, and attributes that qualify the Los Angeles River and Rio Hondo (LARIO) Trail for protection under Section 4(f).

As the official with jurisdiction over this Section 4(f) property, I hereby confirm that the District and Public Works have been informed of Caltrans' intent to apply a de minimis finding for temporary use and permanent incorporation of the LARIO Trail. My signature on page 2, represents written concurrence that all conditions for a de minimis finding are met and that the Shoemaker Bridge Replacement project would not adversely affect the activities, features, and attributes that qualify the LARIO Trail for protection under Section 4(f). The signature is conditioned upon the Section 4(f) impacts and avoidance and minimization measures as included in Section 4(f) analysis.

STATE & RR

If you have any questions, please contact Mr. Mario Rodriguez, Transportation Planning and Programs Division, at (626) 458-3950 or mrodrigu@pw.lacounty.gov.

Very truly yours,

MARK PESTRELLA,
Director of Public Works

DAVID B. MACGREGOR
Deputy Director

MT:pr
C200272
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bc: Land Development (Duong)
Stormwater Planning (Thang)
Transportation Planning and Programs (Suska)

# Appendix B. Title VI Policy Statement

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STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

**DEPARTMENT OF TRANSPORTATION**
OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-6130
FAX (916) 653-5776
TTY 711
www.dot.ca.gov

*Making Conservation a California Way of Life.*

November 2019

**NON-DISCRIMINATION POLICY STATEMENT**

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures "*No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.*"

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page: https://dot.ca.gov/programs/business-and-economic-opportunity/title-vi.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Toks Omishakin
Director

*"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"*

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# Appendix C. Glossary of Terms

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| Term | Note |
|---|---|
| **A** | |
| 100-year floodplain | The area within a floodplain that statistically has a 1% chance of flooding in any given year. |
| A-Weighted Decibel Sound Level (dBA) | The sound level measured on an instrument containing an A filter, which electronically simulates the frequency response of the human ear under an average intensity of sound. |
| Acquisition | The process of obtaining right-of-way. |
| Action | A National Environmental Policy Act (NEPA) term; construction or reconstruction, including associated activities of a transportation facility. An action may be categorized as a "categorical exclusion" or a "major federal action." |
| Active Fault | A fault that has moved within late-Quaternary time (the last 750,000 years). Note that this definition is broader than that used by the California Department of Conservation, California Geological Survey (CGS), which defines an active fault as one that has moved within Holocene time (the last 11,000 years). |
| Adverse | A term used to describe unfavorable, harmful, or detrimental changes in environmental conditions. |
| Aerially deposited lead (ADL) | Lead deposited within unpaved areas or formerly unpaved areas, primarily due to vehicle emissions. Aerially deposited lead is typically found within the top 0.6 meters (2 feet) of material in unpaved areas within the highway right-of-way. |
| Air Contaminant | Any particulate matter, gas, or combination thereof, other than water vapor. |
| Air Pollutant | Any substance in air that could, in a high enough concentration, harm humans, other animals, vegetation, or material. Pollutants may include almost any natural or artificial composition of airborne matter capable of being airborne. They may be in the form of solid particles, liquid droplets, gases, or in combination thereof. Generally, they fall into two main groups: (1) those emitted directly from identifiable sources, and (2) those produced in the air by interaction between two or more primary pollutants, or by reaction with normal atmospheric constituents, with or without photoactivation. Exclusive of pollen, fog, and dust, which are of natural origin, approximately 100 contaminants have been identified. Air pollutants are often grouped in categories for ease in classification; some of the categories are: solids, sulfur compounds, volatile organic chemicals, particulate matter, nitrogen compounds, oxygen compounds, halogen compounds, radioactive compound, and odors. |
| Air Quality Management District (AQMD) | A regional agency that adopts and enforces rules to achieve and maintain state and federal air quality standards. |
| Alluvium | Sediment deposited by flowing water, as in a riverbed, flood plain, or delta. |

| Term | Note |
|---|---|
| Alquist-Priolo Zones | Active fault zones, identified pursuant to the Alquist-Priolo Earthquake Fault Zone Act. This Act is intended to prevent the construction of new buildings for human occupancy over active faults. It requires identification of active fault zones and regulation of development within these zones. General Plan Safety Elements typically incorporate the Act's requirements. The Act does not apply to publicly owned facilities, critical facilities and lifelines, or industrial facilities. |
| Alternatives | Solutions to the project's need. A "reasonable range" of alternatives must be considered as part of the Shoemaker Bridge Reconstruction Project Draft Initial Study/Environmental Assessment (IS/EA) process. One of those alternatives must be a "no project" or No Build Alternative. |
| Ambient Noise | The all-encompassing noise associated with a given environment, being usually a composite of sounds from many sources near and far. |
| Americans With Disabilities Act (ADA) | Federal civil rights legislation for disabled persons passed in 1990; calls on public transit systems to make their services more fully accessible as well as to underwrite a parallel network of paratransit service. |
| Annual Average Daily Traffic (AADT) | The average 24-hour volume, being the total number during a stated period divided by the number of days in that period. Unless otherwise stated, the period is a year. The term is commonly abbreviated as ADT or AADT. |
| ARB - California Air Resources Board | Part of the California Environmental Protection Agency, the California Air Resources Board is charged with promoting and protecting public health, welfare, and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering the effects on the economy of the state. |
| Archaeological Survey Report (ASR) | Caltrans uses the Archaeological Survey Report (ASR) to present results of identification efforts conducted for a project. The ASR is an attachment to the Historic Property Survey Report (HPSR). |
| Area of Potential Effect (APE) | A term used in Section 106 to describe the area in which historic resources may be affected by a federal undertaking. This term should only be used in cultural resource reports; "survey area" or "project footprint" should be used as applicable in other reports. |
| Arterial Street | A major thoroughfare, used primarily for through traffic rather than for access to adjacent land, that is characterized by high vehicular capacity and continuity of movement. |
| Asbestos | An incombustible mineral fiber used for fireproofing, electrical insulation, building materials, brake linings, and chemical filters. The fibers can pollute air or water and are a human health concern. |
| Attainment area | An area considered to have air quality as good as or better than the national ambient air quality standards as defined in the Clean Air Act. An area may be an attainment area for one pollutant and a nonattainment area for others. |
| Attenuation | The reduction of noise. |

| Term | Note |
|---|---|
| Average Daily Traffic (ADT) | The average traffic volume of 24-hour counts collected over a number of days greater than one but less than a year |
| **B** | |
| Best Management Practices (BMP) | Methods or measures designed and selected to reduce or eliminate the discharge of pollutants from nonpoint source discharges. In water quality, BMPs include treatment requirements and operating procedures and practices to control site runoff, spills or leaks, sludge or waste disposal, or drainage from raw material storage. |
| Basin Plan | A specific plan for control of water quality within one of the nine hydrologic basins of the State under the regulation of a Water Quality Control Board. |
| Biofiltration swales/strips | Biofiltration strips are vegetated land areas over which stormwater flows as sheet flow. Biofiltration swales are vegetated channels, typically configured as trapezoidal or v-shaped channels that receive and convey stormwater flows while meeting water quality criteria and other flow criteria. |
| Buildout | The maximum amount of building that can take place within a certain area, typically over a given period of time. |
| **C** | |
| California Department of Fish and Game (CDFG) | A public agency within the Resources Agency of the State of California. This agency is responsible for managing California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. CDFG also is responsible for the administration of the provisions of the State Endangered Species Act and for operating the California Natural Diversity Database. |
| California Department of Transportation (Caltrans) | Owner and operator of the SR-710, and Lead Agency under NEPA for the Shoemaker Bridge Replacement Project Draft Initial Study/Environmental Assessment (IS/EA). |
| California Environmental Quality Act (CEQA) | State legislation enacted in 1970 and subsequently amended. It protects the environment for the people of California through requiring public agencies and decision makers to consider and document the environmental consequences of actions. |
| CEQA Guidelines | Regulations adopted by the State of California to implement California Environmental Quality Act (CEQA). |
| California Native·Plant Society (CNPS) | The California Native Plant Society is a statewide nonprofit organization dedicated to increasing understanding of California's native plants and to preserve them in their natural habitats through scientific activities, education, and conservation. The Society works primarily through its local chapters. |

| Term | Note |
|---|---|
| California Natural Diversity Database (CNDDB) | The California Natural Diversity Database is part of the Wildlife and Habitat Data Analysis Branch, Habitat Conservation Division, California Department of Fish and Game. It is a statewide inventory of the locations and conditions of the state's rarest species and natural communities. Data in the CNDDB are stored in geographic information system (GIS) format and can be retrieved as reports, maps, or overlays. |
| California Public Utility Commission (CPUC) | Regulates privately owned telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. The CPUC is responsible for ensuring that California utility customers have safe, reliable utility service at reasonable rates, protecting utility customers from fraud; and promoting the health of California's economy. |
| California Register of Historical Resources (California Register) | The California Register is the authoritative guide to the state's significant historical and archeological resources. |
| California Transportation Commission (CTC) | A State commission established by Assembly Bill 402 {AB 402) with nine appointed members and two ex-officio members, responsible for the programming and allocating of funds for the construction of highway, passenger rail, and transit improvements throughout California. The CTC also provides guidance and recommendations on transportation policies. |
| California Transportation Plan (CTP) | The state's long-range transportation plan, with a minimum 20-year forecast period, for all areas of the state that provides for the development and implementation of California's intermodal transportation system. (Title 23 United States Code, Section 135). Per California statute, the CTP may not be project-specific. |
| Capital Improvement Program (CIP) | A program of projects to maintain or improve the level of service and performance standards and to mitigate transportation impacts (e.g., in a Congestion Management Program, a transit plan, an Aviation Systems Plan). |
| Clean Air Act (CAA) | Federal legislation that sets national air quality standards; requires each state with areas that have not met federal air quality standards to prepare a State Implementation Plan (SIP). The sweeping 1990 amendments to the CAA, sometimes referred to as CAAA, established new air quality requirements for the development of metropolitan transportation plans and programs. |
| Clean Air Act Amendments of 1990 (CAAA) | The comprehensive federal legislation that establishes criteria for attaining and maintaining the federal standards for allowable concentrations and exposure limits for various air pollutants; the act also provides emission standards for specific vehicles and fuels. |
| Clean Water Act | Legislation that provides statutory authority for the National Pollutant Discharge Elimination System (NPDES) program; Public law 92-500; 33 U.S.C. 1251 et seq. Also known as the Federal Water Pollution Control Act. |

| Term | Note |
|---|---|
| Community Noise Equivalent Level (CNEL) | The CNEL represents the average continuous noise level over a 24-hour period, with special weighting factors applied to noise events occurring in the nighttime (10:00 p.m. to 7:00a.m.), the evening (7:00p.m. to 10:00 p.m.), and the daytime (7:00a.m. to 7:00p.m.). |
| Conformity | The ongoing process that ensures the planning for highway and transit systems, as a whole and over the long term, is consistent with the state air quality plans for attaining and maintaining health-based air quality standards; conformity is determined by metropolitan planning organizations (MPOs) and the U.S. Department of Transportation (U.S. DOT) and is based on whether transportation plans and programs meet the provisions of a State Implementation Plan (SIP). |
| Congestion | Defined by Caltrans as highway operating speeds reduced to less than 35 miles per hour for longer than 15 minutes. |
| Criteria Pollutants | Criteria pollutants include ozone, carbon monoxide, nitrogen dioxide, inhalable particulates (particulate matter less than 10 microns), and lead, as defined by the California Air Resources Board. |
| cubic foot per second | A rate of flow equal to approximately 7.5 gallons. |
| Cumulative effects | Project effects that are related to other actions with individually insignificant but cumulatively significant impacts. |
| **E** | |
| Environmental Justice (EJ) | Federal Executive Order 12898 requiring analysis of the impact of a facility or project on disadvantaged populations (i.e., low-income, minority) |
| **F** | |
| Federal Highway Administration (FHWA) | Federal Highway Administration is the federal lead agency that has delegated its National Environmental Quality Act (NEPA) responsibility to Caltrans. |
| **G** | |
| Greenhouse Gas (GHG) | Green house gases can be naturally occurring or man-made. Greenhouse gases include, but are not limited to, the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafloride. |
| **I** | |
| Impacts | Reasonably predictable changes in the environment resulting from a proposed project. Impacts can be adverse or beneficial, and can be classified as direct, indirect, or cumulative. |

| Term | Note |
|---|---|
| Initial Study/Environmental Assessment (IS/EA) | An assessment of a proposed project's environmental impacts and recommended methods for avoiding or mitigating any significant adverse impacts. A Draft IS/EA is circulated for public review and comment. A Final IS/EA includes responses to public and agency comments and revisions to the Draft IS/EA. |
| **L** | |
| Lead Agency | The public agency responsible for completing California Environmental Quality Act/National Environmental Policy Act (CEQA/NEPA) documentation. For the Shoemaker Bridge Replacement Project, Caltrans is the Lead Agency. |
| **M** | |
| Mitigation Measure | Action that avoids, minimizes, or compensates for the significant impacts of a project. |
| Mitigation Monitoring and Reporting Program (MMRP) | A plan for ensuring that measures to mitigate adverse project impacts are implemented. The plan is a documentation of the commitments made by the Lead Agency to avoid, minimize, and mitigate project impacts and is used as a tool to track their implementation. For the Shoemaker Bridge Reconstruction Project Draft Initial Study/Environmental Assessment (IS/EA) a Mitigation Monitoring and Reporting Program (MMRP) has been provided in Appendix F. |
| **N** | |
| National Environmental Policy Act (NEPA) | Established in 1969, NEPA is the basic national charter for protecting the environment. NEPA requires federal projects to disclose potential environmental impacts and to evaluate alternatives and mitigations in the Shoemaker Bridge Replacement Project Draft Initial Study/Environmental Assessment (IS/EA). |
| Notice of Availability (NOA) | An announcement of the release of the Draft Initial Study/Environmental Assessment (IS/EA) Report/Environmental Impact Statement (EIRIEIS) that makes the documents available to the public. |
| Notice of Determination (NOD) | After approving the Final EIR, the Lead Agency files an NOD with the State Clearinghouse to document approval of the project. Posting of the NOD commences a 30-day statute of limitations. During this time, someone can file a court action challenging the approval of the project. |
| **P** | |
| Purpose and Need Statement | The section of the Draft Initial Study/Environmental Assessment (IS/EA) dedicated to defining the problems to be solved (need) and what the project will accomplish (purpose). |

| Term | Note |
|---|---|
| **R** | |
| Record of Decision (ROD) | Public notification about which alternative the federal Lead Agency has selected and why. The ROD must be published no less than 30 days after the Notice of Availability (NOA) of the Environmental Document. |
| **S** | |
| Southern California Association of Governments (SCAG) | Southern California Association of Governments is a federally designated Metropolitan Planning Organization for the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura and is a Project partner agency. |
| State Clearinghouse Review | The Draft Initial Study/Environmental Assessment (IS/EA) is published in the State Clearinghouse Review for public review and comment. |
| **T** | |
| Technical Studies | A detailed study examining a specific environmental category (i.e., air quality, noise). |
| Trustee Agency | State agency that has jurisdiction, by law, over natural resources affected by a project (i.e. State lands Commission, California Department of Parks and Recreation). |

Sources: U.S. EPA n.d.

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# Appendix D. Mitigation, Monitoring, and Reporting Program / Environmental Commitment Record

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| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| ***Land Use*** | | | | | |
| LU-1 | During construction, the City of Long Beach's (City) Resident Engineer will require the construction contractor to maintain vehicular and pedestrian access to businesses within the construction area throughout the construction period. If existing access points are disrupted, alternative access will be provided. Appropriate signage and temporary sidewalks will be provided, as needed, throughout construction, and the construction contractor will provide and maintain appropriate signage to direct both pedestrian and vehicular traffic to businesses via alternate routes. Disabled access will also be maintained during construction. | City of Long Beach Resident Engineer | Construction | | |
| LU-2 | During the Plans, Specification, and Estimates (PS&E) phase and prior to construction, the City of Long Beach (City) will obtain a Coastal Development Permit (CDP) through the local coastal program (LCP) under the purview by the City and the Port of Long Beach (POLB). The City will also obtain a Harbor Development Permit (HDP) through the POLB. | City of Long Beach | During Plans, Specification, and Estimates (PS&E) phase | | |
| LU-3 | Prior to and during construction, the City of Long Beach (City) will obtain a permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters to Coastal Watershed of Los Angeles and Ventura Counties (Order Number [No.] R4-2013-0095 National Pollutant Discharge Elimination System [NPDES] No. CAG994004) and any subsequent updates to the permit at the time of construction. | City of Long Beach | Prior to and during Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| PR-1 | If Alternatives 2 or 3 (Design Options A and B) are selected, the City of Long Beach (City) will continue to identify and incorporate design refinements to avoid or minimize the permanent incorporation of land from Cesar E. Chavez Park in the final design. | City of Long Beach | During Final Design | | |
| PR-2 | During final design, the City of Long Beach (City) will define the final boundaries of Cesar E. Chavez Park as the basis for the transfer of land from the public street right of way (ROW) for Shoreline Drive through Cesar E. Chavez Park (currently owned by the City) to within the boundary of the park. This will be an internal transfer within the City, as the City currently owns the land for both Shoreline Drive and Cesar E. Chavez Park.<br><br>After the City has identified the new boundaries of Cesar E. Chavez Park, including the consolidation of the six discontinuous parcels into three larger parcels, California Department of Transportation (Caltrans) will coordinate with the City to:<br><br>• Identify park improvements for the new areas added to the park, including removal of pavement and other materials from Shoreline Drive, the landscaping of those areas, and the provision of sidewalks and bicycle paths, as appropriate, connecting the consolidated parcels.<br><br>• Develop a plan for public access to the northwest portion of the park for passive activities, such as wildlife viewing and walking. | City of Long Beach | During Final Design | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| PR-3 | During construction, the City of Long Beach (City) will require the construction contractor to maintain vehicular and pedestrian access to recreational areas within the construction area throughout the construction period. If existing access points are disrupted, alternative access will be provided. Appropriate signage and temporary sidewalks will be provided, as needed, throughout construction, and the construction contractor will provide and maintain appropriate signage to direct both pedestrian and vehicular traffic to recreational areas via alternate routes. Disabled access will also be maintained during construction. | City of Long Beach | Construction | | |
| PR-4 | The City of Long Beach (City) will require the construction contractor to identify all proposed closures of areas within Cesar E. Chavez Park, including streets, no less than 90 days prior to when each closure would begin. | City of Long Beach | Pre-Construction and Construction | | |
| PR-5 | No less than 90 days prior to when a closure would begin, the City of Long Beach (City) will require the construction contractor to provide the following to the City Parks, Recreation and Marine Department and the Long Beach Unified School District (LBUSD):<br>• A map of each proposed closure, clearly showing each park area proposed to be closed temporarily, including identification of any street closures<br>• A plan for providing signing and notifications through other public information outlets to inform the public and recreational visitors of upcoming closures of areas within the park<br>• Estimation of the duration of each closure | City of Long Beach | Pre-Construction and Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| | • Identification of alternative vehicle and trail routes to/through and/or around the park, as appropriate<br>• Identification of park features that would be unavailable to the public during the closure | | | | |
| PR-6 | The City of Long Beach (City) will provide written approval of each proposed closure to the construction contractor no less than 45 days prior to when the closure would begin. | City of Long Beach | Pre-Construction and Construction | | |
| PR-7 | The City of Long Beach (City) will require the construction contractor to provide an information telephone number that park visitors can use to contact the contractor for more information regarding individual closures. The contractor may also provide an information website. The contact number and website information are to be provided at the construction site, at/around each closed area, and on information signs discussing the individual closures. The construction contractor will also be required to provide this information to the City Parks, Recreation and Marine Department and the Long Beach Unified School District (LBUSD). | City of Long Beach | Pre-Construction and Construction | | |
| PR-8 | The City of Long Beach (City) will require the construction contractor to return areas of the park closed temporarily during construction to their original, or better, conditions after completion of construction, and those temporarily closed areas will be respectively returned to the City Parks, Recreation and Marine Department and the Long Beach Unified School District (LBUSD). | City of Long Beach | Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| PR-9 | At the completion of construction in the temporary occupancy areas at Cesar E. Chavez Park, the City of Long Beach (City) will require the construction contractor to return the areas to a condition as good as, or better than, prior to its use for the temporary occupancy. The required improvements for the rehabilitation of those areas will be determined in consultation among the City Parks, Recreation and Marine Department, the Long Beach Unified School District (LBUSD), and the construction contractor. | City of Long Beach | Post-Construction | | |
| PR-10 | For temporary construction easements (TCE) currently vegetated in native and mixed native/nonnative plant materials, those land areas will be revegetated at the completion of construction and returned to the original property owners. The City of Long Beach (City) will develop the vegetation plans in consultation with the property owners to ensure the compatibility of the new vegetation with the existing vegetation in the vicinity of those for the affected properties. | City of Long Beach | Prior to Completion of Construction | | |
| PR-11 | If Alternative 2 or 3 (Design Options A and B) is selected, the City of Long Beach (City) will continue to identify and incorporate design refinements to avoid or minimize the temporary occupancy of land from the Los Angeles and Rio Hondo (LARIO) Trail in the final design. | City of Long Beach | Prior to Final Design | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| PR-12 | During construction, the City of Long Beach (City) will require the construction contractor to maintain vehicular and pedestrian access to recreational areas within the construction area throughout the construction period. If existing access points are disrupted, alternative access will be provided. Appropriate signage and temporary sidewalks will be provided, as needed, throughout construction, and the construction contractor will provide and maintain appropriate signage to direct both pedestrian and vehicular traffic to recreational areas via alternate routes. Disabled access will also be maintained during construction. | City of Long Beach Resident Engineer or Designated Contractor | Construction | | |
| PR-13 | The City of Long Beach (City) will require the construction contractor to identify all proposed closures of areas within the Los Angeles and Rio Hondo (LARIO) Trail, including streets, no less than 90 days prior to when each closure would begin. | City of Long Beach Resident Engineer or Designated Contractor | Pre-Construction and Construction | | |
| PR-14 | No less than 90 days prior to when a closure would begin, the City of Long Beach (City) will require the construction contractor to provide the following to the Los Angeles County Public Works Department and the Los Angeles County Parks and Recreation Department:<br>• A map of each proposed closure, clearly showing each recreational area proposed to be closed temporarily, including identification of any street closures<br>• A plan for providing signing and notifications through other public information outlets to inform the public and recreational visitors of upcoming closures of areas within the recreational area | City of Long Beach Resident Engineer or Designated Contractor | Pre-Construction and Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| | • Estimation of the duration of each closure<br>• Identification of alternative vehicle and trail routes to/through and/or around the recreational area, as appropriate<br>• Identification of recreational features that would be unavailable to the public during the closure | | | | |
| PR-15 | The County of Los Angeles (County) will provide written approval of each proposed closure to the construction contractor no less than 45 days prior to when the closure would begin. | County of Los Angeles | Pre-Construction and Construction | | |
| PR-16 | The City of Long Beach (City) will require the construction contractor to provide an information telephone number that recreational visitors can use to contact the contractor for more information regarding individual closures. The contractor may also provide an information website. The contact number and website information are to be provided at the construction site, at/around each closed area, and on information signs discussing the individual closures. The construction contractor will also be required to provide this information to the Los Angeles County Public Works Department and the Los Angeles County Parks and Recreation Department. | City of Long Beach Designated Contractor | Pre-Construction and Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| PR-17 | The City of Long Beach (City) will require the construction contractor to return areas of the recreational area closed temporarily during construction to their original, or better, conditions after completion of construction, and those temporarily closed areas will be respectively returned to the Los Angeles County Public Works Department and the Los Angeles County Parks and Recreation Department. | City of Long Beach Designated Contractor | Construction | | |
| PR-18 | At the completion of construction in the temporary occupancy areas at the Los Angeles and Rio Hondo (LARIO) Trail, the City of Long Beach (City) will require the construction contractor to return the areas to a condition as good as, or better than, prior to its use for the temporary occupancy. The required improvements for the rehabilitation of those areas will be determined in consultation among the Los Angeles County Public Works Department, the Los Angeles County Parks and Recreation Department, and the construction contractor. | City of Long Beach Designated Contractor | Post-Construction | | |
| PR-19 | For temporary construction easements (TCE) currently vegetated in native and mixed native/nonnative plant materials, those land areas will be revegetated at the completion of construction and returned to the original property owners. The City of Long Beach (City) will develop the vegetation plans in consultation with the property owners to ensure the compatibility of the new vegetation with the existing vegetation in the vicinity of those for the affected properties. | City of Long Beach | Post-Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| PR-20 | If Alternative 2 or 3 (Design Options A and B) is selected, the City of Long Beach (City) will continue to identify and incorporate design refinements to avoid or minimize the temporary occupancy of land from the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility in the final design. | City of Long Beach | Final Design | | |
| PR-21 | During construction, the City of Long Beach (City) will require the construction contractor to maintain vehicular and pedestrian access to recreational areas within the construction area throughout the construction period. If existing access points are disrupted, alternative access will be provided. Appropriate signage and temporary sidewalks will be provided, as needed, throughout construction, and the construction contractor will provide and maintain appropriate signage to direct both pedestrian and vehicular traffic to recreational areas via alternate routes. Disabled access will also be maintained during construction. | City of Long Beach Designated Contractor | Construction | | |
| PR-22 | The City of Long Beach (City) will require the construction contractor to identify all proposed closures of areas within the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility, including streets, no less than 90 days prior to when each closure would begin. | City of Long Beach Designated Contractor | Pre-Construction and Construction | | |
| PR-23 | No less than 90 days prior to when a closure would begin, the City of Long Beach (City) will require the construction contractor to provide the following to the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility: | City of Long Beach Designated Contractor | Pre-Construction and Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| | • A map of each proposed closure, clearly showing each recreational area proposed to be closed temporarily, including identification of any street closures<br>• A plan for providing signing and notifications through other public information outlets to inform the public and recreational visitors of upcoming closures of areas within the recreational area<br>• Estimation of the duration of each closure<br>• Identification of alternative vehicle and trail routes to/through and/or around the recreational area, as appropriate<br>• Identification of recreational features that would be unavailable to the public during the closure | | | | |
| PR-24 | The Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility will provide written approval of each proposed closure to the construction contractor no less than 45 days prior to when the closure would begin. | City of Long Beach | Pre-Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| PR-25 | The City of Long Beach (City) will require the construction contractor to provide an information telephone number that recreational visitors can use to contact the contractor for more information regarding individual closures. The contractor may also provide an information website. The contact number and website information are to be provided at the construction site, at/around each closed area, and on information signs discussing the individual closures. The construction contractor will also be required to provide this information to the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility. | City of Long Beach Designated Contractor | Pre-Construction | | |
| PR-26 | The City of Long Beach (City) will require the construction contractor to return areas of the recreational area closed temporarily during construction to their original, or better, conditions after completion of construction, and those temporarily closed areas will be respectively returned to the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility. | City of Long Beach Designated Contractor | Pre-Construction and Construction | | |
| PR-27 | At the completion of construction in the temporary occupancy areas at the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility, the City of Long Beach (City) will require the construction contractor to return the areas to a condition as good as, or better than, prior to its use for the temporary occupancy. The required improvements for the rehabilitation of those areas will be determined in consultation among the City, the LB MUST facility, and the construction contractor. | City of Long Beach Designated Contractor | Post-Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| PR-28 | For temporary construction easements (TCE) currently vegetated in native and mixed native/nonnative plant materials, those land areas will be revegetated at the completion of construction and returned to the original property owners. The City of Long Beach (City) will develop the vegetation plans in consultation with the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility to ensure the compatibility of the new vegetation with the existing vegetation in the vicinity of those for the affected properties. | City of Long Beach | Post-Construction | | |
| ***Community Impacts*** | | | | | |
| CI-1 | At least 60 days prior to completion of final design, the City of Long Beach (City) Planning Department will determine whether portions or all of the two affected murals along the 6th Street on-ramp (“A History of Long Beach” and “Community History Mural”) will be restored, relocated, and/or repainted after Shoemaker Bridge Replacement Project (Project) completion. The City will coordinate with the muralist regarding potential funding and mitigation sites. | City of Long Beach Planning Department | Final Design | | |
| CI-2 | Before and during Shoemaker Bridge Replacement Project (Project) construction, if homeless encampments are present within the Project limits, the City of Long Beach (City) Department of Health and Human Services (DHHS) will implement an Outreach and Engagement Plan, which will include, but is not limited to, the following best management practices (BMP):<br>• Coordinated outreach | City of Long Beach Department of Health and Human Services | Pre-Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| | o Three-day notification to vacate property<br>• Identify interdisciplinary teams (mental health, veterans, law enforcement, etc.)<br>• Create a targeted proactive response<br>• Conduct assessments for:<br>o Medical, psychiatric, safety, and necessities<br>o Basic needs<br>o Emergency temporary and permanent housing, and relocation assistance<br>• Provide housing, services and support through:<br>o Linkage to continuum of care (CoC), obtaining documents, and establishing income<br>o Coordinate with organizations (Mental Health America, The Children's Clinic, US Veterans, Goodwill, etc.)<br>o Provide subsidies, deposits, housing location assistance, and employment and education services | | | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| CI-3 | During the final design phase, and prior to construction, the City of Long Beach (City) will coordinate with Long Beach Unified School District (LBUSD) to finalize the timing of construction for improvements to the staff parking lot entrance and to determine the location of the new drop off locations. | City of Long Beach | Final Design and Pre-Construction | | |
| CI-4 | Prior to final design, the City of Long Beach (City) will ensure that all property acquisition will be handled in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) (Public Law 91-646, 84 Statue 1894). The Uniform Act mandates that certain relocation services and payments by the City be made available to eligible residents, businesses, and nonprofit organizations displaced by its projects. The Uniform Act provides for uniform and equitable treatment by federal or federally assisted programs of persons displaced from their homes, businesses, or farms, and establishes uniform and equitable land acquisition policies. | City of Long Beach | Prior to Final Design | | |
| ***Utilities and Emergency Services*** | | | | | |
| U-1 | Prior to grading activities, the City of Long Beach's (City) Resident Engineer will require the design/build contractor to notify Underground Service Alert (USA) at least 2 days prior to excavation by calling 811 to require that all utility owners within the Shoemaker Bridge Replacement Project (Project) disturbance limits identify the locations of underground transmission lines and facilities. | City of Long Beach Resident Engineer | Pre-Construction | | |
| U-2 | During the final design phase, and prior to construction, the City of Long Beach (City) will | City of Long Beach | Final Design | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| | develop a temporary drainage plan that will ensure all stormwater can be accommodated during construction. | | | | |
| U-3 | During final design, and prior to construction, the City of Long Beach's (City) Resident Engineer will ensure the 6th Street Pump Station is relocated to an alternate location under Alternatives 2 and 3 (Design Options A and B). A suitable relocation site will be coordinated with the design of the City and the Long Beach Municipal Urban Stormwater Treatment (LB MUST) facility. | City of Long Beach Resident Engineer | Final Design and Pre-Construction | | |
| ***Traffic and Transportation*** | | | | | |
| TR-1 | **Restricted Street Parking.** The City of Long Beach (City) will ensure that restricted parking be implemented along 7th Street as part of the Shoemaker Bridge Replacement Project (Project). The replacement parking will be restricted during AM and PM peak hours. | City of Long Beach | Final Design | | |
| ***Visual and Aesthetics*** | | | | | |
| VIS-1 | **Landscape Plan.** During the plans, specifications, and estimate (PS&E) phase, the City of Long Beach (City) will prepare a highway landscape plan that identifies all opportunities to use areas within the state right-of-way (ROW) for full landscaping consistent with the Caltrans *Highway Design Manual* (HDM). This will include landscaping for graded areas with plant species consistent with adjacent vegetation and enhancement of new Shoemaker Bridge Replacement Project (Project) structures, such as ramps and tunnels, to the extent feasible. This plan will incorporate all applicable procedures and | City of Long Beach | Final Design | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| | requirements detailed in the Caltrans HDM, Section 902.1, Planting Guidelines (July 1, 2015), and policies of the City's General Plan, as applicable. Selected vegetation and irrigation will utilize drought resistant landscaping and recycled water, when feasible, and incorporate native and climate appropriate vegetation, when appropriate, as outlined in California Streets and Highways Code Section 92.3 within the state ROW.<br><br>The City will incorporate the final design of the proposed Project into the landscape plans for the Cesar E. Chavez Park and Drake/Chavez Park greenbelt. The landscape plans will comply with the goals/objectives and policies of the Open Space and Recreation Element of the City General Plan. As applicable, the landscape plans will also comply with the goals/objectives and the policies of the City's Local Coastal Program (LCP). | | | | |
| VIS-2 | **Tree Removal**. During preparation of plans, specifications, and estimate (PS&E) phase, the City of Long Beach (City) will verify that the design minimizes removal of existing mature trees. If removal of mature trees cannot be avoided, additional landscape improvements will be incorporated into the final design for these areas. The replacement ratio of any trees removed will be determined by the City per Section 14.28 of the City's Municipal Code. Tree removal within the California Coastal Commission (CCC) jurisdiction will comply with the goals and policies outlined in the City's Local Coastal Program (LCP). | City of Long Beach | Final Design | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| VIS-3 | **Hardscape Plan.** During the plans, specifications, and estimate (PS&E) phase, the City of Long Beach (City) will prepare a plan to implement attractive bridge, tunnel, medians, retaining walls, and other aesthetic hardscapes. This plan will be prepared consistent with the Interstate 710 (I-710) Corridor Project and applicable goals and policies in the City's General Plan. All designs are required to comply with California Department of Transportation's (Caltrans) standards for safety requirements and other pertinent standards. Special architectural details and aesthetic treatments that promote regional identity, in terms of material, color, texture, and pattern, are encouraged to be incorporated into the proposed Shoemaker Bridge Replacement Project (Project) and will be reviewed and approved by the City and the Caltrans District 7 Landscape Architect. | City of Long Beach | Final Design | | |
| VIS-4 | **Lighting Plan**. During construction, the City of Long Beach's (City's) Resident Engineer, or designated contractor, will ensure that energy conserving light-emitting diode (LED) lighting fixtures be selected and installed to minimize glare on adjacent properties and into the night sky. Lighting will be shielded with nonglare hoods and focused within the Shoemaker Bridge Replacement Project (Project) right-of-way (ROW). The lighting plan will be reviewed and approved by the City and the California Department of Transportation (Caltrans) District 7 Landscape Architect prior to construction to ensure compliance with these criteria. | City of Long Beach Resident Engineer or Designated Contractor | Construction | | |
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| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| CR-1 | The City of Long Beach (City) will ensure that the Project complies with the standards of rehabilitation required in the Secretary of Interior's Standards (SOIS) Action Plan for the Los Angeles River Channel. The City will also ensure that all activities related to the LA River during preconstruction, construction, and post construction phases, identified in the SOIS Action Plan, will be implemented by the SOIS Action Plan's identified responsible parties. | City of Long Beach Resident Engineer or Designated Contractor | Preconstruction, Construction, and Post construction | | |
| ***Geology and Soils*** | | | | | |
| GEO-1 | During final design, the City of Long Beach (City) will prepare a quality assurance/quality control plan that will be maintained during construction. The plan will include observation, monitoring, and testing by a geotechnical engineer and/or engineering geologist during construction to confirm that geotechnical/geologic recommendations are fulfilled, or if different site conditions are encountered, appropriate changes are made to accommodate such issues. The geotechnical engineer will prepare weekly reports while grading excavation and construction activities are underway. | City of Long Beach | Final Design | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| GEO-2 | Prior to completion of final design, the geotechnical engineer will prepare a design-level geotechnical report. This report will document soil-related constraints and hazards, such as slope instability, settlement liquefaction, or related secondary seismic impacts, which may be present. The report will also include:<br>• Evaluation of expansive and potentially corrosive soils and recommendations regarding construction procedures and/or design criteria to reduce the effect of these soils on development of the Shoemaker Bridge Replacement Project (Project)<br>• Identification of potential liquefiable areas within the Project limits and recommendations for mitigation measures<br>• Demonstration that the design of all proposed retaining walls is geotechnically suitable for soils within the Project limits<br>• Geotechnical recommendations for the specific foundation design and earthwork construction considered for this Project | Geotechnical Engineer | Final Design | | |
| **Paleontology** | | | | | |
| PAL-1 | Prior to completion of the final design, the City of Long Beach's (City) Resident Engineer, the California Department of Transportation (Caltrans), and a qualified Principal Paleontologist shall prepare a paleontological mitigation plan (PMP) that includes the following measures:<br>• A preconstruction field survey shall be conducted in areas identified as having high paleontological sensitivity after vegetation and paving have been removed, | City of Long Beach Resident Engineer | Prior to Completion of Final Design. | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| | followed by salvage of any observed surface paleontological resources prior to the beginning of additional grading.<br>• A qualified paleontologist shall attend the pregrade meeting. At this meeting, the paleontologist will explain the likelihood for encountering paleontological resources, what resources may be discovered, and the methods of recovery that will be employed.<br>• During construction excavation, a qualified vertebrate paleontological monitor shall initially be present on a full-time basis whenever excavation will occur within the sediments that have a high paleontological sensitivity rating and on a spot-check basis for excavation in sediments that have low sensitivity rating. Monitoring may be reduced to a part-time basis if no resources are being discovered in sediments with a high sensitivity rating (monitoring reductions, when they occur, will be determined by the qualified Principal Paleontologist). With the City's Resident Engineer's approval, the monitor shall temporarily divert construction equipment away from the immediate area of the discovery. The monitor shall be equipped to rapidly stabilize and remove fossils to avoid prolonged delays to construction schedules. If large mammal fossils or large concentrations of fossils are encountered, the City shall consider using heavy equipment on site to assist in the removal and collection of large materials.<br>• Localized concentrations of small (or micro-) vertebrates may be found in all native sediments. Therefore, these | | | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| | sediments occasionally spot screened on site through 1/8- to 1/20-inch mesh screens determines whether microfossils are present during monitoring. If microfossils are encountered, sediment samples (up to 3 cubic yards, or 6,000 pounds) shall be collected and processed through one-twentieth-inch mesh screens to recover additional fossils.<br>• Recovered specimens shall be prepared to the point of identification and permanent preservation. This includes the sorting of any washed mass samples to recover small invertebrate and vertebrate fossils, the removal of surplus sediment from around larger specimens to reduce the volume of storage for the repository and storage cost, and the addition of approved chemical hardeners/stabilizers to fragile specimens.<br>• Specimens shall be identified to the lowest taxonomic level possible and curated into an institutional repository with retrievable storage. The repository institution usually charge a one-time fee based on volume; removing surplus sediment is important. The repository institution may be a local museum or university with a curator who can retrieve the specimens on request. Caltrans requires that a draft curation agreement be in place with an approved curation facility prior to the initiation of any paleontological monitoring or mitigation activities. | | | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| PAL-2 | Prior to construction, the City of Long Beach's (City) Resident Engineer will obtain a signed agreement with a repository that meets the California Department of Transportation's (Caltrans) requirements. | City of Long Beach Resident Engineer | Pre-Construction | | |
| PAL-3 | Prior to construction, the City of Long Beach's (City) Resident Engineer will ensure a qualified paleontologist conduct paleontological awareness training for all ground disturbance personnel. This will include paleontological background; regulations and requirements protecting fossils, monitoring procedures, communication protocols; and a method for documenting training. | City of Long Beach Resident Engineer | Pre-Construction | | |
| PAL-4 | During construction, the City of Long Beach's (City) Resident Engineer will ensure that a qualified paleontologist conducts paleontological monitoring in areas of old paralic deposits and where any ground disturbance may extend below surficial Holocene-age deposits**.** | City of Long Beach Resident Engineer | Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| PAL-5 | Upon completion of construction activities, the City of Long Beach's (City) Resident Engineer shall submit a paleontological mitigation report (PMR) to the California Department of Transportation (Caltrans), documenting completion of the Project's paleontological mitigation plan (PMP). The PMR shall discuss findings and analysis as a result of the Project's PMP implementation and shall be consistent with guidance contained in the Caltrans' Standard Environmental Reference (SER), Chapter 8. The PMR shall also be included in the Shoemaker Bridge Replacement Project (Project) environmental file and also submitted to the designated curation facility. | City of Long Beach Resident Engineer | Post-Construction | | |
| ***Hazardous Waste*** | | | | | |
| It is understood that if a PSI identifies site contamination, avoidance, minimization, and/or mitigation measures will be determined at that time and property owners are legally responsible for the cleanup of contamination on their private properties. If these PSIs determine that there is contamination present on that property that cannot be mitigated, measures to avoid the acquisition or temporary or permanent easement of the property may be implemented to avoid encountering the area of contamination during construction or maintenance activities. If acquisition limits cannot be adjusted, minimization measures may include indemnification, reduction in price, or acquisition as highway easement instead of in fee.<br><br>Acquisition of contaminated property must comply with applicable Caltrans directives, including the Caltrans Project Delivery Directive PD 02. If contamination is present when property is to be transferred to Caltrans, the impact of this contamination must be evaluated, and the transfer may be contingent upon acceptance of liability by the Caltrans Chief Engineer. | | | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| HAZ-1 | During the plans, specifications and estimate (PS&E) phase, the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed for soil and groundwater within historical railroad right-of-way (ROW) that would be disturbed by the Shoemaker Bridge Replacement Project (Project). The PSI would assess for the presence of petroleum hydrocarbons, asbestos, volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), and metals. | City of Long Beach | Final Design | | |
| HAZ-2 | During the plans, specifications and estimate (PS&E) phase, the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed at Assessor Parcel Number (APN) 7271-003-902 in the area that would be disturbed by the Shoemaker Bridge Replacement Project (Project). The PSI would assess for the presence of petroleum hydrocarbons in soil and groundwater in the vicinity of the active and plugged oil/gas wells located along the western side of the Los Angeles River (LA River). The City, as the Certified Unified Program Authority (CUPA) has authority to direct property owners to mitigate hazardous materials and waste releases within their jurisdiction that may impact the project alternatives. If the PSI identifies contamination that impacts the Project alternative, the CUPA will direct the property owner to mitigate the contamination within the limits of the alternative. | City of Long Beach | Final Design | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| HAZ-3 | During the plans, specifications and estimate (PS&E) phase, the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed at Assessor Parcel Number (APN) 7278-011-908 in the area that would be disturbed by the Shoemaker Bridge Replacement Project (Project). The PSI would assess for the presence of petroleum hydrocarbons in soil and groundwater in the vicinity of the active and plugged oil/gas wells, aboveground storage tanks (AST), and other storage containers used to store hazardous materials. If the PSI identifies contamination that impacts the Project alternative, the Certified Unified Program Authority (CUPA) will direct the property owner to mitigate the contamination prior to acquisition for the alternative. If a delay in acquisition is not possible, the City will take possession of the portion of property needed for the alternative and hold the parcel until all mitigation is complete. | City of Long Beach | During Project Plans, Specifications & Estimate Phase | | |
| HAZ-4 | During the plans, specifications and estimate (PS&E) phase, the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed within the area that would be disturbed by the Shoemaker Bridge Replacement Project (Project). The PSI would assess for the presence of petroleum hydrocarbons in soil and groundwater. If the PSI identifies contamination that impacts the Project alternative, the Certified Unified Program Authority (CUPA) will direct the property owner to mitigate the contamination prior to acquisition for the alternative. If a delay in acquisition is not possible, the City will take possession of the portion of property needed | City of Long Beach | Prior to Completion of Environmental Document Phase | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| | for the alternative and hold the parcel until all mitigation is complete. | | | | |
| HAZ-5 | During the plans, specifications and estimate (PS&E) phase, the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed within the area that would be disturbed by the Shoemaker Bridge Replacement Project (Project). The PSI would assess for the presence of petroleum hydrocarbons in soil and groundwater. If the PSI identifies contamination that impacts the Project alternative, the Certified Unified Program Authority (CUPA) will direct the property owner to mitigate the contamination prior to acquisition for the alternative. If a delay in acquisition is not possible, the City will take possession of the portion of property needed for the alternative and hold the parcel until all mitigation is complete. | City of Long Beach | Prior to Completion of Environmental Document | | |
| HAZ-6 | During the plans, specifications and estimate (PS&E) phase the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed in the area that would be disturbed by the Shoemaker Bridge Replacement Project (Project), adjacent to APN 7271-020-908 (960 De Forest Avenue). The PSI would assess for the presence of petroleum hydrocarbons in groundwater. If the PSI identifies contamination that impacts the Project alternative, the Certified Unified Program Authority (CUPA) will direct the property owner to mitigate the contamination within the Project limits of the alternative. | City of Long Beach | Prior to Completion of Environmental Document | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| HAZ-7 | . During the plans, specifications and estimate (PS&E) phase, the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed in the area that would be disturbed by the Shoemaker Bridge Replacement Project (Project), adjacent to APN 7271-023-900 (970 West Chester Place). The PSI would assess for the presence of petroleum hydrocarbons in groundwater. If the PSI identifies contamination that impacts the Project alternative, the Certified Unified Program Authority (CUPA) will direct the property owner to mitigate the contamination within the Project limits of the alternative. | City of Long Beach | Prior to Completion of Environmental Document | | |
| HAZ-8 | During the plans, specifications and estimate (PS&E) phase, the City of Long Beach (City) will ensure that a Preliminary Site Investigation (PSI) will be completed in the area that would be disturbed by the Shoemaker Bridge Replacement Project (Project), adjacent to Assessor Parcel Number (APN) 7271-005-009 (702 West Anaheim Street). The PSI would assess for the presence of chlorinated solvents in groundwater. If the PSI identifies contamination that impacts the Project alternative, the Certified Unified Program Authority (CUPA) will direct the property owner to mitigate the contamination within the Project limits of the alternative. | City of Long Beach Resident Engineer | During Project Plans, Specifications & Estimate Phase | | |
| HAZ-9 | **D**uring the plans, specifications, and estimates (PS&E) phase, the City of Long Beach (City) will draft a non-standard specification (NSSP) 14-11.11 that will address the handling, containerizing, transporting, and disposing of hazardous waste generated during construction activities for the Project based on findings of the Preliminary Site Investigations | City of Long Beach Resident Engineer | During Project Plans, Specifications & Estimate Phase | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| | (PSI) recommended in the avoidance and minimization measures identified in Section 2.12.4, Avoidance, Minimization, and Mitigation Measures. This project specific NSSP will serve as a special provision that will be approved by the Caltrans Division of Environmental Analysis – Hazardous Waste, Air, Noise, and Paleontology Office (HWANP) prior to acceptance by the Caltrans District 7 Office Engineer (OE) and will be included in the project's PS&E package. | | | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| ***Air Quality*** | | | | | |
| AQ-1 | During clearing, grading, earthmoving, or excavation operations, the City of Long Beach's (City's) Resident Engineer or designated contractor will ensure that fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in South Coast Air Quality Management District (SCAQMD) Rule 403. All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day. All material transported on site or off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust. The areas disturbed by clearing, grading, earthmoving, or excavation operations will be minimized so as to prevent excessive amounts of dust. These control techniques will be indicated in Shoemaker Bridge Replacement Project (Project) specifications. Visible dust beyond the property line emanating from the Project will be prevented to the maximum extent feasible. | City of Long Beach Resident Engineer or Designated Contractor | During Clearing, Grading, Earthmoving, or Excavation Operations | | |
| AQ-2 | The Shoemaker Bridge Replacement Project (Project) grading plans will show the construction duration. During construction, the City of Long Beach's (City's) Resident Engineer or designated contractor will ensure that ozone ($O_3$) precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications. | City of Long Beach Resident Engineer or Designated Contractor | Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| AQ-3 | All trucks that are to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and(e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads. | City of Long Beach Resident Engineer of Designated Contractor | Construction | | |
| AQ-4 | The contractor will adhere to the California Department of Transportation (Caltrans) Standard Specifications for Construction (Section 14.9 02). | City of Long Beach Designated Contractor | Construction | | |
| ***Noise*** | | | | | |
| N-1 | During construction, the City of Long Beach's (City) Resident Engineer or designated contractor will ensure that all heavy construction activities that will potentially exceed 86 A-weighted decibels (dBA) maximum sound level ($L_{max}$) at 50 feet will be conducted between 6 a.m. and 9 p.m. | City of Long Beach Resident Engineer or Designated Contractor | Construction | | |
| N-2 | During final design, the City of Long Beach's (City) Resident Engineer will ensure that the designated design contractor evaluate acoustic methods developed by Caltrans' Division of Environmental Analysis (DEA) in order to locate and quantify potential noise impacts as a result of the bridge replacement associated with the Project. Design elements identified within the DEA Draft Noise Notes for Bridge Projects will be implemented within the bridge design to the extent feasible. | City of Long Beach Resident Engineer or Designated Contractor | Final Design | | |
| ***Energy*** | | | | | |
| E-1 | As part of the plans, specifications, and estimates (PS&E), the City of Long Beach's (City) Resident Engineer will prepare a | City of Long Beach | Final Design | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| | construction efficiency plan, which may include the following:<br>• Reuse of existing rail, steel, and lumber, wherever possible, such as for falsework, shoring, and other applications during the construction process<br>• Recycling of asphalt taken up from roadways, if practicable and cost-effective<br>• Use of newer, more energy-efficient equipment, where feasible, and maintenance of older construction equipment to keep in good working order<br>• Promoting of scheduling of construction operations to efficiently use construction equipment (i.e., only haul waste when haul trucks are full and combine smaller dozer operations into a single comprehensive operation, where possible)<br>• Promotion of construction employee carpooling | Resident Engineer | | | |
| ***Natural Communities*** | | | | | |
| NC-1 | Prior to construction, the City of Long Beach (City) will ensure that an employee education program be developed and implemented by the Shoemaker Bridge Replacement Project (Project) Biologist. Each employee (including temporary, contractors, and subcontractors) will receive a training/awareness program prior to working on the proposed Project. They will be advised of the potential impact to the listed species and the potential penalties for taking such species. At a minimum, the program will include the following topics: (1) responsibilities of the biological monitor; (2) delineation and flagging of adjacent sensitive habitat; (3) | City of Long Beach Resident Engineer and Designated Project Biologist | Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| | limitations on all movement of those employed on site, including ingress and egress of equipment and personnel, to designated construction zones (personnel will not be allowed access to adjacent sensitive habitats); (4) occurrence of the listed and sensitive species in the area (including photographs), their general ecology, sensitivity of the species to human activities, legal protection afforded these species, (5) penalties for violations of federal and state laws, reporting requirements, (6) on-site pet prohibitions; (7) use of trash containers for disposal and removal of trash; and (8) Shoemaker Bridge Replacement Project (Project) features designed to reduce the impacts on listed species and habitat and promote continued successful occupation of adjacent habitat areas. | | | | |
| NC-2 | The City of Long Beach's (City) Resident Engineer will ensure that the use of rodenticides, herbicides, insecticides, or other chemicals that could potentially harm listed species will be prohibited in and around the Los Angeles River (LA River). | City of Long Beach Resident Engineer | Construction | | |
| NC-3 | During construction, the City of Long Beach's (City) Resident Engineer or designated contractor will ensure that any deliberate feeding of wildlife will be prohibited. | City of Long Beach Resident Engineer | Construction | | |
| NC-4 | Prior to construction, the City of Long Beach's Resident Engineer (City) will ensure that a Habitat Mitigation and Monitoring Plan (HMMP) will be developed in coordination with the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW) and will ensure no net | City of Long Beach Resident Engineer | Pre-Construction | | |

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| | loss of estuarine habitat value or acreage. The HMMP will comply with all terms and conditions set forth in the permits and opinions issued by the resource agencies and will typically include the following provisions:<br>• Permanent impacts on the Los Angeles River (LA River) will be mitigated on or off site at a minimum 2:1 ratio. Temporary direct impacts on the LA River will be replaced at a minimum 1:1 ratio with in-kind habitat restored in place within the biological study area (BSA). If off-site restoration is conducted, it will be undertaken within the LA River watershed, if feasible.<br>• Further criteria specified in the HMMP will include an establishment period for the replacement habitat, if applicable; regular trash removal; and regular maintenance and monitoring activities to ensure the success of the mitigation plan. After construction, annual summary reports of biological monitoring will be provided to USACE, RWQCB, and CDFW that document the monitoring effort. The duration of the monitoring and reporting will be established by resource agency permit conditions. | | | | |
| NC-5 | During construction, the City of Long Beach's (City) Resident Engineer or designated contractor will ensure that all soils and material, including contaminated topsoil and lead-based paint (LBP) from demolished bridges, will be removed from the biological study area (BSA) and disposed of properly. Floating booms will be used to contain debris discharged, and any | City of Long Beach Resident Engineer or Designated Contractor | Construction | | |

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| | debris discharged will be removed no later than the end of each day. | | | | |
| ***Animal Species*** | | | | | |
| AN-1 | The City of Long Beach's (City) Resident Engineer will ensure that a qualified bat biologist will survey the Shoemaker Bridge Replacement Project (Project) area in the month of June, which falls prior to the demolition of the existing Shoemaker Bridge, to assess the potential for the bridge's use as a maternity roost since maternity roosts are generally formed in late spring. The qualified bat biologist will also perform preconstruction surveys of the bridge and trees that will be impacted by the Project, since bat roosts can change seasonally. The surveys will include a combination of structure and tree inspections, sampling, exit counts, and acoustic surveys. Should the preconstruction surveys find bats roosting in the Project site, a bat protection and relocation plan will be prepared and submitted to California Department of Fish and Wildlife (CDFW) for approval prior to commencement of Project activities. | City of Long Beach Resident Engineer and Qualified Biologist | Construction | | |
| AN-2 | To avoid direct mortality to bats roosting under the existing Shoemaker Bridge, the City of Long Beach's (City) Resident Engineer will ensure that if bats are found during subsequent surveys, temporary bat exclusion devices will be installed under the supervision of a qualified bat biologist prior to the initiation of demolition activities. Exclusion should be conducted during the fall (September or October) to avoid trapping flightless young inside during the summer months or hibernating individuals during the winter. Such exclusion efforts must be continued to keep the structures free of bats | City of Long Beach Resident Engineer | Pre-Construction and Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| | until the completion of the demolition. All bat exclusion techniques will be coordinated among the City, a California Department of Transportation (Caltrans) District Biologist, and the resource agencies. Any placement of exclusions outside the months of September and October will be coordinated between the District Biologist, the City, and resource agencies. Should the preconstruction bat survey determine that trees slated for removal are suitable for bat roosting, a qualified bat biologist will monitor the tree removal activities. To minimize the potential for direct impacts to tree-roosting bats, trees that must be removed will be pushed down using heavy machinery rather than felling the tree with a chainsaw, where feasible, under the supervision of a qualified bat biologist. To ensure the optimum warning for any roosting bats that may still be present, the tree will be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree will then be pushed to the ground slowly. The bat specialist will determine the optimal time to disturb occupied bat habitat to maximize bats escaping during low light levels. Downed trees will remain in place until they are inspected by a bat specialist. Trees that are known to be bat roosts will not be sawn-up or mulched immediately. A period of at least 24 hours (preferably 48 hours) will elapse prior to such operations to allow bats to escape. | | | | |
| AN-3 | If bats are found to be present during construction, the City of Long Beach's (City) Resident Engineer or designated contractor will ensure that all work conducted on bridges or around trees will take place during the day to the best extent feasible. If this is not feasible, | City of Long Beach Resident Engineer or | Construction | | |

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| | impacts will be minimized by directing lighting and noise away from potential night roosting areas as much as possible. | Designated Contractor | | | |
| ***Threatened and Endangered Species*** | | | | | |
| TE-1 | During construction, the City of Long Beach (City) will ensure that a biologist approved by the Carlsbad Fish and Wildlife Office (CFWO) (Project Biologist) will be on site weekly during Project construction within 200 feet of western snowy plover and California least tern habitat in order to ensure compliance with all conservation measures. The Project Biologist will be familiar with the habitats, plants, and wildlife in the Project area to ensure that issues relating to biological resources are appropriately and lawfully managed. The biologist's name and contact information will be submitted to the CFWO prior to initiating project construction. The contract of the biologist will allow direct communication with the CFWO at any time regarding the proposed Project. | City of Long Beach Resident Engineer | Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| TE-2 | After the completion of construction, the City of Long Beach (City) will ensure that the Project Biologist will submit a final report to the Carlsbad Fish and Wildlife Office (CFWO) within 120 days of Project completion, including photographs of impact areas and adjacent habitat, documentation that authorized impacts were not exceeded, and documentation that general compliance with all conservation measures was achieved. The report will specify numbers and locations of listed species (if observed); observed listed species behavior (especially in relation to project activities); and remedial measures employed to avoid and minimize impacts to listed species. Raw field notes will be provided upon request by the CFWO. | City of Long Beach Resident Engineer | Post Construction | | |
| TE-3 | If nighttime construction is necessary, the City of Long Beach (City) will ensure that all Project lighting (e.g., staging areas, equipment storage sites, roadway) will be selectively placed and directed toward the construction site and away from western snowy plover and California least tern habitat. Lighting will be of the lowest illumination necessary for safety, and light glare shields will be used to reduce the extent of illumination into western snowy plover and California least tern habitat. | City of Long Beach Resident Engineer | Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
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| TE-4 | During construction, the City of Long Beach (City) will ensure that permanent Project lighting will be of the lowest illumination necessary for safety, and such lighting will be directed toward the bridge and paved roadway and away from sensitive habitats. Light glare shields will be used to reduce the extent of illumination into sensitive habitats. The California Department of Transportation (Caltrans) will review the permanent lighting plans for the Project and then submit them to the Carlsbad Fish and Wildlife Office (CFWO). | City of Long Beach Resident Engineer | Construction | | |
| TE-5 | During construction, the City of Long Beach (City) will ensure that all equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities will be restricted to designated areas located outside of jurisdictional wetlands or waters. The equipment will be located such that runoff from the designated areas will not enter western snowy plover and California least tern habitat and will be shown on construction plans. | City of Long Beach Resident Engineer | Construction | | |
| TE-6 | During construction, the City of Long Beach (City) will ensure that the Project site will be kept as clear of debris as possible. All food-related trash items will be enclosed in sealed containers and regularly removed from the site. All spoils and material disposal will be disposed of properly. Disposal or temporary placement of excess fill, brush, or other debris will not be allowed in waters of the United States (U.S.) or their banks. All areas of temporary impact will be returned to original grade, and temporary construction fill will be removed from the waterway following Project construction. | City of Long Beach Resident Engineer | Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| TE-7 | During final design, the City of Long Beach (City) will consider the incorporation of bridge poles or fencing into the design of the new bridge, as feasible, to avoid and minimize vehicle caused bird mortality, as well as in the context of other permitting considerations, such as visual impacts. Bridge poles or fencing that may be incorporated will be designed to be visible to birds and prevent perching by raptors, and will be of sufficient height to guide birds over vehicle traffic. | City of Long Beach Resident Engineer | Construction | | |
| TE-8 | During final design, the City of Long Beach (City) will ensure that the Project landscape design plan will not include the planting of tall trees adjacent to the Los Angeles (LA) River, as raptors may use tall trees for perching and nesting. Such action will discourage raptor species from preying upon foraging western snowy plovers and California least terns. | City of Long Beach Resident Engineer | Construction | | |
| ***Invasive Species*** | | | | | |
| IS-1 | In compliance with Executive Order (EO) 13112, the City of Long Beach (City) will ensure that a weed abatement program will be developed to minimize the importation of nonnative plant material during and after construction. Eradication strategies will be employed should an invasion occur. Measures addressing invasive species abatement and eradication will be included in the Shoemaker Bridge Replacement Project (Project) design and contract specifications and will be implemented and enforced by the City's Resident Engineer or designated contractor. The California Department of Transportation (Caltrans) will review the landscaping plans for the Project and then submit them to the U.S. Fish and Wildlife Service (USFWS) Carlsbad | City of Long Beach Resident Engineer or Designated Contractor | Construction and Post-Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| | Fish and Wildlife Office (CFWO). At a minimum, this program will include the following:<br>• During construction, the City's Resident Engineer or designated contractor will inspect and clean construction equipment at the beginning and end of each day and prior to transporting equipment from one project location to another.<br>• During construction, the City's Resident Engineer or designated contractor will ensure that soil and vegetation disturbance will be minimized to the greatest extent feasible.<br>• During construction, the City's Resident Engineer or designated contractor will ensure that all active portions of the construction site are watered as needed due to dry or windy conditions to prevent excessive amounts of dust and seed dispersal.<br>• During construction, the City's Resident Engineer or designated contractor will ensure that all material stockpiled is sufficiently watered or covered to prevent excessive amounts of dust and seed dispersal.<br>• During construction, the City's Resident Engineer or designated contractor will ensure that soil/gravel/rock will be obtained from weed-free sources.<br>• During construction, the City's Resident Engineer or designated contractor will ensure that only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control. | | | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| | • After construction, the City's Resident Engineer or designated contractor will ensure that the impacted areas adjacent to native vegetation identified for revegetation will be revegetated with plant species approved by the City and the California Department of Transportation (Caltrans) District Biologist that are native to the vicinity.<br>• After construction, the City's Resident Engineer or designated contractor will ensure all revegetated areas will avoid the use of species listed in the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory with a High or Moderate rating.<br>• The City's Resident Engineer or designated contractor will ensure that eradication procedures (e.g., spraying and/or hand weeding) will be outlined should an infestation occur; the use of herbicides will be prohibited within and adjacent to native vegetation, except as specifically authorized and monitored by the City and the Caltrans District Biologist. | | | | |
| IS-2 | The City of Long Beach's (City) Resident Engineer will ensure that preconstruction surveys for the invasive seaweed (*Caulerpa taxifolia*) will be conducted by the National Marine Fisheries Service/California Department of Fish and Wildlife (NMFS/CDFW) Certified Field Surveyors prior to bottom-disturbing activities taking place in the Los Angeles River (LA River) to ensure that the biological study area (BSA) is not infested with this nonnative invasive seaweed (*Caulerpa taxifolia*). | City of Long Beach Resident Engineer or Designated Contractor | Pre-Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| IS-3 | If invasive seaweed (*Caulerpa taxifolia*) is found within the biological study area (BSA), the City of Long Beach's (City) Resident Engineer or designated contractor will ensure that a management plan will be prepared according to guidelines in the National Marine Fisheries Service (NMFS) Caulerpa Control Protocol, or other approved protocol, and submitted to the U.S. Fish and Wildlife Service (USFWS) for approval prior to the start of construction. Construction activities will not begin prior to approval of this plan, if needed. | City of Long Beach Resident Engineer or Designated Contractor | Pre-Construction | | |
| IS-4 | During the final design, the City of Long Beach's (City) Resident Engineer will ensure that the Shoemaker Bridge Replacement Project (Project) landscaping will follow the provisions set forth in Executive Order (EO) 13112, which mandates preventing the introduction of and controlling the spread of invasive plant species on highway right-of-way (ROW). No invasive species listed in the National Invasive Species Management Plan, State of California Noxious Weed List, or California Invasive Plant Council (Cal-IPC) Invasive Plant Inventory list will be used in the landscaping plans for the Project. Caltrans will review the landscaping plans for the project and then submit them to the U.S. Fish and Wildlife Service (USFWS) Carlsbad Fish and Wildlife Office (CFWO) | City of Long Beach Resident Engineer | Final Design | | |
| IS-5 | During construction, the City of Long Beach's (City) Resident Engineer will ensure that the Shoemaker Bridge Replacement Project (Project) Biologist will monitor the project site immediately prior to and during construction to identify the presence of invasive weeds and recommend measures to avoid their | City of Long Beach Resident Engineer | Construction | | |

| No. | Avoidance, Minimization, and Mitigation Measure | Responsible Party | Timing/Phase | Action Taken to Comply with Avoidance, Minimization, or Mitigation Measure | Date |
|---|---|---|---|---|---|
| | inadvertent spread in association with the Project. Such measures may include inspection and cleaning of construction equipment and use of eradication strategies. Special care will be taken during transport, use, and disposal of soils containing invasive weed seeds, and all weedy vegetation removed during construction will be properly disposed of to prevent spread into areas outside of the construction area. All heavy equipment will be washed and cleaned of debris prior to entering the project area to minimize the spread of invasive weeds. | | | | |

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# Appendix E. List of Acronyms

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# Acronyms and Abbreviations

| | |
|---|---|
| **A** | |
| AADT | annual average daily traffic |
| AASHTO | American Association of State Highway and Transportation Officials |
| AB | Assembly Bill |
| AC | affected community |
| ACHP | Advisory Council on Historic Preservation |
| ACM | asbestos-containing material |
| ACTA | Alameda Corridor Transportation Authority |
| ADA | Americans with Disabilities Act |
| ADL | aerially deposited lead |
| ADT | average daily trip |
| af | artificial fill |
| AGR | agricultural |
| APE | area of potential effects |
| APN | Assessor's Parcel Number |
| AQAR | Air Quality Analysis Report |
| ARB | Air Resources Board |
| ARS | acceleration response spectra |
| ASR | Archaeological Survey Report |
| AST | aboveground storage tank |
| ASTM | ASTM International, Inc. |
| **B** | |
| BACM | best available control measures |
| bgs | below ground surface |
| BMP | best management practice |
| BNSF | Burlington Northern-Santa Fe |
| BSA | biological study area |
| **C** | |
| CAA | Clean Air Act |
| CAAA | Clean Air Act Amendment |
| CAAQS | California Ambient Air Quality Standards |
| Cal-IPC | California Invasive Plant Council |
| Cal-OSHA | California Division of Occupational Safety and Health Administration |
| CalRecycle | California Department of Resources Recycling and Recovery |

| | | |
|---|---|---|
| Caltrans | California Department of Transportation | |
| CCA | California Coastal Act | |
| CCC | California Coastal Commission | |
| CCR | California Code of Regulations | |
| CDFG | California Department of Fish and Game | |
| CDFW | California Department of Fish and Wildlife | |
| CDMG | California Division of Mines and Geology | |
| CDP | Coastal Development Permit | |
| CEC | California Energy Commission | |
| CEQ | Council on Environmental Quality | |
| CEQA | California Environmental Quality Act | |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act | |
| CERFA | Community Environmental Response Facilitation Act | |
| CESA | California Endangered Species Act | |
| CFP | California fully protected | |
| CFR | Code of Federal Regulations | |
| CFWO | Carlsbad Fish and Wildlife Office | |
| CGS | California Geological Survey | |
| $CH_4$ | methane | |
| CHL | California Historic Landmarks | |
| CHP | California Highway Patrol | |
| CHRIS | California Historical Resources Information System | |
| CIA | Community Impact Assessment | |
| CIDH | cast-in-drilled-hole | |
| CISS | cast-in-steel-shell | |
| City | City of Long Beach | |
| CNPS | California Native Plant Society | |
| CO | carbon monoxide | |
| $CO_2$ | carbon dioxide | |
| CoC | Continuum of Care | |
| COC | community of comparison | |
| County | County of Los Angeles | |
| CPS | coastal pelagic species | |
| CPUC | California Public Utilities Commission | |
| CREC | controlled recognized environmental condition | |
| CRHR | California Register of Historical Resources | |

| | | |
|---|---|---|
| CSHM | California Seismic Hazard Map | |
| CSLC | California State Lands Commission | |
| CSULB | California State University, Long Beach | |
| CUPA | Certified Unified Program Agency | |
| CWA | Clean Water Act | |
| CZMA | Coastal Zone Management Act | |
| **D** | | |
| dB | decibel | |
| dBA | A-weighted decibel | |
| DDT | dichlorodiphenyltrichloroethane | |
| DEIR | draft environmental impact report | |
| DHHS | Department of Health and Human Services | |
| Direct APE | areas of direct effects | |
| DOGGR | Division of Oil, Gas, and Geothermal Resources | |
| Downtown Plan | Updated Draft Downtown Plan (City of Long Beach) | |
| DPM | diesel particulate matter | |
| DPP | Design Pollution Prevention | |
| DPS | distinct population segment | |
| DPW | Department of Public Works | |
| DSA | Disturbed Soil Area | |
| DTP | Downtown Plan | |
| DTSC | Department of Toxic Substances Control | |
| **E** | | |
| EA | Environmental Assessment | |
| EAP | Early Action Project | |
| EB | eastbound | |
| EDR | Environmental Data Resources, Inc. | |
| EFH | essential fish habitat | |
| EIR | Environmental Impact Report | |
| EIS | Environmental impact statement | |
| EJ | environmental justice | |
| EMS | Emergency Medical Services | |
| EO | Executive Order | |
| EPA | Environmental Protection Agency | |
| EMS | Emergency Medical Services | |

| | | |
|---|---|---|
| ERB | Economic Recovery Bond | |
| ESA | environmentally sensitive areas | |
| ESHA | Environmentally Sensitive Habitat Area | |
| EW | existing wall | |
| **F** | | |
| °F | degrees Fahrenheit | |
| FCAA | Federal Clean Air Act | |
| FEMA | Federal Emergency Management Agency | |
| FESA | Federal Endangered Species Act | |
| FHWA | Federal Highway Administration | |
| FIFRA | Federal Insecticide, Fungicide, and Rodenticide Act | |
| FIRM | Flood Insurance Rate Map | |
| FONSI | Finding of No Significant Impact | |
| FTA | Federal Transit Administration | |
| FTIP | Federal Transportation Improvement Program | |
| **G** | | |
| g | acceleration due to gravity | |
| GHG | greenhouse gas | |
| GIS | geographic information system | |
| GPA | GPA Consulting | |
| **H** | | |
| H&SC | Health and Safety Code | |
| $H_2S$ | hydrogen sulfide | |
| HCL | Historic-cultural Monuments | |
| HDM | Highway Design Manual | |
| HDP | Harbor Development Permit | |
| HEI | Health Effects Institute | |
| HFC | hydrofluorocarbon | |
| HFC-23 | fluoroform | |
| HFC-134a | s, s, s, 2-tetrafluorethane | |
| HFC-152a | difloroethane | |
| HHRA | Human Health Risk Assessment | |
| HMMP | Habitat Mitigation and Monitoring Plan | |
| HPSR | Historic Property Survey Report | |
| HREC | historical recognized environmental condition | |
| HRER | Historical Resources Evaluation Report | |

| | | |
|---|---|---|
| HRI | Historic Resources Inventory | |
| HUD | Housing and Urban Development | |
| **I** | | |
| I-5 | Interstate 5 | |
| I–10 | Interstate 10 | |
| I–105 | Interstate 105 | |
| I–405 | Interstate 405 | |
| I–710 | Interstate 710 | |
| IHA | Incidental Harassment Authorization | |
| IND | industrial | |
| Indirect APE | areas of indirect effects | |
| IPCC | Intergovernmental Panel on Climate Change | |
| IRIS | Integrated Risk Information System | |
| ISA | Initial Site Assessment | |
| **J** | | |
| JD | Jurisdictional Delineation | |
| **K** | | |
| km | kilometer | |
| kV | kilovolt | |
| **L** | | |
| L&WCF | Land and Water Conservation Fund | |
| LA Basin | Los Angeles Basin | |
| LA River | Los Angeles River | |
| LA River Flood Channel | Los Angeles River Flood Channel | |
| LACFCD | Los Angeles Flood Control District | |
| LACM | Natural History Museum of Los Angeles County | |
| LACSD | Los Angeles County Sanitation District | |
| LADPW | Los Angeles Department of Public Works | |
| LARIO | Los Angeles River and Rio Hondo | |
| LARWQCB | Los Angeles Regional Water Quality Control Board | |
| LBBS | Long Beach Building and Safety | |
| LBFD | Long Beach Fire Department | |
| LB MUST | Long Beach Municipal Urban Stormwater Treatment | |
| LBP | lead-based paint | |

| | | |
|---|---|---|
| LBPD | Long Beach Police Department | |
| LBT | Long Beach Transit | |
| LBUSD | Long Beach Unified School District | |
| LCFS | low-carbon fuel standard | |
| LCP | local coastal program | |
| LED | light-emitting diode | |
| LEDPA | least environmentally damaging practicable alternative | |
| Leighton | Leighton Consulting | |
| $L_{eq}$ | equivalent noise level | |
| $L_{eq}(h)$ | hourly equivalent noise level | |
| $L_{max}$ | maximum noise level | |
| LOS | level of service | |
| LPA | Locally Preferred Alternative | |
| LRFD | Load Resistance Factor Design | |
| LST | localized significance thresholds | |
| LUD | land use districts | |
| LUST | leaking underground storage tank | |
| **M** | | |
| $mg/m^3$ | milligrams per cubic meter | |
| MBA | methylene blue activated substanc | |
| MBTA | Migratory Bird Treaty Act | |
| MCE | maximum credible earthquake | |
| MD | midday | |
| MEP | maximum extent practicable | |
| Metro | Los Angeles County Metropolitan Transportation Authority | |
| mg/kg | milligrams per kilogram | |
| mg/L | milligrams per liter | |
| MHWL | mean high water level | |
| mL | milliliter | |
| MLD | most likely descendant | |
| MLLW | mean lower low water | |
| MMPA | Marine Mammal Protection Act | |
| MMRP | Mitigation, Monitoring, and Reporting Program | |
| MOT | Maintenance of Traffic | |
| MOU | Memorandum of Understanding | |
| mpg | miles per gallon | |

| | | |
|---|---|---|
| mph | miles per hour | |
| MPO | Metropolitan Planning Organization | |
| MPTA | Migratory Bird Treaty Act | |
| MSA | Magnuson-Stevens Fishery Conservation and Management Act | |
| MSAT | mobile source air toxics | |
| MSC | Multi-Service Center | |
| MUN | municipal wateruse | |
| mya | million years ago | |
| **N** | | |
| NAAQS | National Ambient Air Quality Standards | |
| NAC | noise abatement criteria | |
| NAHC | Native American Heritage Commission | |
| NATA | National Air Toxics Assessment | |
| NB | northbound | |
| NRCS | Natural Resources Conservation Service | |
| NEPA | National Environmental Policy Act | |
| NES | national environment study | |
| NESHAP | National Emission Standards for Hazardous Air Pollutants | |
| ng/L | nanograms per liter | |
| NHPA | National Historic Preservation Act | |
| NHTSA | National Highway Traffic Safety Administration | |
| NMFS | National Marine Fisheries Service | |
| No. | Number | |
| $NO_2$ | nitrogen dioxide | |
| NOx | nitrogen oxide | |
| NOAA | National Oceanic and Atmospheric Administration | |
| NOI | Notice of Intent | |
| NOP | Notice of Preparation | |
| NOT | Notice of Termination | |
| NPDES | National Pollutant Discharge Elimination System | |
| NRC | Neighborhood Resource Center | |
| NRHP | National Register of Historic Places | |
| NS | non-stormwater | |
| NSR | Noise Study Report | |
| NTU | nephelometric turbidity unit | |

| | | |
|---|---|---|
| **O** | | |
| $O_3$ | ozone | |
| OEHHA | Office of Environmental Health Hazard Assessment | |
| OHWM | ordinary high water mark | |
| OSHA | Occupational Safety and Health Act | |
| Oxy Oil | Occidental Oil | |
| **P** | | |
| PA | Programmatic Agreement | |
| PA/ED | Project Approval/Environmental Document | |
| PAAL | Poly Academy of Achievers and Leaders | |
| PAH | polycyclic aromatic hydrocarbons | |
| Pb | lead | |
| PBDB | Paleobiology Database | |
| PCB | polychlorinated biphenyls | |
| PCE | Perchloroethylene | |
| PCH | Pacific Coast Highway | |
| PD | planned development | |
| PDS | Project Development Support | |
| PDPM | Project Development Procedures Manual | |
| PDT | Project Development Team | |
| PEAR | Preliminary Environmental Analysis Report | |
| PEIR | Program Environmental Impact Report | |
| PER | Paleontological Evaluation Report | |
| PFC | perfluorocarbon | |
| PGA | peak ground acceleration | |
| PGDR | Preliminary Geotechnical Design Report | |
| pH | potential of hydrogen | |
| pg/L | picograms per liter | |
| PIR | Paleontological Identification Report | |
| PM | post mile | |
| $PM_{10}$ | particulate matter broken down into particles of 10 micrometers (microns) or less | |
| $PM_{2.5}$ | particulate matter broken down into particles less than 2.5 micrometers (microns) in aerodynamic diameter | |
| PMP | Paleontological Mitigation Plan | |
| PMR | Paleontological Mitigation Report | |
| POAQC | Project of Air Quality Concern | |

| | | |
|---|---|---|
| POLA | Port of Los Angeles | |
| POLB | Port of Long Beach | |
| POU | publicly owned utilities | |
| ppb | parts per billion | |
| ppm | parts per million | |
| PQS | Professionally Qualified Staff | |
| PROC | Industrial process supply | |
| Project | Shoemaker Bridge Replacement Project | |
| PRC | Public Resource Code | |
| PS&E | plans, specifications, and estimates | |
| PSI | Preliminary Site Investigation | |
| PSR | Project Study Report | |
| **Q** | | |
| Qms | unconsolidated shelf sediment | |
| Qops | old paralic deposits | |
| QSD | Qualified SWPPP Developer | |
| Qyfa | young alluvium | |
| **R** | | |
| RAP | Relocation Assistance Program | |
| RCP | regional comprehensive plan | |
| RCRA | Resource Conservation and Recovery Act | |
| RDEIR | Recirculated Draft Environmental Impact Report | |
| REAP | Rain Event Action Plan | |
| REC | recognized environmental condition | |
| RIM | Relocation Impact Memorandum | |
| ROE | right-of-entry | |
| ROG | reactive organic gases | |
| ROW | right-of-way | |
| RPS | Renewables Portfolio Standard | |
| Rrup | Closest distance (km) to the fault rupture plane | |
| RTP | Regional Transportation Plan | |
| RTPA | Regional Transportation Planning Agency | |
| RV | recreational vehicle | |
| RWQCB | Regional Water Quality Control Board | |

| S | | |
|---|---|---|
| SAFETEA-LU | Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users | |
| SAN | Streambed Alteration Notification | |
| SB | southbound | |
| SCAB | South Coast Air Basin | |
| SCAG | Southern California Association of Government | |
| SCAQMD | South Coast Air Quality Management District | |
| SCCIC | South Central Coastal Information Center | |
| SCE | Southern California Edison | |
| SCH | State Clearinghouse | |
| SCS | Sustainable Communities Strategy | |
| SDC | Seismic Design Criteria | |
| SDEIS | Supplemental Draft Environmental Impact Statement | |
| sec | seconds | |
| SEIR | Supplemental Environmental Impact Report | |
| SER | Standard Environmental Reference | |
| sf | square foot/feet | |
| $SF_6$ | sulfur hexafluoride | |
| SHPO | State Historic Preservation Officer | |
| SIP | State Implementation Plan | |
| SLF | Sacred Lands File | |
| SMARTS | Stormwater Multi-Application and Report Tracking System | |
| $SO_2$ | sulfur dioxide | |
| $SO_x$ | sulfur oxides | |
| SR-710 | State Route 710 | |
| SSC | species of special concern | |
| SSP | Standard Special Provisions | |
| SVOC | semi-volatile organic compound | |
| SVP | Society of Vertebrate Paleontology | |
| SWDR | Stormwater Data Report | |
| SWIS | Solid Waste Information System | |
| SWMP | Stormwater Management Plan | |
| SWPPP | Stormwater Pollution Prevention Plan | |
| SWRCB | State Water Resources Control Board | |

| | | |
|---|---|---|
| **T** | | |
| TAC | toxic air contaminant | |
| TAME | tert-amyl methyl ether | |
| TASAS | Traffic Accident and Surveillance Analysis Systems | |
| TBA | tert-butyl alcohol | |
| TC | tracking control | |
| TCE | temporary construction easement | |
| TCWG | Transportation Conformity Working Group | |
| TDM | Transportation Demand Management | |
| TDML | total maximum daily load | |
| TIP | Transportation Improvement Program | |
| TMDL | total maximum daily load | |
| TMP | Transportation Management Plan | |
| TNM | Traffic Noise Model | |
| TNW | traditional navigable water | |
| TOAR | Traffic Operational Analysis Report | |
| TPH-g | tert-amyl methyl ether | |
| TSAR | TASAS Selective Accident Retrieval | |
| TSCA | Toxic Substances Control Act | |
| TSM | Transportation System Management | |
| TSS | total suspended solids | |
| **U** | | |
| U.S. | United States | |
| UCMP | University of California Museum of Paleontology | |
| UPRR | Union Pacific Railroad | |
| UPS | United Parcel Service | |
| URS | URS Corporation, Inc. | |
| USA | Underground Service Alert | |
| USACE | United States Army Corps of Engineers | |
| USC | United States Code | |
| USCG | United States Coast Guard | |
| USDOT | United States Department of Transportation | |
| USFWS | United States Fish and Wildlife Service | |
| USGS | United States Geological Survey | |
| USPS | United States Postal Service | |
| UST | underground storage tank | |

| | | |
|---|---|---|
| Uniform Act | Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 | |
| **V** | | |
| V/C | volume to capacity | |
| VAU | visual assessment unit | |
| VHT | vehicle hours traveled | |
| VIA | Visual Impact Assessment | |
| VMT | vehicle miles traveled | |
| VOC | volatile organic compound | |
| VRP | visibility reducing particles | |
| **W** | | |
| WARM | warm freshwater habitat | |
| WB | westbound | |
| WDID | Waste Discharger Identification | |
| WDR | waste discharge requirements | |
| WM | waste management | |
| WPCP | Water Pollution Control Program | |
| $\mu g/m^3$ | micrograms per cubic meter | |
| WQAR | Water Quality Assessment Report | |

# Appendix F. Notice of Preparation

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# F.1 Notice of Preparation and Scoping Meeting

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# NOTICE OF PREPARATION AND SCOPING MEETING

**TO:** Responsible, Trustee, and Federal Agencies, Organizations, and Interested Parties

**SUBJECT:** Notice of Preparation of a Draft Environmental Impact Report in Compliance with Title 14, Sections 15082(a), 15103, and 15375 of the California Code of Regulations Pursuant to Public Resources Code Section 21165 and the Guidelines for the California Environmental Quality Act (CEQA) Section 15050, the City of Long Beach is the Lead Agency responsible for preparation of an Environmental Impact Report (EIR) addressing potential impacts associated with the project identified below.

**PROJECT TITLE:** Shoemaker Bridge Replacement Project

**PROJECT LOCATION:** The Shoemaker Bridge Replacement Project is located at the southern end of Interstate 710 (I-710) in the City of Long Beach and is bisected by the Los Angeles River (LA River).

**PROJECT DESCRIPTION:** The City of Long Beach (City) will prepare an Environmental Impact Report (EIR) for the proposed Shoemaker Bridge Replacement Project (project). The Shoemaker Bridge Replacement Project (proposed project) is an Early Action Project of the Interstate 710 (I-710) Corridor Improvement Project. A detailed project description, study area map, and summary of the potential environmental effects are attached.

AGENCIES: The purpose of this notice is to serve as a Notice of Preparation (NOP) of an EIR pursuant to the State CEQA Guidelines Section 15082, and solicit comments and suggestions regarding the scope and content of the EIR to be prepared for the proposed project. Specifically, the City of Long Beach (the City) requests input on the environmental information that is germane to your agency's statutory responsibility in connection with the proposed project. Your agency may rely on the Draft EIR prepared by the City when considering permits or other approvals for this project.

ORGANIZATIONS AND INTERESTED PARTIES: The City of Long Beach requests your comments and concerns regarding the proposed scope and content of the environmental information to be included in the EIR.

PUBLIC REVIEW PERIOD: This NOP is available for public review and comment pursuant to California Code of Regulations, Title 14, Section 15082(b). The public review and comment period during which the City of Long Beach will receive comments on the NOP for this proposed project is:

| | |
|---|---|
| Beginning: | Friday, April 1, 2016 |
| Ending: | Monday, May 2, 2016 at 4:30 pm |

The City is holding a public scoping meeting to provide information about the project, a summary of the environmental process and issues addressed, and to receive input regarding the environmental issues and suggested scope and content of the EIR.

A copy of the Initial Study is not attached.

PUBLIC SCOPING MEETING:

| | |
|---|---|
| When: | Wednesday, April 13, 2016 |
| Time: | 4:30 PM to 7:30 PM |
| Where: | Cesar Chavez Park Community Center Social Hall<br>401 Golden Avenue<br>Long Beach, California 90802 |

THE NOP AND INITIAL STUDY ARE AVAILABLE FOR PUBLIC REVIEW AT THE FOLLOWING LOCATIONS:

City Hall, 333 W. Ocean Boulevard, 9th Floor
Long Beach Main Library, 101 Pacific Avenue
Online at: shoemakerprojectlb.com

Due to the time limits mandated by state law, your response must be sent at the earliest possible date but no later than 30 days after receipt of this notice.

RESPONSES AND COMMENTS: Please list a contact person for your agency or organization, include U.S. mail and email addresses, and send your comments to:

| | |
|---|---|
| Contact: | Traci Gleason<br>Public Works Department<br>City of Long Beach<br>333 W. Ocean Boulevard, 9th Floor<br>Long Beach, CA 90802<br>Or via email to: info@shoemakerprojectlb.com |

ADDITIONAL PROJECT DESCRIPTION: The City, in cooperation with Caltrans, is proposing to replace the Shoemaker Bridge (West Shoreline Drive) in the City of Long Beach, California. The Shoemaker Bridge Replacement Project (proposed project) is an Early Action Project of the Interstate 710 (I-710) Corridor Improvement Project and is located at the southern end of I-710 in the City of Long Beach and is bisected by the Los Angeles River. The Regional Location and Project Vicinity (Figure 1-1) is attached.

The purpose of the proposed project is to:

- Improve existing traffic safety and operations;
- Increase multi-modal connectivity within the project limits and surrounding area;
- Enhance Complete Streets elements by providing bicycle, pedestrian, and streetscape improvements on major thoroughfares; and
- Address non-standard features and design deficiencies.

Three alternatives, a No Build Alternative (Alternative 1), and two Build Alternatives (Alternatives 2 and 3) are being evaluated as part of the proposed project. Both Alternatives 2 and 3 will replace the existing Shoemaker Bridge over the Los Angeles River with a new bridge located just south of the existing bridge. Both Alternatives will include the evaluation of design options for a roundabout or a "Y" intersection at the easterly end of the bridge. The primary difference between Alternatives 2 and 3 is that Alternative 2 provides for the re-purposing of the existing bridge for non-motorized transportation and recreational use and Alternative 3 includes removal of the existing bridge.

Alternatives 2 and 3 will also provide improvements to associated roadway connectors to downtown Long Beach and along West Shoreline Drive from I-710. Improvements include the realignment of the existing West Shoreline Drive in downtown Long Beach to facilitate the City's future planned expansion of the Cesar E. Chavez and Drake Parks. Both alternatives include improvements along I-710 from just south of Anaheim Street to just south of West Shoreline Drive.

Under Alternatives 2 and 3, proposed street improvements are also anticipated along West Shoreline Drive, 3rd Street, 6th Street, 7th Street, Ocean Boulevard, and Broadway Avenue. The proposed project will also evaluate potential improvements along Magnolia Ave. and Anaheim Street. The proposed street improvements may include additional street lighting, re-striping, turn lanes, bicycle, pedestrian, and streetscape improvements. Additionally, as an early action project of the I-710 Corridor Improvement Project, Alternatives 2 and 3 will evaluate the impacts from the closure of the 9th and 10th Street ramp connections into downtown Long Beach.

Although most of the improvements and construction would occur within the existing Caltrans or City of Long Beach right-of-way, acquisition of property and easements from the Los Angeles County Flood Control District (LACFCD) will be required.

The proposed project is included in the Final 2015 Federal Transportation Improvement Program (FTIP) and the Southern California Association of Government's (SCAG) 2012 Regional Transportation Plan (RTP) for Los Angeles County as Project ID: LAOG830.1, the project description provided in the FTIP and RTP states the following:

> I-710 Improvements/Shoemaker Bridge - Downtown Exits. The project makes bicycle, pedestrian, and streetscape improvements on major thoroughfares.

**PROBABLE ENVIRONMENTAL EFFECTS OF THE PROJECT:** Based on the findings of the Initial Study, the proposed project could have potentially significant impacts on the following environmental factors:

Aesthetics/Visual
Biological Resources
Geology & Soils
Hazards and Hazardous Materials
Land Use & Planning
Public Services
Traffic and Circulation
Air Quality
Cultural Resources
Greenhouse Gas Emissions
Hydrology and Water Quality
Noise
Recreation
Utilities & Service Systems

# F.2 Affidavit from Long Beach Telegram - Publication of Shoemaker Bridge Replacement Project Scoping Meeting Notice

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**Long Beach Press-Telegram**
727 Pine Avenue
Long Beach, CA 90844
562-499-1236
Fax: 562-499-1391
legals@presstelegram.com

CITY OF LB/PLAN DEPT
PORTIA SMITH
333 W OCEAN BL 4TH FL
LONG BEACH, CA 90802

| | |
|---|---|
| *Account Number:* | 5007769 |
| *Ad Order Number:* | 0010785313 |
| *Customer's Reference / PO Number:* | |
| *Publication:* | Long Beach Press-Telegram |
| *Publication Dates:* | 03/29/2016 |
| *Total Amount:* | $1,909.20 |
| *Payment Amount:* | $0.00 |
| *Amount Due:* | $1,909.20 |

*Invoice Text:* **NOTICE OF PREPARATION**
**AND SCOPING MEETING**

**TO:** Responsible, Trustee, and Federal Agencies,
Organizations, and Interested Parties

**SUBJECT:** Notice of Preparation of a Draft Environmental Impact Report in Compliance with Title 14, Sections 15082(a), 15103, and 15375 of the California Code of Regulations Pursuant to Public Resources Code Section 21165 and the Guidelines for the California Environmental Quality Act (CEQA) Section 15050, the City of Long Beach is the Lead Agency responsible for preparation of an Environmental Impact Report (EIR) addressing potential impacts associated with the project identified below.

**PROJECT TITLE:** Shoemaker Bridge Replacement Project

**PROJECT LOCATION:** The Shoemaker Bridge Replacement Project is located at the southern end of Interstate 710 (I-710) in the City of Long Beach and is bisected by the Los Angeles River (LA River).

**PROJECT DESCRIPTION:** The City of Long Beach (City) will prepare an Environmental Impact Report (EIR) for the proposed Shoemaker Bridge Replacement Project (project). The Shoemaker Bridge Replacement Project (proposed project) is an Early Action Project of the Interstate 710 (I-710) Corridor Improvement Project. A detailed project description and summary of the potential environmental effects are provided below.

**AGENCIES:** The purpose of this notice is to serve as a Notice of Preparation (NOP) of an EIR pursuant to the State CEQA Guidelines Section 15082, and solicit comments and suggestions regarding the scope and content of the EIR to be prepared for the proposed project. Specifically, the City of Long Beach (the City) requests input on the environmental information that is germane to your agency's statutory responsibility in connection with the proposed project. Your agency may rely on the Draft EIR prepared by the City when considering permits or other approvals for this project.

**ORGANIZATIONS AND INTERESTED PARTIES:** The City of Long Beach requests your comments and concerns regarding the proposed scope and content of the environmental information to be included in the EIR.

**PUBLIC REVIEW PERIOD:** This NOP is available for public review and comment pursuant to California Code of Regulations, Title 14, Section 15082(b). The public review and comment period during which the City of Long Beach will receive comments on the NOP for this proposed project is:

Beginning: Friday, April 1, 2016
Ending: Monday, May 2, 2016 at 4:30 pm

The City is holding a public scoping meeting to provide information about the project, a summary of the environmental process and issues addressed, and to receive input regarding the environmental issues and suggested scope and content of the EIR.

A copy of the Initial Study is not attached.

**PUBLIC SCOPING MEETING:**

When: Wednesday, April 13, 2016
Time: 4:30 PM to 7:30 PM
Where: Cesar Chavez Park Community Center Social Hall
401 Golden Avenue
Long Beach, California 90802

THE NOP AND INITIAL STUDY ARE AVAILABLE FOR PUBLIC REVIEW AT THE FOLLOWING LOCATIONS:

City Hall, 333 W. Ocean Boulevard, 9th Floor
Long Beach Main Library, 101 Pacific Avenue
Online at: shoemakerprojectlb.com

Due to the time limits mandated by state law, your response must be sent at the earliest possible date but no later than 30 days after receipt of this notice.

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Public Works Department
City of Long Beach
333 W. Ocean Boulevard, 9th Floor

Long Beach, CA 90802
Or via email to: info@shoemakerprojectlb.com

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I-710 Improvements/Shoemaker Bridge - Downtown Exits. The project makes bicycle, pedestrian, and streetscape improvements on major thoroughfares.

**PROBABLE ENVIRONMENTAL EFFECTS OF THE PROJECT:** Based on the findings of the Initial Study, the proposed project could have potentially significant impacts on the following environmental factors:

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Biological Resources
Geology & Soils
Hazards and Hazardous Materials
Land Use & Planning
Public Services
Traffic and Circulation
Air Quality
Cultural Resources
Greenhouse Gas Emissions
Hydrology and Water Quality
Noise
Recreation
Utilities & Service Systems

**Pub March 29, 2016(1t)PT(785313)**

**Long Beach Press-Telegram**
727 Pine Avenue
Long Beach, CA 90844
562-499-1236
Fax: 562-499-1391
legals@presstelegram.com

(Space below for use of County Clerk Only)

5007769

Legal No. **0010785313**

CITY OF LB/PLAN DEPT
PORTIA SMITH
333 W OCEAN BL 4TH FL
LONG BEACH, CA 90802

# PROOF OF PUBLICATION
# (2015.5 C.C.P.)

## STATE OF CALIFORNIA
## County of Los Angeles

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principle clerk of the printer of the Long Beach Press-Telegram, a newspaper of general circulation, printed and published daily in the City of Long Beach, County of Los Angeles, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of County of Los Angeles, State of California, on the date of March 21, 1934, Case Number 370512. The notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

**03/29/2016**

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Executed at Long Beach, LA Co. California,
this 5th day of April, 2016.

Signature

The Long Beach Press-Telegram, a newspaper of general circulation, is delivered to and available in but not limited to the following cities: Long Beach, Lakewood, Bellflower, Cerritos, Downey, Norwalk, Artesia, Paramount, Wilmington, Compton, South Gate, Los Alamitos, Seal Beach, Cypress, La Palma, Lynwood, San Pedro, Hawaiian

## NOTICE OF PREPARATION AND SCOPING MEETING

**TO:** Responsible, Trustee, and Federal Agencies, Organizations, and Interested Parties

**SUBJECT:** Notice of Preparation of a Draft Environmental Impact Report in Compliance with Title 14, Sections 15082(a), 15103, and 15375 of the California Code of Regulations Pursuant to Public Resources Code Section 21165 and the Guidelines for the California Environmental Quality Act (CEQA) Section 15050, the City of Long Beach is the Lead Agency responsible for preparation of an Environmental Impact Report (EIR) addressing potential impacts associated with the project identified below.

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| | |
|---|---|
| Beginning: | Friday, April 1, 2016 |
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A copy of the Initial Study is not attached.

**PUBLIC SCOPING MEETING:**

| | |
|---|---|
| When: | Wednesday, April 13, 2016 |
| Time: | 4:30 PM to 7:30 PM |
| Where: | Cesar Chavez Park Community Center Social Hall<br>401 Golden Avenue<br>Long Beach, California 90802 |

THE NOP AND INITIAL STUDY ARE AVAILABLE FOR PUBLIC REVIEW AT THE FOLLOWING LOCATIONS:

City Hall, 333 W. Ocean Boulevard, 9th Floor
Long Beach Main Library, 101 Pacific Avenue
Online at: shoemakerprojectlb.com

Due to the time limits mandated by state law, your response must be sent at the earliest possible date but no later than 30 days after receipt of this notice.

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Caltrans, is proposing to replace the Shoemaker Bridge (West Shoreline Drive) in the City of Long Beach, California. The Shoemaker Bridge Replacement Project (proposed project) is an Early Action Project of the Interstate 710 (I-710) Corridor Improvement Project and is located at the southern end of I-710 in the City of Long Beach and is bisected by the Los Angeles River.

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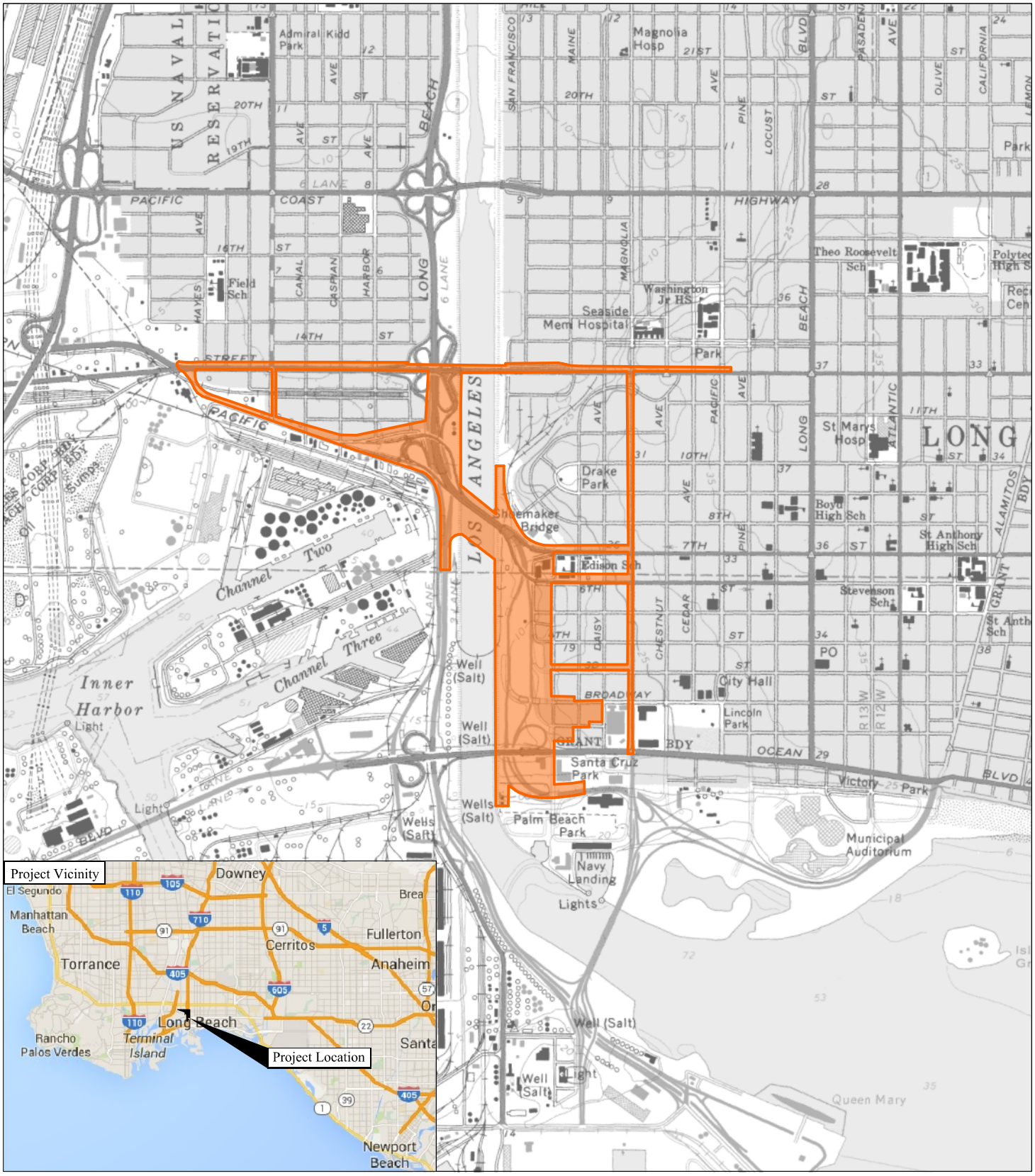
Biological Resources
Geology & Soils
Hazards and Hazardous Materials
Land Use & Planning
Public Services
Traffic and Circulation
Air Quality
Cultural Resources
Greenhouse Gas Emissions
Hydrology and Water Quality
Noise
Recreation
Utilities & Service Systems

**Pub March 29, 2016 (1t) PT (785313)**




LEGEND

Project Limits

FIGURE 1-1

0 1000' 2000'

FEET

SOURCE: USGS 7.5min. Quad. (LONG BEACH, 1978)

*Shoemaker Bridge Replacement Project*

Regional Location and Project Vicinity

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# F.3 Summary of Comments Received from the Notice of Preparation Scoping Period

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# Memo

| | |
|---|---|
| Date: | Monday, May 23, 2016 |
| Project: | Shoemaker Bridge Replacement Project |
| To: | Angie Kung |
| From: | Kelsey McGrath |
| Subject: | Summary of Comments Received From the Notice of Preparation Scoping Period |

On April 1, 2016, the City of Long Beach as the California Environmental Quality Act (CEQA) lead agency, formally initiated the environmental process for this EIR with circulation of a Notice of Preparation (NOP), which was sent to reviewing agencies and interested individuals. In accordance with CEQA Guidelines Section 15082, the NOP was circulated to the agencies and individuals listed in Appendix A for a period of 32 days, during which time written comments were solicited pertaining to environmental issues/topics that the Draft EIR should evaluate. The State of California Clearinghouse issued a project number for the Draft EIR (SCH No. 2016041007).

The City of Long Beach held a public scoping meeting on April 13, 2016 to present the proposed project and to solicit input from interested individuals regarding environmental issues that should be addressed in this Draft EIR. This meeting was held at 4:30 p.m. at the Cesar E. Chavez Community Center Social Hall, located at 401 Golden Ave, Long Beach, California. The NOP was sent to 84 agencies, organizations and individuals. In addition, the NOP was mailed to 4,430 owners and 8,925 occupants (non owner-occupied) property addresses within approximately 750 feet (ft.) of the project limits to notify the general public about the project and the public scoping meeting. A notice also appeared in the Long Beach Press-Telegram on March 29, 2016 (Attachment A). Issues and concerns raised at the scoping meeting included:

- Increased traffic within the project area, especially in adjacent neighborhoods as a result of the proposed project;
- Cost of the proposed project and where the funding will come from;
- The potential for existing flooding conditions on Maine Ave and Edison Elementary School to worsen due to the proposed project;
- Concern about the loss of access between the west side of Long Beach and Downtown Long Beach because of the removal of the 9$^{th}$ and 10$^{th}$ Street ramps;
- Speed limit of traffic exiting the bridge into the residential area;
- The potential for air quality impacts resulting from construction of the proposed project;
- Noise impacts to marine life caused by the construction of the proposed project; and
- Noise impacts associated with increased traffic through the project area as a result of the proposed project.

The City received 34 written comments to the NOP. These comments included 12 comment letters from the following public agencies and 22 comments from the general public. Attachment B includes the NOP and a summary matrix of the comments received. Copies of the actual comment letters received are included in Attachment C of this memorandum.

- Native American Heritage Commission (NAHC)
- United States Coast Guard (USCG)
- Gabrieleno Band of Mission Indians—Kizhnation
- California Highway Patrol (CHP)
- South Coast Air Quality Management District (SCAQMD)
- Long Beach Water Department (LBWD)
- Los Angeles County Sanitation Districts
- County of Los Angeles Department of Public Works Flood Control
- California State Lands Commission (CSLC)
- Long Beach Unified School District (LBUSD)
- California Department of Transportation (Caltrans)
- United States Fish and Wildlife Service (USFWS)

The agency comments received in response to the NOP include:

- Native American Heritage Commission (NAHC): A standard comment letter to the NOP was issued, which discussed requirements under AB52 consultation. NAHC requires a fourteen day period to provide Notice of Completion and an application/decision to undertake a project. In addition, they requested that the agency must begin consultation within 30 days of receiving a Tribe's request for consultation and before releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report.
- United States Coast Guard (USCG): The USCG indicated that the Los Angeles River conforms to advance approval criteria under Title 33 Code of Federal Regulations, Part 115.70 at the project site. USCG indicated that an individual Coast Guard bridge permit will not be required for the Project. USCG also requested post construction documents, which shall consist of a photograph and as-built plan and elevation drawings of the bridge.
- Gabrieleno Band of Mission Indians- Kizhnation: The Gabrieleno Band of Mission Indians-Kizhnation indicated that the project lies in an area where the Ancestral territories of the Kizh (Kitc) Gabrieleno's villages adjoined and overlapped with each other, at least during the Late Prehistoric and Prehistoric Periods. Therefore, they have requested that one of their certified Native American Monitors to be on site during any and all ground disturbances to protect any cultural resources which may be affected during construction or development.
- South Coast Air Quality Management District (SCAQMD): SCAQMD requested a copy of the Draft EIR all appendices or technical documents related to the air quality and greenhouse gas analyses and electronic versions of all air quality modeling and heath risk assessment files. The SCAQMD staff also requested that the lead agency quantify criteria pollutant

emissions and compare the results to the recommended regional significance thresholds. SCAQMD also recommended that when preparing the air quality analysis for the proposed project, that the lead agency perform a localized analysis by either using LSTs developed by SCAQMD or perform dispersion modeling, as necessary. In addition, SCAQMD requested that in the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment.

- Long Beach Water Department (LBWD): The LBWD stated that they do not have any objections to the proposed scope and contents of the notification. They do, however, have active water and sewer facilities within the project limits and request to be notified for any project conflicts with these facilities.
- Los Angeles County of Sanitation District: The LA County Sanitation District has determined that the proposed project may impact existing and/or proposed Districts' trunk sewers located within the proposed project limits, and therefore, cannot issue a detailed response to or permit construction of the proposed project until project plans and specifications that incorporate Districts' sewer lines are submitted for review. The agency requests the submittal of a detailed map of the proposed limits to the attention of Mr. Michael Tatalovich of the District's Sewer Design Section.
- County of Los Angeles Department of Public Works Flood Maintenance Division (LADPW Flood Control District): LADPW Flood Control District determined that an encroachment permit from their office is required for any encroachment within the Los Angeles River. Therefore, the environmental document must discuss the encroachments to the Los Angeles River along with any applicable mitigation measures if impacts occur. The agency requires that the proposed bridge have sufficient clearance underneath to allow maintenance truck activity to occur along the channel access road. The LADPW Flood Control District requests to review to the approved plans when they become available to assure the proposed bridge improvements do not have any adverse structural effect on their facilities and maintenance activities. Lastly, the LADPW Flood Control District requests that the environmental document provide a schedule of construction activities to avoid potential conflicts with their maintenance activities.
- California State Lands Commission (CSLC): CSLC staff stated that they do not assert jurisdiction at this time. Therefore, no lease or other authorization will be required from the CSLC for the project. CSLC requests that the City of Long Beach prepare a report on the feasibility of providing public access to the waterway, for recreational purposes, and determine if such public access will be provided. CSLC also determined that the subject waterway involved in the project area is subject to a public navigational easement.
- Long Beach Unified School District (LBUSD): LBUSD requests that the EIR contain enough information and analysis to clearly identify impacts to students and schools related to: traffic, noise, air quality, community impacts, Section 4(f), and Right-of-way (ROW) so that appropriate measures can be proposed to avoid or mitigate them. LBUSD requests that the City and Caltrans commit to a process that leads to appropriate mitigation for impacts to schools.
- California Department of Transportation (Caltrans): Caltrans requested to actively participate in the lead agency's CEQA process, review the lead agency's CEQA document, and use that document when making a decision on the project. Caltrans would like the

agency to be aware that they follow Highway Capacity methods to analyze its facilities and requested that the agency refer to their traffic engineers to follow the Caltrans Guide for the Preparation of Traffic Impact Analysis Studies. Caltrans stated that they do not consider the Los Angeles County's CMP criteria alone for the analysis of transportation impacts pursuant to a CEQA review and Caltrans guidelines for the preparation of Traffic Impact Analyses should be followed.

Assuming there is a need for federal money on this proposed project, Caltrans stated that the environmental document will undergo Caltrans Environmental Document Quality Control and NEPA Assignment Review Procedures for environmental documentation. Caltrans noticed that the Initial Study does not include Recreation as an issue area study in the DEIR. However, the NOP does state that Recreation could have potentially significant effects to recreation resources. Caltrans recommended that the DEIR include an in-depth analysis of impacts to recreation resources.

- United States Fish and Wildlife Service (USFWS): USFWS is concerned about the potential impact to migratory birds and would like a description of the proposed project's impacts to migratory birds and their habitats, as well as any conservation measures that will be used to offset impacts to migratory birds to be included in the DEIR. In addition, USFWS would like a description of the proposed project and the environment in the vicinity of the project, from both local and regional perspectives, including all practicable alternatives that have been considered to avoid and/or reduce project impacts to federally listed and other sensitive species and vegetation types to be included in the DEIR.

  USFWS requested the inclusion of specific acreages and descriptions of the types of wetlands, riparian and other sensitive habitats that may be affected by the project alternatives as well as aerial photographs, mapping, and tables to summarize such information and the inclusion of detailed information on the number and distribution of all Federal candidate, proposed, and listed species; State-listed species; and locally sensitive species on or near the project site that may be affected by the proposed project or project alternatives.

  USFWS stated that project information is collected on a sufficiently wide region such that the DEIR addresses the entire project footprint, including borrow and fill sites, staging areas, fuel modification and maintenance zones, and potentially extensive manipulation of adjacent habitat areas, including potential relocation of stretches of the Los Angeles River, as well as areas that may be restored to offset these impacts. USFWS requests that an analysis of cumulative effects from proposed developments in the surrounding area be included in the DEIR. USFWS would like the agency to be aware that there are numerous historic records for the federally endangered Lyon's pentachaeta and salt marsh bird's beak, as well as federal candidate Brand's phacelia in the vicinity of the proposed project. If any suitable remnant habitat occurs within the proposed project footprint, focused plant surveys should be conducted during the appropriate time of year by a qualified botanist.

The remaining 22 comment letters were received from the general public, most of whom are residents of the City of Long Beach. The general public comment letters included 1 letter in support of the project 21 letters neither in support of or opposition to the project and no letters in opposition to the project. The following 19 individuals from the general public have commented on key issues:

- Adreana Langston
- Ann Salas-Rock
- Cheryl Perry
- Crystal West
- Elizabeth Cino
- Elizabeth Mahoney
- Ernie Villa
- Frances Emily Dawson Harris
- Hilda Jurado
- Jennifer Kumiyama
- Kelly Carroll
- Lily Anderson
- Maria Barrientos
- Robert Boydston
- Sean Foster
- Sharon MacNett
- Sheila Gibbons
- Terry Beebe
- Vincent Passanisi

Key issues raised in the NOP public comment letters received were:

- Concern for the potential of increased traffic and refuse truck trips within the project area as a result of the proposed project;
- Concern for the cost of the proposed project and where the funding will come from;
- Concern that the removal of 9$^{th}$ Street and the lack of access to 6$^{th}$ Street will disrupt surrounding residents;
- Concern on how 7$^{th}$ Street traffic will flow if it is a two-way and the impact on the nearby school;
- Request to reserve jobs for the proposed project to Long Beach City residents with a wage of at least $20 per hour;
- Concern about the potential for existing flooding conditions on Maine Ave and Edison Elementary School that may worsen due to the proposed project;
- Concern about the loss of access between the west side of Long Beach and Downtown Long Beach;
- Concern about the speed limit of traffic exiting the bridge into the residential area;
- Concern about the roundabout to potentially cause more accidents from speeding, drunk drivers, etc.;

- Concern for the potential of decreased air quality resulting from construction of the proposed project;
- Support for the increased connectivity within Cesar E. Chavez Park;
- Concern that noise impacts to marine life will occur as a result of the construction of the proposed project;
- Concern about noise impacts associated with increased traffic through the project area;
- Requests that if the existing bridge is used for recreation, it should be ADA compliant;
- Requests for continued or similar access to and from Seaside Way to Shoreline Drive/Shoemaker Bridge/I-710 on ramp facilities.
- Concerns with the impact the park improvements will have on parking and noise in surrounding neighborhoods.

HDR is requesting confirmation from the City that all NOP comment letters have been received. In addition, HDR is requesting that the City review the responses to the issues raised as summarized within the NOP Comments/Response Summary Matrix in Attachment B.

Attachments: Attachment A: Long Beach Press Telegram Posting

Attachment B: NOP Comments/Response Summary Matrix

Attachment C: NOP Comment Letters

**Long Beach Press-Telegram**
727 Pine Avenue
Long Beach, CA 90844
562-499-1236
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legals@presstelegram.com

(Space below for use of County Clerk Only)

5007769

Legal No. **0010785313**

CITY OF LB/PLAN DEPT
PORTIA SMITH
333 W OCEAN BL 4TH FL
LONG BEACH, CA 90802

# PROOF OF PUBLICATION
# (2015.5 C.C.P.)

## STATE OF CALIFORNIA
## County of Los Angeles

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principle clerk of the printer of the Long Beach Press-Telegram, a newspaper of general circulation, printed and published daily in the City of Long Beach, County of Los Angeles, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of County of Los Angeles, State of California, on the date of March 21, 1934, Case Number 370512. The notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

**03/29/2016**

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Executed at Long Beach, LA Co. California,
this 5th day of April, 2016.

Signature

The Long Beach Press-Telegram, a newspaper of general circulation, is delivered to and available in but not limited to the following cities: Long Beach, Lakewood, Bellflower, Cerritos, Downey, Norwalk, Artesia, Paramount, Wilmington, Compton, South Gate, Los Alamitos, Seal Beach, Cypress, La Palma, Lynwood, San Pedro, Hawaiian

## NOTICE OF PREPARATION AND SCOPING MEETING

**TO:** Responsible, Trustee, and Federal Agencies, Organizations, and Interested Parties

**SUBJECT:** Notice of Preparation of a Draft Environmental Impact Report in Compliance with Title 14, Sections 15082(a), 15103, and 15375 of the California Code of Regulations Pursuant to Public Resources Code Section 21165 and the Guidelines for the California Environmental Quality Act (CEQA) Section 15050, the City of Long Beach is the Lead Agency responsible for preparation of an Environmental Impact Report (EIR) addressing potential impacts associated with the project identified below.

**PROJECT TITLE:** Shoemaker Bridge Replacement Project

**PROJECT LOCATION:** The Shoemaker Bridge Replacement Project is located at the southern end of Interstate 710 (I-710) in the City of Long Beach and is bisected by the Los Angeles River (LA River).

**PROJECT DESCRIPTION:** The City of Long Beach (City) will prepare an Environmental Impact Report (EIR) for the proposed Shoemaker Bridge Replacement Project (project). The Shoemaker Bridge Replacement Project (proposed project) is an Early Action Project of the Interstate 710 (I-710) Corridor Improvement Project. A detailed project description and summary of the potential environmental effects are provided below.

**AGENCIES:** The purpose of this notice is to serve as a Notice of Preparation (NOP) of an EIR pursuant to the State CEQA Guidelines Section 15082, and solicit comments and suggestions regarding the scope and content of the EIR to be prepared for the proposed project. Specifically, the City of Long Beach (the City) requests input on the environmental information that is germane to your agency's statutory responsibility in connection with the proposed project. Your agency may rely on the Draft EIR prepared by the City when considering permits or other approvals for this project.

**ORGANIZATIONS AND INTERESTED PARTIES:** The City of Long Beach requests your comments and concerns regarding the proposed scope and content of the environmental information to be included in the EIR.

**PUBLIC REVIEW PERIOD:** This NOP is available for public review and comment pursuant to California Code of Regulations, Title 14, Section 15082(b). The public review and comment period during which the City of Long Beach will receive comments on the NOP for this proposed project is:

| | |
|---|---|
| Beginning: | Friday, April 1, 2016 |
| Ending: | Monday, May 2, 2016 at 4:30 pm |

The City is holding a public scoping meeting to provide information about the project, a summary of the environmental process and issues addressed, and to receive input regarding the environmental issues and suggested scope and content of the EIR.

A copy of the Initial Study is not attached.

**PUBLIC SCOPING MEETING:**

| | |
|---|---|
| When: | Wednesday, April 13, 2016 |
| Time: | 4:30 PM to 7:30 PM |
| Where: | Cesar Chavez Park Community Center Social Hall<br>401 Golden Avenue<br>Long Beach, California 90802 |

THE NOP AND INITIAL STUDY ARE AVAILABLE FOR PUBLIC REVIEW AT THE FOLLOWING LOCATIONS:

City Hall, 333 W. Ocean Boulevard, 9th Floor
Long Beach Main Library, 101 Pacific Avenue
Online at: shoemakerprojectlb.com

Due to the time limits mandated by state law, your response must be sent at the earliest possible date but no later than 30 days after receipt of this notice.

**RESPONSES AND COMMENTS:** Please list a contact person for your agency or organization, include U.S. mail and email addresses, and send your comments to:

Contact: Traci Gleason
Public Works Department
City of Long Beach
333 W. Ocean Boulevard, 9th Floor
Long Beach, CA 90802
Or via email to: info@shoemakerprojectlb.com

**ADDITIONAL PROJECT DESCRIPTION:** The City, in cooperation with Caltrans, is proposing to replace the Shoemaker Bridge (West Shoreline

Caltrans, is proposing to replace the Shoemaker Bridge (West Shoreline Drive) in the City of Long Beach, California. The Shoemaker Bridge Replacement Project (proposed project) is an Early Action Project of the Interstate 710 (I-710) Corridor Improvement Project and is located at the southern end of I-710 in the City of Long Beach and is bisected by the Los Angeles River.

The purpose of the proposed project is to:

- Improve existing traffic safety and operations;
- Increase multi-modal connectivity within the project limits and surrounding area;
- Enhance Complete Streets elements by providing bicycle, pedestrian, and streetscape improvements on major thoroughfares; and
- Address non-standard features and design deficiencies.

Three alternatives, a No Build Alternative (Alternative 1), and two Build Alternatives (Alternatives 2 and 3) are being evaluated as part of the proposed project. Both Alternatives 2 and 3 will replace the existing Shoemaker Bridge over the Los Angeles River with a new bridge located just south of the existing bridge. Both Alternatives will include the evaluation of design options for a roundabout or a "Y" intersection at the easterly end of the bridge. The primary difference between Alternatives 2 and 3 is that Alternative 2 provides for the re-purposing of the existing bridge for non-motorized transportation and recreational use and Alternative 3 includes removal of the existing bridge.

Alternatives 2 and 3 will also provide improvements to associated roadway connectors to downtown Long Beach and along West Shoreline Drive from I-710. Improvements include the realignment of the existing West Shoreline Drive in downtown Long Beach to facilitate the City's future planned expansion of the Cesar E. Chavez and Drake Parks. Both alternatives include improvements along I-710 from just south of Anaheim Street to just south of West Shoreline Drive.

Under Alternatives 2 and 3, proposed street improvements are also anticipated along West Shoreline Drive, 3rd Street, 6th Street, 7th Street, Ocean Boulevard, and Broadway Avenue. The proposed project will also evaluate potential improvements along Magnolia Ave. and Anaheim Street. The proposed street improvements may include additional street lighting, re-striping, turn lanes, bicycle, pedestrian, and streetscape improvements. Additionally, as an early action project of the I-710 Corridor Improvement Project, Alternatives 2 and 3 will evaluate the impacts from the closure of the 9th and 10th Street ramp connections into downtown Long Beach.

Although most of the improvements and construction would occur within the existing Caltrans or City of Long Beach right-of-way, acquisition of property and easements from the Los Angeles County Flood Control District (LACFCD) will be required.

The proposed project is included in the Final 2015 Federal Transportation Improvement Program (FTIP) and the Southern California Association of Government's (SCAG) 2012 Regional Transportation Plan (RTP) for Los Angeles County as Project ID: LAOG830.1, the project description provided in the FTIP and RTP states the following:

I-710 Improvements/Shoemaker Bridge - Downtown Exits. The project makes bicycle, pedestrian, and streetscape improvements on major thoroughfares.

**PROBABLE ENVIRONMENTAL EFFECTS OF THE PROJECT:** Based on the findings of the Initial Study, the proposed project could have potentially significant impacts on the following environmental factors:

Aesthetics/Visual
Biological Resources
Geology & Soils
Hazards and Hazardous Materials
Land Use & Planning
Public Services
Traffic and Circulation
Air Quality
Cultural Resources
Greenhouse Gas Emissions
Hydrology and Water Quality
Noise
Recreation
Utilities & Service Systems

**Pub March 29, 2016 (1t) PT (785313)**

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**NOP Comments/ Response Summary Matrix- Agency Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Agency Comments | Response |
|---|---|---|---|---|
| Native American Heritage Commission | April 6, 2016 | Cultural | In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE). | Historical resources present in the APE will be evaluated within the HPSR in support of the Draft ED. |
| | | | If the Project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18. | The proposed project does not propose the adoption or an amendment to a general plan or specific plan. Therefore, SB 18 does not apply. |
| | | AB52 | The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect cultural resources. | The AB 52 process was initiated within 14 days of the release of the NOP to all tribes listed on the City's contact list. |
| | | | Requires fourteen day period to provide Notice of Completion of an application/decision to undertake a project. | As stated previously, a notice to initiate AB 52 consultation was issued to all tribes listed on the City's contact list within 14 days of the release of the NOP. |
| | | | Must begin consultation within 30 days of receiving a Tribe's request for consultation and before releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report. | The City recognizes that consultation for AB 52 must begin within 30 days of receiving a Tribe's request for consultation and prior to releasing the Environmental Impact Report. |
| | | | Mandatory topics of consultation if requested by a tribe: alternatives to the project; recommended mitigation measures and; significant effects. | The City recognizes that mandatory topics of consultation (if requested by a tribe) include: alternatives to the project, recommended mitigation measures, and significant effects. |
| | | | Information submitted by a tribe during the environmental review process must be confidential. | The City has noted that the information submitted by a tribe during the environmental review process must be confidential. |

**NOP Comments/ Response Summary Matrix- Agency Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Agency Comments | Response |
|---|---|---|---|---|
| | | | If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following: whether the proposed project has a significant impact on an identified tribal cultural resource and whether feasible alternatives or mitigation measures avoid or substantially lessen the impact on the identified tribal cultural resource. | The City has noted that if there is a significant impact on a tribal cultural resource, the Draft ED will discuss whether the proposed project has a significant impact on an impact on an identified tribal cultural resource and whether feasible alternatives or mitigation measures avoid or substantially lessen the impact on the identified tribal cultural resource. |
| | | | Consultation with a tribe shall be considered concluded when with of the following occurs: the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. | The City acknowledges that consultation is considered concluded when the parties agree to measures to mitigate or avoid significant effect if it exists on a tribal cultural resource in good faith and employing reasonable effort if a mutual agreement cannot be reached. |
| | | | Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code Section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code Section 21082.3, Subdivision (b), Paragraph 2, and shall be fully enforceable. | Any mitigation measures agreed upon during AB 52 consultation will be included in the environmental document, and adopted in the mitigation, monitoring, and reporting program, as requested. |
| | | | Required consideration of feasible mitigation. | The City acknowledges that it is required to consider feasible mitigation. |
| United States Coast Guard | April 8, 2016 | Water and Hydrology | The Commandant has given approval to the location and plans of bridges to be constructed across reaches of waterways considered navigable, but not actually navigated by other than logs, log rafts, rowboats, canoes and small motorboats. We have determined that the Los Angeles River conforms to advance approval criteria under Title 33 Code of Federal Regulations, Part 115.70 at the project site. | The City acknowledges the US Coast Guard's role and requirements under Title 33 Code of Federal Regulations, Part 115.70 at the project site. |

**NOP Comments/ Response Summary Matrix- Agency Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Agency Comments | Response |
|---|---|---|---|---|
| | | Water and Hydrology | An individual Coast Guard bridge permit will not be required for this project (COMDTINST 16590.5C) This does not relieve the applicant from complying with all applicable federal, state and local laws and associated permit requirements. | The City acknowledges that an individual Coast Guard bridge permit will not be required for this project. However, the project will still need to comply with all applicable federal, state and local laws and associated permit requirements. |
| | | Review Period | This review is valid for a period of 3 years from the date of this letter. If the character of navigation changes, such that the waterway no longer meets advance approval criteria, the Coast Guard will promptly withdraw the advance approval designation for this project and notify all interested parties. | The City acknowledges the US Coast Guard review period and that if the project changes where the waterway no longer meets advance approval criteria, the Coast Guard will promptly withdraw the advance approval designation for this project and notify all interested parties. |
| | | Construction | All portions of the replaced bridge not used as part of this project, shall be removed completely from the waterway, or down to an elevation determined by the USACE and disposed of properly. | The City acknowledges that the replaced bridge (if not preserved for non motorized/recreational use) shall be properly removed. |
| | | Request for Post Construction Documents | A photograph and as-built plan and elevation drawings of the bridge, in 8 1/2 x 11 inch format, are required upon completion of the project. The drawings must indicate the elevation of the lowest hittable part of the bridge above mean high water or high water flow, whichever is applicable. | The City understands that a photograph and as-built plan and elevation drawings of the bridge in 8 1/2 x 11 inch format will be provided to the US Coast Guard upon completion of the project. The drawings will indicate elevation of the lowest hittable part of the bridge above mean high water or high water flow, whichever is applicable. |
| Gabrieleno Band of Mission Indians-Kizhnation | April 11, 2016 | Cultural | Project lies in an area where the Ancestral territories of the Kizh (Kitc) Gabrieleno's villages adjoined and overlapped with each other, at least during the Late Prehistoric and Prehistoric Periods. | The City understands and acknowledges that ancestral territories of the Kizh Gabrieleno's villages lies in the area. |

**NOP Comments/ Response Summary Matrix- Agency Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Agency Comments | Response |
|---|---|---|---|---|
| | | Cultural | Due to the project location and the high sensitivity of the area location, we would like to request one of our certified Native American Monitors to be on site during any and all ground disturbances to protect any cultural resources which may be affected during construction or development. | The City acknowledges that the tribe is stating that there is high sensitivity in the area location and is requesting that one of your certified Native American Monitors to be on site during any and all ground disturbances. |
| South Coast Air Quality Management District (SCAQMD) | April 26, 2016 | Request for DEIR Copy | Please send the SCAQMD a copy of the Draft EIR upon its completion. In addition, please send with the DEIR all appendices or technical documents related to the air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files. These include original emission calculation spreadsheets and modeling files (not Adobe PDF files). Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period. | The SCAQMD has been included on the mailing list of the Draft EIR. The Draft EIR document and appendices will be available electronically on the City's website. |
| | | Air Quality | The SCAQMD staff requests that the lead agency quantify criteria pollutant emissions and compare the results to the recommended regional significance thresholds (website provided in letter). In addition to analyzing regional air quality impacts, the SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds. When preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized analysis by either using LSTs developed by SCAQMD or performing dispersion modeling as necessary. | The City will consider the analysis of LSTs as part of the environmental document. |
| | | Air Quality | In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. | The City will consider preparing a limited mobile source health risk assessment. |
| | | Air Quality | In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. | The City acknowledges that the SCAQMD is requesting that all feasible mitigation measures be incorporated in the event the project generates significant adverse air quality impacts. |
| Long Beach Water Department (LBWD) | April 27, 2016 | Support | The LBWD does not have any objections to the proposed scope and contents of the notification. | The City acknowledges that LBWD does not have an objections to the proposed scope and contents of the NOP. |

**NOP Comments/ Response Summary Matrix- Agency Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Agency Comments | Response |
|---|---|---|---|---|
| | | Request for Notification | LBWD has active water and sewer facilities within the project limits. LBWD shall be notified for any project conflicts with these facilities. | The City understands and will notify LBWD in the event the proposed project conflicts with known LBWD facilities. |
| Los Angeles County of Sanitation District | April 26, 2016 | Utilities | The proposed project may impact existing and/or proposed Districts' truck sewers located within the proposed project limits. Existing and proposed Districts' trunk sewers are located directly under and/or cross directly beneath the proposed project limits. The Districts cannot issue a detailed response to or permit construction of the proposed project until project plans and specifications that incorporate Districts' sewer lines are submitted for review. In order to prepare these plans, you will need to submit a detailed map of the proposed project limits to the attention of Mr. Michael Tatalovich of the District's Sewer Design Section. The Districts will then provide you with the plans for all Districts' facilities that will be impacted by the proposed project. Then, when revised plans that incorporate the Districts' sewers have been prepared, submit copies of the same for Districts' review and comment. | The City acknowledges that the proposed project may impact the Los Angeles County Sanitation District (LACSD) facilities. The City understands that the LACSD cannot issue a detailed response to or permit construction until project plans and specification that incorporate existing LACSD sewer lines are submitted for review. A detailed map of the proposed project limits will be sent to the attention of Mr. Tatalovich for review and comment, as requested. |
| | | Utilities | The Districts maintain sewage facilities within the project area that may be affected by the proposed project. Approval to construct improvements within a Districts' sewer easement and/or over or near a Districts' sewer is required before construction may begin. | The City understands that the LACSD has sewage facilities within the project area that may be affected by the proposed project and the approval to construct the proposed project improvements within LACSD's sewer easements or new LACSD's sewers are required before construction can occur. |
| County of Los Angeles Department of Public Works | April 29, 2016 | Request to Review DED | Would like to review the EIR when it becomes available. | The County of Los Angeles Public Works (LA County DPW) has been added to the mailing list for the ED. When the Draft ED is available for public review, LA County DPW will be notified. |

**NOP Comments/ Response Summary Matrix- Agency Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Agency Comments | Response |
|---|---|---|---|---|
| | | Drainage/Hydro | An encroachment permit from the LA County Flood Control District is required for any encroachment within the Los Angeles River. The environmental document must discuss the encroachments to the Los Angeles River along with any applicable mitigation measures. | The City understands that an encroachments permit from the LA County Flood Control District is required for any encroachment within the LA River. The ED will address encroachments into the LA River and provide any applicable mitigation measures, if necessary. |
| | | Design/Engineering | The proposed bridge must have sufficient clearance underneath to allow maintenance truck activity to occur along the channel access road. Clearances shall be discussed in the environmental document. | The PDT team will take this requirement for sufficient clearance underneath the bridge during the design of the proposed project and it will be discussed within the Draft ED. |
| | | Design/Engineering | The LACFCD would need to review the approved plans when they become available to assure the proposed bridge improvements do not have any adverse structural effect on the LACFCD facilities maintenance activities. The EIR shall discuss this. | The PDT team will allow LACFCD the opportunity to review the approved plans when available. The proposed bridge improvements will be discussed within the Draft ED as well as the Draft Project Report. |
| | | Request | The environmental document must provide a schedule of construction activities to avoid any potential conflicts with LACFCD maintenance activities. | The environmental document will provide a brief estimated schedule for construction of the proposed project. The proposed project will make every effort to avoid potential conflicts with LACFCD maintenance activities. |
| California State Lands Commission | April 26, 2016 | General | Based on a review of the project location as shown in the NOP and DEIR and in-house records, CSLC staff does not assert jurisdiction at this time. Therefore, no lease or other authorization will be required from the CSLC for the Project. | The City appreciates the determination by CSLC regarding the assertion of jurisdiction over the proposed project. |
| | | Design/Engineering | The Legislature has provided for a process to be followed regarding promoting access at bridge construction sites in the California Streets and Highways Code, at Section 1809. Pursuant to Section 1809, during the design hearing process, the City of Long Beach is required to prepare a report on the feasibility of providing public access to the waterway, for recreational purposes, and determine if such public access will be provided. | The City acknowledges that it will be required to prepare a report on the feasibility of providing public access to the waterway for recreational purposes, and determine if such public access will be provided. |

**NOP Comments/ Response Summary Matrix- Agency Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Agency Comments | Response |
|---|---|---|---|---|
| | | Engineering/Design/ROW/Hydrology | The subject waterway involved in the Project area is subject to a public navigational easement. | The City acknowledges that the proposed project is subject to a public navigational easement. |
| | | Engineering/Design/Hydrology | The Proposed Project activities must not restrict or impede the navigation and recreational rights of the public. | The City understands that the proposed project cannot restrict or impede navigation and recreational rights of the public. |
| Long Beach Unified School District | May 2, 2016 | Traffic/Noise/Air Quality/Community Impacts | Impacts to schools and students should not be improperly minimized or ignored. It was noted that Shoemaker NOP fails to properly identify school (Institutional) land uses in the "Surrounding Land Uses and Setting" Section. The Shoemaker Project will bring significant amounts of traffic to areas immediately adjacent to schools and cause long-term impacts, particularly during the construction period. It is requested that the EIR contain enough information and analysis to clearly identify those impacts to students and schools, so that appropriate measures can be proposed to avoid or mitigate them. | The ED will identify school land uses and analyze the amounts of traffic to areas immediately adjacent to schools and identify any short-term impacts and long-term impacts. If impacts are identified within the ED, the appropriate avoidance, minimization, and mitigation measures will be incorporated in the ED. |
| | | Traffic/Noise/Air Quality/Community Impacts | Since the Shoemaker Project's impacts to schools will likely be substantial, the Project must include mitigation measures to reduce the impacts to schools and children to the greatest extent possible. The District requests that the City and Caltrans commit to a process that leads to appropriate mitigation for impacts to school. | The project is not capacity enhancing and the improvements to local streets are not anticipated to create significant impacts. However, in the event that impacts are anticipated, avoidance, minimization, and mitigation measures will be implemented within the ED. |
| | | Air Quality | The EIR should provide the documentation to support its air quality analyses, and to lay out the bases of the various assumptions that will be used. | There will be Air Quality Analysis Report (AQAR) that will analyze potential air quality impacts as a result of the proposed project. |
| | | HRA/Air Quality/ Community Impacts (Recreational Resources) | The EIR should comprehensively identify, thoroughly explain, and appropriately mitigate any increased cancer risk levels at the two schools adjacent to the Project. The EIR should evaluate a range of potential mitigation measures specifically designed to address impacts to schools and students, including but not limited to: (1) installation of high efficiency HVAC filtration systems; (2) provision of replacement high efficiency filters; (3) development of indoor recreation facilities; (4) support for alternative recreation areas and opportunities; and (5) funding for the District to develop and implement additional appropriate mitigation measures to reduce impacts to schools. | The City will take into consideration potential mitigation measures as suggested in the event that air quality impacts exist as a result of the proposed project. |

**NOP Comments/ Response Summary Matrix- Agency Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Agency Comments | Response |
|---|---|---|---|---|
| | | ROW/Section 4(f) | The District would like the Shoemaker EIR to contain sufficient information addressing the fact that construction of the Project could cause significant impacts to Cesar ES. Project operation also will impact Cesar ES. The Shoemaker EIR should identify and describe mitigation to reduce the significant and permanent adverse impact to the school that will result from any taking of the property in which the school will suffer a loss of much needed physical education property. The District should be consulted during the Shoemaker Project environmental review in order to resolve these concerns. | Impacts to Cesar Chavez Elementary School will be discussed in the ED. If impacts are identified, the appropriate avoidance, minimization, and mitigation measures will be incorporated in the ED. |
| | | Air Quality/HRA/Noise/Community Impacts/Traffic | The magnitude of significant air, noise, traffic and health impacts at specific school sites- i.e., Chavez ES and Edison ES- under worst case construction conditions should be analyzed and reported in the Shoemaker EIR. For example, the District requests that the EIR include an estimate of the localized noise levels- both exterior and interior- during each stage, phase, and sub-phase of the Project's construction at each pertinent District school site (Chavez ES and Edison ES). The EIR should also evaluate and require measures to mitigate significant impacts, as appropriate, including but not limited to: (1) traffic measures designed specifically to reduce impacts to school-age children; (2) sound barriers (e.g., new windows, doors, building insulation) along with any HVAC upgrades necessary for the sound barriers to be effective; (3) operational controls (e.g., schedule noisy construction activities to avoid school operational hours and testing periods); (4) system improvements to mitigate air quality impacts (e.g., high efficiency air filtration systems, replacement filters, provisions of indoor or alternative recreation facilities and areas); and (5) funding for the District to develop and implement additional appropriate mitigation measures to mitigate construction impacts to school. | The AQAR will analyze the impacts of the proposed project on sensitive receptors, which may include Cesar Chavez Elementary School and Edison Elementary School during construction. In addition, the Traffic Analysis will identify impacts related to traffic and circulation as a result of the proposed project. If impacts are identified in the AQAR or the Traffic Analysis, the appropriate avoidance, minimization, and mitigation measures will be identified in the ED. |
| | | ROW | Figure 1-1 in the NOP shows project limits; however, the scale doesn't clearly indicate whether project limits are adjacent to or overlapping with District property (Chavez ES and Edison ES). The City and/or Caltrans should discuss with the District the potential temporary or permanent acquisition of any District property. | A detailed project limits figure identifying any temporary or permanent impacts areas will be provided within the ED. Any impacts to schools will be identified within the ED. |
| | | Section 4(f) | The District should be included in the Section 4(f) consultation for this Project as a local agency having jurisdiction over part of Chavez Park, pursuant to the District's Reciprocal Use Agreement with the City of Long Beach for that part of Chavez Park adjacent to Chavez Elementary School. The District must be included in any further consultations regarding Chavez Park, and adequate mitigation must be provided, so that student access to recreation is not adversely affected. | The District will be included in Section 4(f) discussion in regards to the improvements to Cesar Chavez Park. |
| | | Air Quality/Noise/HRA/Traffic Community Impacts | The District's participation is necessary in order to develop and implement mitigation measures to reduce impacts to students and staff to a less than significant level. The District request that the City and Caltrans coordinate with the District before finalizing the EIR, and before designing and implementing construction activities, to avoid air quality, traffic, health risk, noise, and other impacts to District facilities, students, and staff. | The City will engage the District early on to understand the concerns in regards to the proposed project. |

**NOP Comments/ Response Summary Matrix- Agency Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Agency Comments | Response |
|---|---|---|---|---|
| California Department of Transportation | April 27, 2016 | Request | Caltrans must actively participate in the lead agency's CEQA process, review the lead agency's CEQA document, and use that document when making a decision on the project. | The City acknowledges that the Caltrans is a Responsible agency under CEQA and will review the City's CEQA document when making a decision on the project. |
| | | Safety | Caltrans has updated the Highway Design Manual (HDM) to incorporate Complete Street policies. | The City acknowledges that Caltrans has an updated Highway Design Manual to incorporate Complete Street policies and the project will be consistent with these HDM policies. |
| | | Traffic | Noted a traffic impact analysis will be prepared. Please be aware that Caltrans follows Highway Capacity methods to analyze its facilities. Please refer traffic engineers to follow the Caltrans Guide for the Preparation of Traffic Impact Analysis Studies. | The Traffic Analysis Report prepared for the proposed project will be consistent with the Highway Capacity Manual requirements. The Caltrans Guide for the Preparation of Traffic Impact Analysis Studies will be followed for the proposed project. |
| | | Traffic | Although the lead agency is required to comply with Los Angeles County Congestion Management Program (CMP) standards and thresholds of significance, Caltrans does not consider the Los Angeles County's CMP criteria alone for the analysis of transportation impacts pursuant to a CEQA review. Caltrans' Guide directs preparers of traffic impact analysis to consult with the local District as early as possible to determine the appropriate requirements and criteria of significance to be used in the traffic impact analysis. | The City acknowledges that the Traffic Impact Analysis will need to include not only the LA County's CMP criteria, but the Caltrans' Guide for Traffic Analysis, as well. The Traffic Impact Analysis will be provided to Caltrans for review and approval. |
| | | Funding | Assuming there is a need for federal money on this proposed project, Caltrans will perform Environmental Document Quality Control and NEPA Assignment Review Procedures for environmental documentation. | Caltrans is identified as the NEPA lead on the proposed project and it is anticipated that Caltrans will review and approve the environmental document under NEPA Assignment. |

**NOP Comments/ Response Summary Matrix- Agency Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Agency Comments | Response |
|---|---|---|---|---|
| | | Recreation | The IS does not include Recreation as an issue area for study in the DEIR. However, the NOP does state that Recreation could have potentially significant impacts. Caltrans believes the proposed project may potentially have significant effects to recreation resources, particularly since Alternative 2 provides for the re-purposing of the existing bridge for non-motorized transportation and recreational use, as well as the potential reconfiguration of Cesar Chavez Park. Accordingly, we recommend the DEIR include an in-depth analysis of impacts to recreation resources. | The ED will identify impacts to recreational resources. Improvements to Cesar Chavez Park may be potentially significant as a Section 4(f) Resource and it will be discussed and evaluated further within the ED. In addition, the alternative proposing the repurposing of the existing bridge for recreational purposes will also be evaluated in the ED. |
| United States Fish and Wildlife Service | May 24, 2016 | Biology | Concerned about the potential to impact migratory birds. The Los Angeles River, from its mouth to Interstate 105, and to a lesser extent to State Route 60, is the premier spot in Los Angeles County for migrant shorebirds with single day counts number up to 15,000 individuals. Black-necked stilts, American avocets, and killdeer are known to nest in the river channel, and western sandpipers, long-billed dowitchers, pintails, and teal also use the areas in abundance. Due to large numbers of migratory birds, raptors such as peregrine falcons use the area extensively to forage, and brown pelicans use the river mouth to loaf and bathe. The federally endangered snowy plover are also known to occur nearby. The U.S. Fish and Wildlife Service would like a description of the proposed project's impacts to migratory birds and their habitats, as well as any conservation measures that will be used to offset impacts to migratory birds to be included in the DEIR. | The Natural Environment Study (NES) and the Draft ED will address potential impacts to migratory birds. A full description of impacts to migratory birds and their habitats as well as any conservation measures that will be used to offset impacts to migratory birds will be included in the DEIR, as requested. |
| | | Biology | Please include a description of the proposed project and the environment in the vicinity of the project, from both local and regional perspectives, including all practicable alternatives that have been considered to avoid and/or reduce project impacts to federally listed and other sensitive species and vegetation types. | The NES, Jurisdictional Delineation (JD), and Draft ED will have a description of the proposed project and the environment in the vicinity of the project from both local and regional perspectives, including all practicable alternatives that have been considered to avoid and/or reduce project impacts to federally listed and other sensitive species and vegetation types. |

**NOP Comments/ Response Summary Matrix- Agency Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Agency Comments | Response |
|---|---|---|---|---|
| | | Biology | Include specific acreages and descriptions of the types of wetlands, riparian and other sensitive habitats that may be affected by the project alternatives as well as aerial photographs, mapping, and tables to summarize such information. | Acreages and descriptions of types of wetlands, riparian and other sensitive habitats that may be affected by the project alternatives, as well as aerial photographs and mapping, and tables summarizing this information will be provided within the NES as well as the Draft ED. |
| | | Biology | Include detailed information on the number and distribution of all Federal candidate, proposed, and listed species; State-listed species; and locally sensitive species on or near the project site that may be affected by the proposed project or project alternatives. | Detailed information regarding the number and distribution of all Federal candidate, proposed, and listed species; State-listed species; and locally sensitive species on or near the project site that may be affected by the proposed project or project alternatives will be provided in the NES as well as the Draft ED. |
| | | Biology | Ensure that project information is collected on a sufficiently wide region such that the DEIR addresses the entire project footprint, including borrow and fill sites, staging areas, fuel modification and maintenance zones, and potentially extensive manipulation of adjacent habitat areas, including potential relocation of stretches of the Los Angeles River, as well as areas that may be restored to offset these impacts. | The project information will be collected on a sufficiently wide region so that project impacts will evaluated will include the project footprint, borrow and fill sites, staging areas, and fuel modification and maintenance zones. |
| | | Biology | Please include an analysis of cumulative effects from proposed developments in the surrounding area. | A cumulative analysis from proposed developments in the surrounding area will be analyzed in the Draft ED. |
| | | Biology | Please be aware that there are numerous historic records for the federally endangered Lyon's pentachaeta and salt marsh bird's beak, as well as federal candidate Brand's phacelia in the vicinity of the proposed project. If any suitable remnant habitat occurs within the proposed project footprint, focused plant surveys should be conducted during the appropriate time of year by a qualified botanist. | The City acknowledges that there are numerous historic records for the federally endangered Lyon's pentachaeta and salt marsh bird's beak, as well as federal candidate Brand's phacelia in the vicinity of the proposed project. If an suitable remnant habitat is observed during biological surveys for the proposed project, additional focused plant survey will be conducted. |

**NOP Comments/ Response Summary Matrix- Public Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Public Comments | Response |
|---|---|---|---|---|
| Adreana Langston | 4/13/2016 | Opinion | Would like the Request for Proposal (RFP) for the contractors to include a clause that states the contractor has to have a plan to ensure that 60% of the construction jobs resulting from the proposed project will be given to Long Beach residents and those workers will be paid at least $20 per hour. | The City will take this comment into consideration at the time the construction contract RFP will be issued. |
| Adreana Langston (2) | 4/13/2016 | Utilities | Concern about the flooding due to drainage affecting Emerald Villas at 555 Maine Ave and Edison Elementary School. | The City will consider flood impacts as a result of the proposed project within the proposed project limits. Currently, Emerald Villas at 555 Main Avenue and Edison Elementary School are outside the project limits. However, if during the impacts analysis there are indirect impacts related to these specific properties, the EIR will evaluate these impacts and recommend measures to avoid, minimize, or mitigate these impacts if they should occur. |
| Illegible Name | 4/13/2016 | Opinion | Proposed to fill the 'dead' space in the center of the roundabout with "LAX style" colored poles with fountains on top. | The City will take in consideration of the design input. |
| Ann Salas-Rock | 4/13/2016 | Opinion | Request that 60% of employees hired on for the construction of the project be local Long Beach workers. | The City will take this request into consideration upon the issuance of the construction contract. |
| Ann Salas-Rock (2) | 4/13/2016 | Air Quality | Wondering if the project will increase the air pollution in the area. If so, what is the projection when the project is built? | The air quality for the proposed project will be evaluated in our environmental document. |
| Maria Barrientos | 4/13/2016 | Traffic | Concern about the speed limit and traffic exiting into the residential area. | The speed limit and traffic exiting into the residential area will be evaluated in our traffic study and considered in our project design. |
| | | Noise | Concern about the level of noise that would come from the proposed project, specifically with the levels of traffic. | Noise impacts will be evaluated in our Noise Study Report. |
| Frances Emily Dawson Harris | 4/13/2016 | Noise/Biology | Concern about the potential for excessive, loud, repetitive sounds affecting the marine life in the surrounding ocean waters. Suggests the collaboration with a marine biologist to analyze impacts. | Noise impacts for qualified sensitive receptors will be evaluated in the Noise Study Report for the proposed project. Impacts to marine life will be evaluated within the biological assessment in the Natural Environment Study (NES). |

**NOP Comments/ Response Summary Matrix- Public Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Public Comments | Response |
|---|---|---|---|---|
| | | Air Quality/Biology/Water Quality | Concern about an increase in greenhouse gas emissions, specifically CO2, which increases the acidity of the water and lowers the pH of the water, effecting marine life. | Greenhouse gas emissions will be evaluated within the Air Quality Assessment Report for the proposed project. Impacts related to marine life will be evaluated in the Natural Environment Study (NES). |
| Elizabeth Cino | 4/13/2016 | Opinion | Suggests the proposed Shoemaker Bridge look like the new Desmond Bridge. | The City will take into consideration this opinion on the project when developing design concepts for the bridge. |
| Ernie Villa | 4/13/2016 | Community Impacts (Recreational Resources) | Wondering about how the expanded park proposal will benefit the community. | The expansion of facilities at Cesar Chavez park and the benefits to the community will be evaluated within the Community Impact Assessment (CIA) for the proposed project as well as in the Draft Environmental Document (Draft ED). |
| Crystal West | 4/13/2016 | Recreational Facility | Wondering if there will be a dedicated park law service. If so, will it be on-site and 24/7? | Cesar Chavez Park is not a State Park, it is a local City park, and therefore there it is not anticipated that dedicated park law enforcement service will be available on-site 24 hours a day/7 days a week. |
| Kelly Carroll | 4/13/2016 | Traffic/Safety/Design/Engineering | Concern about the elevated roundabout causing accidents from drivers speeding around it. | The safety of the roundabout proposed for the project will be evaluated in the Traffic Impact Study. |
| | | Opinion | Prefers the existing bridge be used for recreation. | The City appreciates this opinion and will consider this during the Project Development Team's final decision regarding the Preferred Alternative. |
| Terry Beebe | 4/13/2016 | Opinion | Prefers the existing bridge be used for recreation. | The City appreciates this opinion and will consider this during the Project Development Team's final decision regarding the Preferred Alternative. |
| Cheryl Perry | 4/13/2016 | Opinion | Prefers the existing bridge be used for recreation. | The City appreciates this opinion and will consider this during the Project Development Team's final decision regarding the Preferred Alternative. |

**NOP Comments/ Response Summary Matrix- Public Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Public Comments | Response |
|---|---|---|---|---|
| | | Traffic, Opinion | Concern about how 7th Street traffic will flow if it is a two-way street and how it will affect the school. Suggests keeping or building a pedestrian bridge across 7th Street. | The traffic impacts related to converting 7th Street from a one-way street to a two-way street and how it will affect the school will be evaluated in the Traffic Impact Analysis for the proposed project. The suggestion to keep it a one-way street or build a pedestrian bridge across 7th Street will be considered. |
| | | Opinion, Traffic | Would like to see signage entering Long Beach via 7th on Broadway and also signage leaving Long Beach. | This suggestion will be taken into consideration by the City during the design of the proposed project. |
| Hilda Jurado | 4/13/2016 | Opinion | Likes the look and design of the proposed bridge. | The City appreciates this opinion. |
| | | Opinion | Prefers the existing bridge be used for recreation. Suggests the park be turned into a fitness park. | The City acknowledges this suggestion and will consider the feasibility of this suggestion when evaluating the project design. |
| | | Traffic/Safety, Opinion | The roundabout sounds dangerous, as for when it is dark and cars are driving fast they can get into an accident, which will cause more traffic. Concerned about people speeding around the roundabout and drunk drivers. Does not think the roundabout is a good idea. | The safety of the roundabout proposed for the project will be evaluated in the Traffic Impact Study. |
| Jennifer Kumiyama | 4/13/2016 | Access, Opinion | Wondering if the park expansion is implemented, that it will be ADA compliant. Also prefers the existing bridge be used for recreation. | When determining the improvements to Cesar Chavez Park, the City will take into consideration for ADA compliant access. The opinion for the existing bridge to be repurposed for recreational purposes will be considered by the PDT when deciding the Preferred Alternative for the proposed project. |
| Robert Boydston | 4/13/2016 | Funding | Wondering how much the project will cost and where the money will come from. | The project is currently funded by Measure R for up until the design phase. |
| | | Community Impacts, Opinion | Closing 9th Street and onramp to bridge will disrupt nearby Long Beach citizens. Same with 6th Street. | The closure of 9th Street to the community will be evaluated within the Draft Environmental Document. 6th Street will not be closed as part of the project. |

**NOP Comments/ Response Summary Matrix- Public Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Public Comments | Response |
|---|---|---|---|---|
| | | Opinion, Design | Suggests the widening of the existing bridge to solve congestion for 6th Street off ramp to widen southbound could have a lane to join 6th Street further down and another lane to existing southbound to Broadway and beyond. The north extension could solve the 9th Street exit. This will save money on the overall project. | The City will take into consideration the opinion to solve congestion for the 6th Street off-ramp and the 9th Street exit during the design of the project. |
| Vincent Passanisi | 4/13/2016 | Traffic, Access | Concerned about the loss of access between the Westside of Long Beach and Downtown. If 9th and 10th Street ramps are gone, then it will be more difficult for people to access the Westside from downtown. This will cut off many Westside businesses from their customers. Even though access many be available through other routes, the inconvenience of using these other routes will severely limit their use. In addition, it will be much more difficult for emergency services to access the Westside and will restrict the ability of Westside residents to travel downtown and to other parts of Long Beach. It will effectively cut off the Westside from the rest of Long Beach. Supports the possibility of having bike routes to the Westside since currently there is no easy way to get from downtown to the Westside by bicycle. | The purpose of the proposed project is to improve connectivity between the west side of Long Beach and Downtown Long Beach. Any impacts to connectivity related to the improvements of the proposed project will be evaluated in the Draft ED. |
| Sharon MacNett | 4/13/2016 | Opinion, Parks | Prefers the existing bridge be used for recreation. Would like downtown cycling infrastructure to be connected to the new bike route(s) over the LA River and connecting to LART. | The City appreciates this opinion and will consider suggestions when designing the proposed project. |
| | | Traffic | Supports a roundabout as a traffic-calming measure, but safe transitions for cyclists and pedestrians need to be considered if the proposed bridge is multi-modal. | The safety for cyclists and pedestrians will be considered in the design of the roundabout. |
| | | Air Quality | Since air quality is already a huge concern in this neighborhood, how will this project impact air quality? | The air quality for the proposed project will be evaluated in the Air Quality Assessment Report (AQAR) and our environmental document. |
| Sheila Gibbons | 4/13/2016 | Opinion | Prefers the existing bridge be used for recreation. Would like to see a place for lawn bowling on the recreation bridge. | The City appreciates the suggestion for the existing bridge to be used for recreational purposes. |
| Elizabeth Mahoney | 4/27/2016 | Traffic/Transportation, Support | Would like to see continued/similar access to/from Seaside Way to Shoreline Dr./Shoemaker/I-710 on ramp facilities as most residents who live along the south side of Ocean Blvd. use Seaside Way to access our buildings and parking structures. Supports the concept of shifting Shoreline Dr. to consolidate the roadway and provide improved access to Cesar E. Chavez Park. | The City appreciates the suggestion for the design of the project and will consider these suggestions during the design of the proposed project. |
| | | Opinion, Support | Supports both the roundabout and Y-intersection designs. | The City appreciates the support for both the roundabout and Y-intersection designs. |
| | | Support, Opinion | Supports the concept of retaining and repurposing the existing Shoemaker Bridge as a linear park if determined to be financially feasible and not cause undue conflict with the ACOE permitting and water flow in the LA River. The overall design provides great improvement and accessibility to existing parkland so if the linear park concept is too expensive, the residents of downtown still receive a benefit of improved recreational areas. | The City appreciates the suggestion of repurposing the existing bridge for recreational purposes. |
| Sean Foster | 5/1/2016 | Opinion | Supports the replacement of the bridge and expanding of the park (lives at 555 Maine Ave). | The City appreciates the support for the proposed project. |

**NOP Comments/ Response Summary Matrix- Public Comments**

| Commenter | Date of Comment | Comment Subject Code | Summary of Public Comments | Response |
|---|---|---|---|---|
| | | Traffic/Parking | Would like the parking in the neighborhood within a couple of blocks of the park to be reviewed. Concerned that there are too many cars parked on the streets surrounding Cesar E. Chavez Park, and parking is difficult to find. Would like to see parking tees in the neighborhood nearby the park and more enforcement of parking rules in the neighborhood. | Parking for the improved Cesar Chavez Park facilities will be considered in the Draft ED. |
| | | Opinion | Supports the freeway access being pushed to 7th Street. | The City appreciates the support for freeway access being pushed to 7th Street. |
| | | Parking/Noise/Recreational Resources | Concern about the amount of parties in the park. Parking overflow and noise are concerns. Would like to see measures taken to limit parties by requiring that they are scheduled in advance. Would also like to see the landscape encourage parties to be held away from the neighborhood to help with the noise concern. | The amount of parties at Cesar Chavez Park is maintained by the City's Parks, Recreation, and Marine. Any concerns related to activities at Cesar Chavez Park should be directed to that department. |
| | | Recreation/Section 4(f) | Parking in the neighborhood should be permitted for residents of the local blocks only. Residents in the neighborhood use the park parking for overflow because there are too many people living in the neighborhood and there is insufficient parking both on the street and off. | Parking restrictions are designated by the City's Parks, Recreation, and Marine Department. Any concerns related to parking at Cesar Chavez park should be directed to that department. |

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Edmund G. Brown Jr., Governor

April 6, 2016

Sean Crumby
City of Long Beach
333 W. Ocean Boulevard, 9th Floor
Long Beach, CA 90802

sent via e-mail:
info@shoemakerprojectlb.com
Number of pages: 4

RE: SCH# 2016041007 Shoemaker Bridge Replacement Project, Draft EIR, City of Long Beach, Los Angeles County, California

Dear Mr. Crumby:

The Native American Heritage Commission has received the Notice of Preparation (NOP) for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.), specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines Section 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared. (Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

**CEQA was amended significantly in 2014**. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code § 21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code § 21084.3 (a)). **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. § 800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments. **Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
   a. A brief description of the project.
   b. The lead agency contact information.
   c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
   d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
   a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
   a. Alternatives to the project.
   b. Recommended mitigation measures.

c. Significant effects. (Pub. Resources Code § 21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
   a. Type of environmental review necessary.
   b. Significance of the tribal cultural resources.
   c. Significance of the project's impacts on tribal cultural resources.
   d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
   a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
   b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
   a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
   b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code § 21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
    a. Avoidance and preservation of the resources in place, including, but not limited to:
       i. Planning and construction to avoid the resources and protect the cultural and natural context.
       ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
    b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
       i. Protecting the cultural character and integrity of the resource.
       ii. Protecting the traditional use of the resource.
       iii. Protecting the confidentiality of the resource.
    c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
    d. Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
    e. Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
    f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
    a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
    b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
    c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

*This process should be documented in the Cultural Resources section of your environmental document.*

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code § 65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have been already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
    a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
    b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
    a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
    b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
    c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5,

U.S. Department of Homeland Security

United States Coast Guard

Commander
Eleventh District

U.S. Coast Guard Island, Bldg 50-2
Alameda, CA 94501-5100
Staff Symbol: (dpw)
Phone: (510) 437-3514
Fax: (510) 437-5836

16590
LA River (3.9)
April 8, 2016

The City of Long Beach, Public Works
Attn: Traci Gleason
333 W. Ocean Boulevard, 9th Floor
Long Beach, CA 90802

Dear Traci Gleason:

We have completed our review of the Notice of Preparation and Scoping Meeting concerning the proposed Shoemaker bridge replacement, mile 3.9 across the Los Angeles River, City of Long Beach, Los Angeles County, CA.

The General Bridge Act of 1946 requires the approval of the location and plans of bridges prior to start of construction (33 U.S.C. 525). The Los Angeles River, from the mouth to mile 4.7, is subject to tidal influence and is presently considered navigable by Coast Guard standards.

The Commandant has given advance approval to the location and plans of bridges to be constructed across reaches of waterways considered navigable, but not actually navigated by other than logs, log rafts, rowboats, canoes and small motorboats. In such cases the clearances provided for high water stages will be considered adequate to meet the reasonable needs of navigation. The nature of the waterway prevents navigation by anything larger than small motorboats. We have determined that the Los Angeles River conforms to advance approval criteria under Title 33 Code of Federal Regulations, Part 115.70 at the project site.

An individual Coast Guard bridge permit will not be required for this project (COMDTINST 16590.5C). This does not relieve the applicant from complying with all applicable federal, state and local laws and associated permit requirements.

This review is valid for a period of 3 years from the date of this letter. If the character of navigation changes, such that the waterway no longer meets advance approval criteria, the Coast Guard will promptly withdraw the advance approval designation for this project and notify all interested parties.

All portions of the replaced bridge not used as part of this project, shall be removed completely from the waterway, or down to an elevation determined by the USACE and disposed of properly.

A photograph and as-built plan and elevation drawings of the bridge, in 8 ½ x 11 inch format, are required upon completion of the project. The drawings must indicate the elevation of the lowest hittable part of the bridge above mean high water or high water flow, whichever is applicable.

16590
April 8, 2016

I can be contacted by telephone at 510-437-3516 or by email: David.H.Sulouff@uscg.mil to discuss this project.

Sincerely,

DAVID H. SULOUFF
Chief, Bridge Section
Eleventh Coast Guard District
By direction of the District Commander

Copy: LA District Corps of Engineers
USCG LA/LB

GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

*Traci Gleason*
*Public works Department*
*City of Long Beach*
*333 Ocean Boulevard, 9st Floor*
*Long Beach, CA 90802*
*RE: AB52 consultation response for*

*Dear Traci Gleason*

*April 11, 2016*

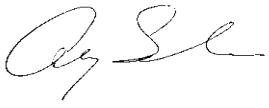
*Please find this letter in response to your request for consultation dated April 1 , 2016. I have reviewed the project site and do have concerns for cultural resources. Your project lies in an area where the Ancestral territories of the Kizh (Kitc) Gabrieleño's villages adjoined and overlapped with each other, at least during the Late Prehistoric and Protohistoric Periods. The homeland of the Kizh Gabrieleño was probably the most influential Native American group in aboriginal southern California (Bean and Smith 1978a:538), was centered in the Los Angeles Basin, and reached as far east as the San Bernardino-Riverside area. The homeland of our neighbors the Serranos was primarily the San Bernardino Mountains, including the slopes and lowlands on the north and south flanks. Whatever the linguistic affiliation, Native Americans in and around the project area exhibited similar organization and resource procurement strategies. Villages were based on clan or lineage groups. Their home/ base sites are marked by midden deposits often with bedrock mortars. During their seasonal rounds to exploit plant resources, small groups would migrate within their traditional territory in search of specific plants and animals. Their gathering strategies of ten left behind signs of special use sites, usually grinding slicks on bedrock boulders, at the locations of the resources.*

*Due to the project location and the high sensitivity of the area location, we would like to request one of our certified Native American Monitor to be on site during any and all ground disturbances (including but not limited to pavement removal, post holing, auguring, boring, grading, excavation and trenching) to protect any cultural resources which may be effected during construction or development. In all cases, when the Native American Heritage Commission states there are "no records of sacred sites in the project area" the NAHC will always refer lead agencies to the respective Native American Tribe because the NAHC is only aware of general information and are not the experts on each California Tribe. Our Elder Committee & Tribal Historians are the experts for our Tribe and are able to provide a more complete history (both written and oral) regarding the location of historic villages, trade routes, cemeteries and sacred/religious sites in the project area. While the property may be located in an area that has been previously developed, numerous examples can be shared to show that there still is a possibility that unknown, yet significant, cultural resources will be encountered during ground disturbance activities. Please note, if they haven't been listed with the NAHC, it doesn't mean that they aren't there. Not everyone reports what they know.*

*The recent implementation of AB52 dictates that lead agencies consult with Native American Tribes who can prove and document traditional and cultural affiliation with the area of said project in order to protect cultural resources. However our tribe is connected Ancestrally to this project location area, what does Ancestrally or Ancestral mean? The people who were in your family in past times, Of, belonging to, inherited from, or denoting an ancestor or ancestors http://www.thefreedictionary.com/ancestral. Our priorities are to avoid and protect without delay or conflicts – to consult with you to avoid unnecessary destruction of cultural and biological resources, but also to protect what resources still exist at the project site for the benefit and education of future generations.*

***CC: NAHC***

*With respect,*



*Andrew Salas, Chairman*
*cell (626)926-4131*

Andrew Salas, Chairman | Nadine Salas, Vice-Chairman | Christina Swindall Martinez, secretary
Albert Perez, treasurer I | Martha Gonzalez Lemos, treasurer II | Richard Gradias, Chairman of the council of Elders

PO Box 393 Covina, CA 91723 www.gabrielenoindians@yahoo.com gabrielenoindians@yahoo.com

subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

Please contact me if you need any additional information at gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

cc: State Clearinghouse

**From:** Efferson, David@CHP
**To:** info@shoemakerprojectlb.com
**Subject:** Notice of Prepartion and Scoping Meeting
**Date:** Wednesday, April 20, 2016 6:22:42 PM
**Attachments:** image001.jpg

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Hello Traci Gleason,

I was not able to attend the Public Scoping Meeting, which was held on April 13, 2016. However, I logged onto the NOP and Initial Study website to review your project. I will be the point of contact person for the South Los Angeles Area California Highway Patrol Office.

Please contact me via email or by telephone (see information below), if I can be of any assistance to you.

David

***D. Efferson, #17367***
***Lieutenant***

*California Highway Patrol*
*South Los Angeles Area 530*
*19700 Hamilton Avenue*
*Torrance, CA 90502*
*(310)516-3355*
*defferson@chp.ca.gov*

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

April 26, 2016

info@shoemakerprojectlb.com
Traci Gleason
City of Long Beach, Public Works Department
333 W. Ocean Boulevard, 9th Floor
Long Beach, CA 90802

**Notice of Preparation of an Environmental Impact Report (EIR) for the Shoemaker Bridge Replacement Project**

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The SCAQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the Draft EIR. Please send the SCAQMD a copy of the Draft EIR upon its completion. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to the SCAQMD. Please forward a copy of the Draft EIR directly to SCAQMD at the address in our letterhead. **In addition, please send with the Draft EIR all appendices or technical documents related to the air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files. These include original emission calculation spreadsheets and modeling files (not Adobe PDF files). Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

**Air Quality Analysis**

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. More recent guidance developed since this Handbook was published is also available on SCAQMD's website here: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993). SCAQMD staff also recommends that the Lead Agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD staff requests that the lead agency quantify criteria pollutant emissions and compare the results to the recommended regional significance thresholds found here: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf. In addition to analyzing regional air quality impacts, the SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing

a Draft EIR. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

In addition, guidance on siting incompatible land uses (such as placing homes near freeways) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Perspective*, which can be found at the following internet address: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process.

**Mitigation Measures**

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. Pursuant to CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying possible mitigation measures for the project, including:

- Chapter 11 of the SCAQMD *CEQA Air Quality Handbook*
- SCAQMD's CEQA web pages at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies.
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.
- SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions
- Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

**Data Sources**

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's webpage (http://www.aqmd.gov).

The SCAQMD staff is available to work with the Lead Agency to ensure that project emissions are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact Jack Cheng, Air Quality Specialist by email at jcheng@aqmd.gov or by phone at (909) 396-2448.

Sincerely,

*Jillian Wong*

Jillian Wong, Ph.D.
Program Supervisor
Planning, Rule Development & Area Sources

JC:JW
LAC160407-08
Control Number

WATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON HYDE
*Chief Engineer and General Manager*

April 26, 2016

Ref File No.: 3674510

Ms. Traci Gleason
City of Long Beach
333 West Ocean Boulevard, 9th Floor
Long Beach, CA 90802

Dear Ms. Gleason:

**Comment Letter for the Shoemaker Bridge Replacement Project**

The County Sanitation Districts of Los Angeles County (Districts) received a Notice of Preparation of a Draft Environmental Impact Report for the Shoemaker Bridge Replacement Project (proposed project) on April 4, 2016. The proposed project is located within the jurisdictional boundaries of District No. 3. We offer the following comments:

1. The proposed project may impact existing and/or proposed Districts' trunk sewers located within the proposed project limits. Existing and proposed Districts' trunk sewers are located directly under and/or cross directly beneath the proposed project limits. The Districts cannot issue a detailed response to or permit construction of the proposed project until project plans and specifications that incorporate Districts' sewer lines are submitted for review. In order to prepare these plans, you will need to submit a detailed map of the proposed project limits, when available, to the attention of Mr. Michael Tatalovich of the Districts' Sewer Design Section at the address shown above. The Districts will then provide you with the plans for all Districts' facilities that will be impacted by the proposed project. Then, when revised plans that incorporate the Districts' sewers have been prepared, please submit copies of the same for Districts' review and comment.

2. The Districts maintain sewerage facilities within the project area that may be affected by the proposed project. Approval to construct improvements within a Districts' sewer easement and/or over or near a Districts' sewer is required before construction may begin. For a copy of the Districts' buildover procedures and requirements go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and click on the Buildover Procedures and Requirements link. For more specific information regarding the buildover procedure, please contact Mr. Ed Stewart at (562) 908-4288, extension 2766.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

DOC: #3707855.D03

Recycled Paper

**CALIFORNIA STATE LANDS COMMISSION**
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

**JENNIFER LUCCHESI,** *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
*California Relay Service From TDD Phone* **1-800-735-2922**
*from Voice Phone* **1-800-735-2929**

***Contact Phone:*** **(916) 574-1900**
***Contact FAX:*** **(916) 574-1835**

April 26, 2016

File Ref: SD 2016-04-14.1

City of Long Beach
Public Works Department
Attn: Traci Gleason
333 W. Ocean Boulevard, 9th FL
Long Beach, CA 90802

SUBJECT: **Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Shoemaker Bridge Replacement Project, Located at the Southern End of Interstate 710, Crossing the Los Angeles River, city of Long Beach, Los Angeles County**

Dear Ms. Gleason:

This letter is to provide comments on the subject Notice of Preparation (NOP) of a Draft Environmental Impact report (DEIR) circulated through the State Clearing House on April 1, 2016, as Document #2016041007.

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (PRC §6301 and §6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On navigable non-tidal waterways, including lakes and rivers, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or a court decision. Such boundaries may not be readily apparent from present day site inspections.

Based on a review of the project location as shown in the NOP of DEIR and in-house records, CSLC staff does not assert jurisdiction at this time. Therefore, no lease or other authorization will be required from the CSLC for the Project.

Promotion of public access to and use of California's navigable waters is a mandate of the California Constitution (Article 10, Section 4), a condition of statehood in the Act of Admission (Vol. 9, Statutes at Large, page 452), and a responsibility of State agencies pursuant to the Public Trust Doctrine. Please be advised that the Legislature has provided for a process to be followed regarding promoting access at bridge construction sites in the California Streets and Highways Code, at section § 1809. Pursuant to § 1809, during the design hearing process, the city of Long Beach is required to prepare a report on the feasibility of providing public access to the waterway, for recreational purposes, and determine if such public access will be provided.

Please also be advised that the subject waterway involved in the Project area is subject to a public navigational easement. This easement provides that the public has the right to navigate and exercise the incidences of navigation in a lawful manner on State waters that are capable of being physically navigated by oar or motor-propelled small craft. Such uses may include, but are not limited to, boating, rafting, sailing, rowing, fishing, fowling, bathing, skiing, and other water-related public uses (*People ex rel. Baker v. Mack (1971)*). In addition to compliance with California Streets and Highways Code section § 1809, the proposed Project activities must not restrict or impede the navigation and recreational rights of the public.

These comments are made without prejudice to any future assertion of State ownership or public rights, should circumstances change, or should additional information become available. These comments are not intended, nor should they be construed as a waiver or limitation of any right, title, or interest of the State of California in any lands under its jurisdiction.

Please contact Sandra Kreutzburg at (916) 574-0282, or by e-mail at sandra.kreutzburg@slc.ca.gov if you have any questions concerning the above.

Sincerely,

Ken Foster
Public Land Manager

cc: Sandra Kreutzburg
Public Land Management Specialist

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN, JR, Governor

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 7, Division of Environmental Planning
100 South Main Street, Suite 100
LOS ANGELES, CA 90012-3606
PHONE (213) 897-0703
FAX (213) 897-0685
TTY (213) 897-4937

*Serious drought.*
*Help save water!*

April 27, 2016

Mr. Sean Crumby
City Engineer
City of Long Beach
333 W. Ocean Blvd, 9th Floor
Long Beach, CA 90802

Dear Mr. Crumby:

Thank you for the opportunity to review and comment on the Notice of Preparation (NOP) and Initial Study (IS) for the Shoemaker Bridge Replacement Project (proposed project). The proposed project is an Early Action Project of the Interstate 710 (I-710) Corridor Improvement Project. The California Department of Transportation (Caltrans) is a Responsible Agency under the California Environmental Quality Act (CEQA), and agrees with the City of Long Beach to prepare a Draft Environmental Impact Report (DEIR) for the proposed project. As a Responsible Agency, Caltrans must actively participate in the lead agency's CEQA process, review the lead agency's CEQA document, and use that document when making a decision on the project. Caltrans must rely on the lead agency's environmental document to prepare and issue its own findings regarding the project (CEQA Guidelines, Sections 15096 and 15381). Based on the information contained in the NOP and IS, Caltrans has the following comments:

Caltrans is continually improving its standards and processes to provide flexibility while maintaining the safety and integrity of the state's transportation system. Caltrans has updated the Highway Design Manual (HDM) to incorporate Complete Streets policies.

Caltrans on April 11, 2014 endorsed the National Associate of City Transportation Officials' (NACTO) Urban Bikeway Design guide that includes innovations such as buffered bike lanes and improved pedestrian walkways.

We note a traffic impact analysis will be prepared. Please be aware that Caltrans follows Highway Capacity methods to analyze its facilities. Please refer traffic engineers to the follow the *Caltrans Guide for the Preparation of Traffic Impact Studies*. It is accessible online at: http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa_files/tisguide.pdf .

Although the lead agency is required to comply with Los Angeles County Congestion Management Program (CMP) standards and thresholds of significance, Caltrans does not consider the Los Angeles County's CMP criteria alone for the analysis of transportation impacts pursuant to a CEQA review.

The CMP does not normally address cumulative transportation impacts and does not analyze for safety, weaving problems, or delay. Caltrans' Guide directs preparers of traffic impact analysis to consult with the local District as early as possible to determine the appropriate requirements and criteria of significance to be used in the traffic impact analysis.

As you may be aware, Caltrans has entered into a memorandum of understanding pursuant to 23 USC 327 with the Federal Highway Administration (FHWA). Under 23 USC 327, Caltrans assumes FHWA responsibilities under National Environmental Policy Act (NEPA) and other federal environmental laws. This assignment includes projects on the State Highway System and Local Assistance projects off of the State Highway System. Assuming there is a need for federal money on this proposed project, Caltrans will perform Environmental Document Quality Control and NEPA Assignment Review Procedures for environmental documentation.

It is critical for identifying a reasonable range of project alternatives; it expedites project delivery; and it leads to a more precisely defined project scope, schedule, and cost. Just as importantly, it explains that the expenditure of funds is necessary and worthwhile, and that the proposed project priority relative to other transportation projects is warranted. A quality Purpose and Need statement also meets the requirements of federal and state regulations: an Environmental Impact Report shall "contain a statement of objectives sought by the proposed project" and it "should include the underlying purpose of the project" [14 CCR §151.24(b)].

The IS does not include Recreation as an issue area for study in the DEIR. However, the NOP does state that Recreation could have potentially significant impacts. Caltrans believes the proposed project may potentially have significant effects to recreation resources, particularly since Alternative 2 provides for the re-purposing of the existing bridge for non-motorized transportation and recreational use, as well as the potential reconfiguration of Cesar Chavez Park. Accordingly, we recommend the DEIR include an in-depth analysis of impacts to recreation resources.

We appreciate your cooperation as we move forward with the proposed project. If you have any questions or concerns, please contact me or Allison Morrow of my staff at (213) 897-3247. Thank you for your interest in mobility improvements.

Sincerely,

Ronald Kosinski

RONALD KOSINSKI
Deputy District Director
Division of Environmental Planning

Cc: Robert So, Deputy District Director for Project Management

| | |
|---|---|
| **From:** | Dennis Santos |
| **To:** | info@shoemakerprojectlb.com |
| **Cc:** | Robert Verceles |
| **Subject:** | Response to Notice of Preparation of Draft EIR for Shoemaker Bridge Replacement Project |
| **Date:** | Wednesday, April 27, 2016 4:44:49 PM |

Good afternoon:

The Long Beach Water Department (LBWD) does not have any objections to the proposed scope and contents of the notification. LBWD has active water and sewer facilities within the project limits. LBWD shall be notified for any project conflicts with these facilities.

Please contact me or Mr. Robert J. Verceles, LBWD Division Engineer, at 562-570-2337 or Robert.Verceles@lbwater.org, for information or inquiries related to water and sewer systems.

Thank you,

Dennis A. Santos, P.E.
**Long Beach Water Department**
1800 E. Wardlow Road, Long Beach, CA 90807
Direct: (562) 570-2381 | FAX: (562) 570-2378
Email: dennis.santos@lbwater.org

April 29, 2016

Traci Gleason
Public Works Department
City of Long Beach
333 West Ocean Boulevard, 9th Floor
Long Beach, CA 90802

**NOTICE OF PREPARATION–DRAFT ENVIRONMENTAL IMPACT REPORT (NOP-DEIR)**
**SHOEMAKER BRIDGE REPLACEMENT PROJECT**
**CITY OF LONG BEACH**

Thank you for the opportunity to review the NOP-DEIR for the Shoemaker Bridge Replacement Project in the City of Long Beach. The Shoemaker Bridge Replacement Project is located at the southern end of Interstate 710 (I-710) in the City of Long Beach and is bisected by the Los Angeles River. The proposed project is an Early Action Project of the Interstate 710-(I-710) Corridor Improvement Project. It will improve existing safety and operations, increase multi-modal connectivity within the project limits, address non-standard features, design deficiencies, and enhance complete street elements by providing bicycle, pedestrian, and streetscape improvements on major thoroughfares.

The following County of Los Angeles Department of Public Works comments are for your consideration and relate to the environmental document only:

A. Flood Control

1. We would like the opportunity to review the Environmental Impact Report when it becomes available.

2. An encroachment permit from the Los Angeles County Flood Control District (LACFCD) is required for any encroachment within the Los Angeles River. The environmental document must discuss the encroachments to the Los Angeles River along with any applicable mitigation measures.

3. The proposed bridge must have sufficient clearance underneath to allow maintenance truck activity to occur along the channel access road. Clearances shall be discussed in the environmental document.

4. The LACFCD would need to review the approved plans when they become available to assure the proposed bridge improvements do not have any adverse structural effect on LACFCD facilities. The EIR shall discuss this.

5. The environmental document must provide a schedule of construction activities to avoid any potential conflicts with LACFCD maintenance activities.

If you have any questions regarding the flood control comments, please contact Mr. Ahmet Tatlilioglu of Public Works' Flood Maintenance Division at (562) 861-0316 or atalilioglu@dpw.lacounty.gov.

If you have any other questions or require additional information, please contact Ruben Cruz of Public Works' Land Development Division at (626) 458-4910 or rcruz@dpw.lacounty.gov.

RC:
p:\ldpub\subpcheck\plan checking files\projects not associated with a tr-pm-cup-single lot-permit\shoemaker bridge replacement\nop-eir\2016-04-19 nop-eir submittal\2016-04-29, nop-deir shoemaker bridge replacement, lacdpw comments.docx

long beach unified school district

**BUSINESS DEPARTMENT - Business Services**
**Facilities Development & Planning Branch**
Donald K. Allen Building Services Facility
2425 Webster Ave., Long Beach, CA 90810
(562) 997-7550 Fax (562) 595-8644

May 2, 2016

Via email
info@shoemakerprojectlb.com

Traci Gleason
Public Works Department
City of Long Beach
333 W. Ocean Boulevard, 9th Floor
Long Beach, CA 90802

**Re: Comments on the NOP for for the Shoemaker Bridge Replacment Project**

Dear Ms. Gleason:

The Long Beach Unified School District ("LBUSD" or "District") appreciates the opportunity to comment on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the Shoemaker Bridge Replacement Project ("Shoemaker Project" or "Project"), dated April 1, 2016. The City of Long Beach, in cooperation with the California Department of Transportation ("Caltrans"), is proposing to replace the Shoemaker Bridge (West Shoreline Drive) in the City of Long Beach ("City"). The proposed Project is an Early Action Project of the Interstate 710 ("I-710") Corridor Improvement Project. The City is the Lead Agency responsible for preparation of an Environmental Impact Report (EIR) addressing potential impacts from the Project in accordance with the California Environmental Quality Act (CEQA).

## I. Background

The I-710 Corridor Project ("I-710 Project") is being proposed by Caltrans, in cooperation with the Los Angeles County Metropolitan Transportation Authority ("Metro"), the Gateway Cities Council of Governments ("GCCOG"), the Southern California Association of Governments ("SCAG"), the Ports of Los Angeles ("POLA") and Long Beach ("POLB"), and the Interstate 5 Joint Powers Authority. A draft Environmental Impact Report/Environmental Impact Statement ("I-710 DEIR/DEIS") was prepared for the I-710 Project in June 2012. LBUSD reviewed and submitted written comments on the I-710 DEIR/DEIS, by letter dated September 28, 2012[1].

The District's September 28, 2012 comment letter identified substantial concerns regarding the I-710 DEIR/DEIS' analysis of air quality and other impacts on the District's schools. A number of these concerns potentially are applicable to the Shoemaker Project, which is an element of the I-710 Project. A recirculated DEIR/DEIS for the I-710 Project reportedly has been undeway since 2012 and previously has been scheduled for release at various dates in the past. According to the I-710 Project webpage, the recirculated I-710 DEIR/DEIS is now scheduled to be released Spring 2017[2]. As such, the concerns identified in our 2012 comment letter have not yet been addressed in a susbsequent CEQA analysis. Accordingly, the District refers the City to our 2012 comment letter on the I-710 Project DEIR/DEIS, as these comments generally would

[1] Comments on the Draft EIR/EIS for the I-710 Corridor Project, by letter to Mr. Ronald Kosinski, Caltrans, from Ms. Carri Matsumoto, LBUSD Executive Director, Facilities Development and Planning, dated September 28, 2012.
[2] I-710 Corridor Project metro web page, https://www.metro.net/projects/i-710-corridor-project/, accessed April 26, 2016.

remain applicable to the Shoemaker Project to the extent the project features and analysis to be included in the Shoemaker EIR reflect the features and analysis in the I-710 Project DEIR/DEIS.

The reminder of this letter identifies comments, concerns and requests regarding the proposed scope and content of the environmental information to be included in the Shoemaker EIR.

## II. Introduction

The District has substantial concerns that the Shoemaker EIR adequately analyze air quality and other impacts on the District's schools, and the students and staff at those schools whose interests the District must protect through its participation in this CEQA process. CEQA review must be developed to provide the required analysis and mitigation of impacts to schools. Full disclosure of impacts and analysis of mitigation must be completed before final authorization of construction, so that the District and other stakeholders have an adequate opportunity to review the specific analysis of impacts to schools and the mitigation measures that can avoid or minimize such impacts.

We ask that the EIR include a comprehensive evaluation of impacts on schools and on students as sensitive receptors. The District has actively participated in the public outreach efforts for the I-710 Project as a member of the I-710 Corridor Advisory Committee and the Environmental Subject Working Group. We request the Shoemaker EIR fully consider the District's concerns and include the analyses necessary to determine impacts to students and school facilities.

The District's comments on the NOP reflect its primary concerns: the health and safety of students and staff, maintaining instructional time, preserving facilities tied to schools and learning, and ensuring the best use of money invested in public education. The District's comments are therefore focused on ensuring the environmental impacts of the Shoemaker Project are appropriately identified and properly addressed, analyzed, and mitigated to avoid adverse impacts to schools, students, and staff.

## III. Comments on the NOP for the Shoemaker EIR

The following discussion sets forth District's broader comments on the analysis of impacts on schools and students.

- **Impacts on Schools and Students Should Not Be Improperly Minimized or Ignored.** The District requests that appropriate consideration be given to students and schools in the EIR. We note that the Shoemaker NOP fails to properly identify school (Institutional) land uses in the "Surrounding Land Uses and Setting" section. The Shoemaker Project will bring significant amounts of traffic to areas immediately adjacent to schools and cause long-term impacts, particularly during the construction period. We request that the EIR contain enough information and analysis to clearly identify those impacts to students and schools, so that appropriate measures can been proposed to avoid or mitigate them.

- **Adequate Mitigation**. Generally, as outlined in our 2012 comment letter, the I-710 DEIR/DEIS does not adequately address or mitigate noise, traffic, air quality, and human health risk impacts to schools and other sensitive receptors. Because the Shoemaker Project's impacts to schools also likely are substantial, the Project must include mitigation measures to reduce the impacts to schools and children to the greatest extent possible. The District requests that the City and Caltrans commit to a process that leads to appropriate mitigation for impacts to schools. Given the certainty of substantial impacts, but the lack of detail in the I-710 DEIR/DEIS regarding when, where, and how specific impacts will occur, it is important that Caltrans commit now to a reasonable amount of mitigation funding that can be allocated to mitigation measures at a later date; including for the Shoemaker Project. We anticipate the process leading to adequate mitigation of project impacts to schools will require explicit and formal coordination

between the District and the City and/or Caltrans prior to certification of the final EIR, as well as prior to development of construction management plans and traffic management plans.

- **Sufficient Documentation**. The EIR should provide the documentation to support its air quality analyses, and to lay out the bases of the various assumptions that will be used. Supporting documentation and methodological assumptions are integral to the significance determinations in the EIR. A lack of adequate documentation explaining the air quality analyses and assumptions would significantly hamper the District's ability to review and comment on the most basic findings of the EIR.

  **Identify and Mitigate Cancer Risk Levels for Schools**. The I-710 DEIR/DEIS does not describe or depict the cancer risk levels specifically for any school sites under any of the I-710 Project alternatives. However, available data clearly indicate the I-710 Project will result in unavoidable significant cancer risk impacts, and the lack of analysis of this impact specific to school-age children is concerning. The Shoemaker EIR should comprehensively identify, thoroughly explain, and appropriately mitigate any increased cancer risk levels at the two schools adjacent to the Project: Chavez Elementary School and Edison Elementary School. Moreover, if appropriate, the EIR should evaluate a range of potential mitigation measures specifically designed to address impacts to schools and students, including but not limited to: (1) installation of high efficiency HVAC filtration systems; (2) provision of replacement high efficiency filters; (3) development of indoor recreation facilities; (4) support for alternative recreation areas and opportunities; and (5) funding for the District to develop and implement additional appropriate mitigation measures to reduce impacts to schools.

- **Account for Right-of-Way (ROW) Impacts at Chavez Elementary School.** The I-710 DEIR/DEIS describes taking a portion of Chavez Park for ROW use. In addition, the I-710 DEIR/DEIS (Table 3.24-1) indicates that the basketball court west of Chavez ES will be temporarily removed during project construction. Chavez Park is the subject of a Reciprocal Use Agreement ("Agreement") between the City of Long Beach and the District which allows Chavez Elementary School (ES) to use designated joint use property in the park during school hours until the year 2058. The District was not initially consulted regarding the proposed ROW impacts, even though such consultation was required as part of the Section 4(f) analysis[3].

  The I-710 DEIR/DEIS further states that any of the project's build alternatives will require the temporary use of 6.1 acres of the southern portion of Chavez Park for a temporary construction easement, as well as the use of 0.41 acre for a detour road during construction of the realignment of Broadway Street. Given that the construction duration for this Project is projected to be years, not months, allowing for typical project delays and constraints, the District is concerned the Shoemaker EIR must contain sufficient information addressing the fact that construction of the Project could cause significant impacts to Chavez ES. Project operation also will impact Chavez ES.

  The Shoemaker EIR should identify and describe mitigation to reduce the significant and permanent adverse impact to the school that will result from any taking of property in which the school will suffer a loss of much needed physical education property. The District should be consulted during the Shoemaker Project environmental review in order to resolve these concerns.

- **Identify and Mitigate Construction Impacts**. Construction impacts greatly depend on the phasing, sub-phasing, duration, construction equipment, haul/vendor trips, and proximity to sensitive land uses.

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[3] Federal Highway Administration's (FHWA) regulations governing the use of land from publicly owned parks, recreation areas, wildlife and waterfowl refuges, and public or private historic sites for Federal highway projects are now codified at 23 U.S.C. § 138 and 49 U.S.C. § 303. However, this subject matter remains commonly referred to as Section 4(f) because the requirements originated in Section 4(f) of the Department of Transportation Act of 1966 (Pub. L. 89-670, 80 Stat. 931).

If the City or Caltrans intends for the I-710 EIR/EIS to function as a source document for project-level environmental clearance, they must identify construction phasing and sub-phasing in enough detail to adequately describe the environmental impacts of the project. Caltrans must revise the I-710 EIR/EIS to include this information or commit to preparing a supplemental EIR/EIS when specific I-710 improvements are proposed, or otherwise include this information in the Shoemaker EIR, so that an adequate project-level environmental analysis can then be prepared.

It is clear that construction of the Project will impact District schools, students, and staff. While the I-710 DEIR/DEIS includes a generalized discussion of the scope of, and location of, project construction activities, there is a lack of key information describing specific construction details that are crucial to quantifying construction impacts at individual schools (*e.g.*, staging, phasing, scheduling, duration, equipment specifications, construction emissions, etc.). As a result, the magnitude of significant air, noise, traffic and health impacts at specific school sites – i.e., Chavez ES and Edison ES -- under worst-case construction conditions should be analyzed and reported in the Shoemaker EIR. For example, the District requests that the EIR include an estimate of the localized noise levels – both exterior and interior – during each stage, phase, and sub-phase of the Project's construction at each pertinent District school site (Chavez ES and Edison ES). The EIR should also evaluate and require measures to mitigate significant impacts, as appropriate, including but not limited to: (1) traffic measures designed specifically to reduce impacts to school-age children; (2) sound barriers (*e.g.*, new windows, doors, building insulation) along with any HVAC upgrades necessary for the sound barriers to be effective; (3) operational controls (*e.g.*, schedule noisy construction activities to avoid school operational hours and testing periods); (4) system improvements to mitigate air quality impacts (*e.g.*, high efficiency air filtration systems, replacement filters, provision of indoor or alternative recreation facilities and areas); and (5) funding for the District to develop and implement additional appropriate mitigation measures to mitigate construction impacts to school.

- **Be Clear Regarding Acquisition of School Properties.** The I-710 DEIR/DEIS concept figures in Appendix O identify a proposed ROW that surrounds Edison ES and Chavez ES. However, in the ROW Impact Report and other sections of the I-710 DEIR/DEIS, these areas are not depicted as "Proposed Right of Way" and the acquisition of any school property is not discussed. Figure 1-1 in the NOP shows project limits; however, the scale doesn't clearly indicate whether project limits are adjacent to or overlapping with District property (Chavez ES and Edison ES).The City and/or Caltrans should discuss with the District the potential temporary or permanent acquisition of any District property.

- **Further Consultation over Chavez Park.** The District should be included in the Section 4(f) consultation for this Project as a local agency having jurisdiction over part of Chavez Park, pursuant to the District's Reciprocal Use Agreement with the City of Long Beach for that part of Chavez Park adjacent to Chavez Elementary School. Pursuant to that Agreement, the District has exclusive use of the Park area between 3rd and Broadway during weekday daytime hours.The proposed new access ramps (as depicted in the I-710 DEIR/DEIS) interfere with that use of the Park by the District. The District must be included in any further consultations regarding Chavez Park, and adequate mitigation must be provided, so that student access to recreation is not adversely affected.

- **Coordination with the District Prior to Final EIR and Construction.** The I-710 DEIR/DEIS does not address coordination with the District to minimize the severity of construction impacts. The DEIR/DEIS states that Caltrans will coordinate with affected I-710 Corridor cities, but does not discuss coordination with separate, non-city entities such as the District (and any other affected school districts).

  The District's participation is necessary in order to develop and implement mitigation measures to reduce impacts to students and staff to a less than significant level. The District requests that the City and Caltrans coordinate with the District before finalizing the EIR, and before designing and implementing

construction activities, to avoid air quality, traffic, health risk, noise, and other impacts to District facilities, students, and staff.

As noted above, consultation with the District is required as part of the "Section 4(f) Evaluation" (I-710 DEIR/DEIS Appendix B) because the District, through the Reciprocal Use Agreement, will be impacted by Caltrans' acquisition of Chavez Park for construction and Project operation

## IV. Summary

The District's 2012 comment letter identified substantial deficiencies in the I-710 DEIR/DEIS regarding disclosure of potential impacts to schools and analysis of effective mitigation of those impacts. Significantly more environmental analysis is warranted before that document can be used as a source document for the Shoemaker Project EIR.

The Shoemaker Bridge Replacement Project, an I-710 Early Action Project, will directly impact students and staff at Chavez ES and Edison ES, and may interfere with the use of Chavez Park as permitted under the Agreement with the City of Long Beach. It is critical that the Shoemaker EIR fully disclose, analyze, and propose mitigation for impacts to schools and students. The analysis should be specific to each school site (Chavez ES and Edison ES), and should address the duration of construction and future, long term impacts associated with Project operation. Because the District is uniquely qualified to provide necessary information about the existing schools in the vicinity of the Project, close consultation and cooperation with the District is critical for an adequate evaluation.

The District appreciates the improvments in traffic safety, mobility and streetscapes offered by the Shoemaker Project. The District looks forward to working with the City and Caltrans to develop mitigation measures that will avoid impacts on the District's schools, students and staff .

If you have any questions, please feel free to contact me at (562) 997-7550.

Sincerely,

Les Leahy
kc

Les Leahy
Business Services Administrator
Facilities Development & Planning Branch
Long Beach Unified School District

cc: Chris Steinhauser – LBUSD Superintendent of Schools
Yumi Takahashi – LBUSD Chief Business & Financial Officer
Jacquelyn Roberts – LBUSD Environmental Project Planner
Dori Arbour – LBUSD Environmental Project Manager
PlaceWorks

# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

In Reply Refer To:
FWS-LA-13B0103-16CPA0292

MAY 24 2016

Traci Gleason
Public Works Department
City of Long Beach
333 West Ocean Boulevard, 9th Floor
Long Beach, California 90802

Subject: Notice of Preparation (NOP) to Prepare a Draft Environmental Impact Report (DEIR) for the Shoemaker Bridge Replacement Project, Los Angeles County, California

Dear Ms. Gleason:

The U.S. Fish and Wildlife Service (Service) has reviewed the NOP, dated April 1, 2016, for the proposed Shoemaker Bridge Replacement Project (project), which is located within the City of Long Beach (City). The comments provided herein are based upon the information provided in the NOP, our knowledge of sensitive and declining vegetation communities, and our participation in regional conservation planning efforts.

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and threatened and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*), including habitat conservation plans (HCP) developed under section 10(a)(1) of the Act.

The City will prepare a DEIR for the proposed project. The project is an Early Action Project of the Interstate 710 (I-710) Corridor Improvement Project. The project is located at the southern end of the I-710, and is bisected by the Los Angeles River. The purpose of the project is to improve existing traffic safety and operations; increase multi-modal connectivity within the project limits and surrounding area; enhance Complete Streets elements by providing bicycle, pedestrian, and streetscape improvements on major thoroughfares; and address non-standard features and design deficiencies. Three alternatives are being considered: a No Build Alternative (Alternative 1), an alternative that re-purposes the existing bridge for non-motorized transportation and recreational use (Alternative 2), and an alternative that includes the removal of the existing bridge (Alternative 3). Alternatives 2 and 3 would provide improvements to associated roadway connectors and local streets.

To facilitate the evaluation of the proposed project from the standpoint of fish and wildlife protection, we recommend that the DEIR include the following information:

1. Our main concern regarding the proposed project is its potential to impact migratory birds. The Los Angeles River, from its mouth to Interstate 105, and to a lesser extent to State Route

60, is the premier spot in Los Angeles County for migrant shorebirds with single day counts numbering up to 15,000 individuals (Garrett 2008, pers. comm.). Black-necked stilts (*Himantopus mexicanus*), American avocets (*Recurvirostra americana*), and killdeer (*Charadrius vociferus*) are known to nest in the river channel, and western sandpipers (*Calidris mauri*), long-billed dowitchers (*Limnodromus scolopaceus*), pintails (*Anas acuta*), and teal (*Anas* sp.) also use the area in abundance. Due to the large numbers of migratory birds, raptors such as peregrine falcons (*Falco peregrinus*) use the area extensively to forage, and brown pelicans (*Pelecanus occidentalis*) use the river mouth to loaf and bathe (Garrett 2008, pers. comm.). The federally endangered California least tern [*Sternula antillarum browni* (*Sterna a. b.*)] and the federally threatened western snowy plover [*Charadrius alexandrinus nivosus* (*C. alexandrinus n.*)] are also known to occur nearby. According to the U.S. Shorebird Conservation Plan (Page and Shuford 2000, page 31), "Once part of one of the largest flood plains in the United States, the Los Angeles River is now entirely channelized and operated primarily as a flood control facility by the Los Angeles Department of Water and Power and the U.S. Army Corps of Engineers. Within the intertidal portion of the river, extending inland from the mouth about 2.6 miles to the Willow Street crossing in Long Beach, are approximately 234 acres of wetlands, which provide shorebird habitat when water levels are low. Although the river upstream of Willow Street has a cement bottom, a 4-mile stretch, equivalent to about 40 acres of river channel, annually holds thousands of shorebirds during migration (L. Hays pers. comm.)." Please include in the DEIR a description of the proposed project's impacts to migratory birds and their habitats, as well as any conservation measures that will be used to offset impacts to migratory birds.

2. Please include a description of the proposed project and the environment in the vicinity of the project, from both local and regional perspectives, including all practicable alternatives that have been considered to avoid and/or reduce project impacts to federally listed and other sensitive species and vegetation types. Include specific acreages and descriptions of the types of wetlands, riparian, and other sensitive habitats that may be affected by the project alternatives as well as aerial photographs, mapping, and tables to summarize such information. Include detailed information on the number and distribution of all Federal candidate, proposed, and listed species; State-listed species; and locally sensitive species on or near the project site that may be affected by the proposed project or project alternatives. Ensure that project information is collected on a sufficiently wide region such that the DEIR addresses the entire project footprint, including borrow and fill sites, staging areas, fuel modification and maintenance zones, and potentially extensive manipulation of adjacent habitat areas, including potential relocation of stretches of the Los Angeles River, as well as areas that may be restored to offset these impacts.

3. Please include an analysis of cumulative effects from proposed developments in the surrounding area.

4. Please be aware that there are numerous historic records for the federally endangered Lyon's pentachaeta (*Pentachaeta lyonii*) and salt marsh bird's beak (*Cordylanthus maritimus* subsp. *Maritimus)*, as well as federal candidate Brand's phacelia (*Phacelia stellaris*) in the vicinity

of the proposed project. If any suitable remnant habitat occurs within the proposed project footprint, focused plant surveys should be conducted during the appropriate time of year by a qualified botanist.

We appreciate the opportunity to comment on the referenced NOP and to participate in the transportation planning process. If you have any questions regarding this letter, please contact Colleen Draguesku of this office at (760) 431-9440, extension 241.

Sincerely,

for Karen A. Goebel
Assistant Field Supervisor

cc: Michelle Barton, CalTrans, District 7

## LITERATURE CITED

Page, Gary W. and W. David Shuford. 2000. Southern Pacific Coast Regional Shorebird Plan. U.S. Shorebird Conservation Plan. Pg. 31.

**Personal Communications**

Garrett, K. 2008. Ornithologist, Natural History Museum of Los Angeles County, dated September 23, 2008

**From:** Lily Anderson
**To:** info@shoemakerprojectlb.com
**Subject:** Information only
**Date:** Monday, April 11, 2016 9:51:09 AM

---

I own the property at 521 chestnut avenue. I received this letter regarding the shoemaker bridge replacement project. Just wanted to confirm this is just for my information and will not affect my property.
Thank you
Lilian Anderson
562/884-7462

Sent from my iPhone

**From:** adreanainlongbeach90802@gmail.com on behalf of Adreana Langston
**To:** info@shoemakerprojectlb.com
**Subject:** 2010 flooding under Edison school catbridge
**Date:** Wednesday, April 13, 2016 6:43:53 PM

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https://youtu.be/NHf8-qAnqcw

**From:** emcmahoney@me.com
**To:** info@shoemakerprojectlb.com
**Subject:** Comment about the Notice of Preparation from Shoemaker Bridge Replacement Project Website
**Date:** Wednesday, April 27, 2016 11:56:30 AM

---

From: Elizabeth Mahoney

Email: emcmahoney@me.com

Phone: 562-912-7709

Comment:
1. Traffic/Transportation: As a resident of downtown, I would like to see continued/similar access to/from Seaside Way to Shoreline Dr./Shoemaker/I-710 on ramp facilities as most residents who live along the south side of Ocean Blvd. use Seaside Way to access our buildings and parking structures. I support the concept of shifting Shoreline Dr. to consolidate the roadway and provide improved access to Cesar Chavez park.
2. Transportation/Traffic: I like both the roundabout or Y-intersection designs.
3. Recreation: I support the concept of retaining and repurposing the existing Shoemaker bridge as a linear park if determined to be financially feasible and not cause undue conflict with the ACOE permitting and water flow in the LA River. The overall design provides great improvement and accessibility to existing parkland so if the linear park concept is too expensive, the residents of downtown still receive a benefit of improved recreational areas.

* You received this message because Elizabeth Mahoney submitted a comment/suggestion.

Regards,
System Administrator

| | |
|---|---|
| **From:** | sean.foster1980@gmail.com |
| **To:** | info@shoemakerprojectlb.com |
| **Subject:** | Comment about the Notice of Preparation from Shoemaker Bridge Replacement Project Website |
| **Date:** | Sunday, May 01, 2016 9:34:22 PM |

---

From: Sean Foster

Email: sean.foster1980@gmail.com

Phone: 213-445-4392

Comment:
I am very supportive of the replacement bridge and expanding the park. I live at 555 Maine Ave, Long Beach 90802.

1. Please make an effort to review the parking in the neighborhood within a couple of blocks of the park. There are too many cars in the blocks around the park today. I can rarely find street parking today. Adding more visitors to the park will only make this problem worse. I would like to see parking tees in the neighborhood nearby the park and more enforcement of parking rules in the neighborhood.

2. I like that the freeway access is being pushed up to 7th street. I think there should be good efforts to reduce freeway noise in the neighborhood.

3. There are too many parties in the park today. Parking overflow and noise are concerns. I would like to see measures taken to limit parties by requiring that they are scheduled in advance. There are days when multiple parties with more than 50 people happen; the parking gets even worse. Party registration needs to include having a resident of Long Beach take responsibility for the event. If someone does not live in Long Beach they should not be having a party in the park. I would also like to see the landscape encourage parties to happen away from the neighborhood and deep in the park to help with noise. Parking should take into account the number of people visiting these parties and be spread out to the event locations.

4. Parking in the neighborhood should be permitted for residents of the local blocks only. Park parking should not overflow. Registered, permitted parking should be limited to the number of registered/permitted bedrooms minus the number of parking spaces in the residence. Residents in the neighborhood use the park parking for overflow because there are too many people living in the neighborhood and there is insufficient parking both on the street and off.

* You received this message because Sean Foster submitted a comment/suggestion.

Regards,
System Administrator

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project, This is regarding this project much further down the line. Specifically when the city and HDR are reviewing bids from contractors to actually do the building of the project. I want the RFP that is put out to the contractors to include a clause that states that the contractor has to have a plan to make sure that A) The ~~employees~~ jobs for the people actually doing the work are reserved for Long Beach residence (to the tune of 60% of the positions). B) That the lowest paid employee is making at least $20 per hour. I understand that this will significantly increase the cost of the bids submitted. Guess what, I am a Long Beach tax payer and I am willing to pay a bit more for justice, so it is worth it.

**Please provide your mailing address below.**

555 Maine Ave
Unit 222
Long Beach, CA
90802

☒ Check the box if you wish to be added to the mailing list.

Sincerely,

Adreana Langston

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project, My comment is regarding a Senas drainage concern affecting Emerald Villas at 555 Maine and Edison Elementary. I sent this video to Ms. Traci Gleason but here is the link: https://www.youtube.be/NHf8-gAnqcw. The flooding in this video is from 2010. But this also occurred in 2017 and will continue as global warming continues. I was told this flooding is controled by a pump station on 3rd street. Please address this flooding when you start work on this area

**Please provide your mailing address below.**

555 Maine Ave
Unit 222
Long Beach, CA
90802

☐ Check the box if you wish to be added to the mailing list.

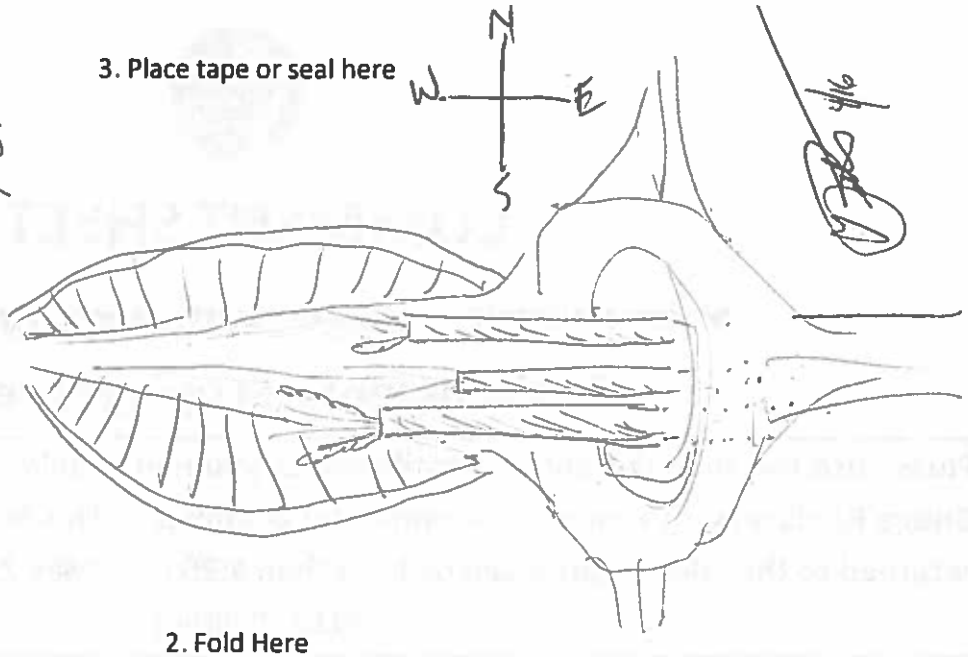
Sincerely,

Adreana Langston

Please print your name

AT END OF BRIDGE, FILL DEAD SPACE INSIDE CIRCLE FOR 'LAX' STYLE COLONES W/ FOUNTAINS AT TOP POLES

3. Place tape or seal here




2. Fold Here

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**Public Works Department**
**City of Long Beach**
**Attn: Traci Gleason**
**333 W. Ocean Boulevard, 9th Floor**
**Long Beach, CA 90802**

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1. Fold Here

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project, 60% of Employees on this project should be local Long Beach workers when hired.

**Please provide your mailing address below.**

grnrockett@verizon.net

☐ Check the box if you wish to be added to the mailing list.

Sincerely,

ANN SALAS-Rock

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project,

- Main Concern is the speed limit and traffic exiting into residential area.

Additionally:

- The numerous accidents and noise with the traffic is a disruption to the 555 Maine Complex and other buildings (residential). The sound of traffic echos off the buildings and is amplified into the condos. My condo is experiencing ongoing noise. (Rental)

I'd like to see a reduction in above concerns

**Please provide your mailing address below.**

417 Daisy Ave
LB CA 90802

☑ Check the box if you wish to be added to the mailing list.

Sincerely,

Maria Barrientos

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project, _____

In regards to noise; excessive, loud, repetitive sounds do affect marine life in the ocean / sea waters. I believe it will be helpful to collaborate with marine biologists; perhaps, at the Aquarium of The Pacific.

In regards to environmental ~~gas~~ greenhouse gas emissions; such as, carbon dioxide which increases the acidity of water and lowers the ph; thus, effects fish's smell to detect predators, and, affects coral reefs, as well as, sea urchins, etc.

**Please provide your mailing address below.**

421 W. Broadway Apt. 5155
Long Beach, Ca.
90802

☒ Check the box if you wish to be added to the mailing list.

Sincerely,

Frances Emily Dawson Harris

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project, _____

The design of the bridge should match the new Desmond bridge.

LOOKING FORWARD TO THE new bridge.

**Please provide your mailing address below.**

_____

_____

_____

_____

☐ Check the box if you wish to be added to the mailing list.

Sincerely,

ELIZABETH CINO

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project, I know there is so much that ~~would~~ delivered to the community this evening. My thoughts will need to express how the expanded park proposal will benefit the community. I have long wished to have that expanded use be an acceptable gift to our over-crowded neighborhood. Keep going and thank you.

**Please provide your mailing address below.**

1255 N. Loma Vista Dr
L.B. 90813

☑ Check the box if you wish to be added to the mailing list.

Sincerely,

Ernie Villa

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project, Will there be a dedicated park law service? On-site? 24/7?

**Please provide your mailing address below.**

Crystal West
4041 E First St #1324
Long Beach, CA
90802

☐ Check the box if you wish to be added to the mailing list.

Sincerely,

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project, _____

My only concern would be the elevated round a bout - love the design & concept to slow down the traffic flow but worry about accidents from people taking it too fast.

Appreciate the overview tonight & involving the community.

Beautiful design - love the park ⇒ better use of space

**Please provide your mailing address below.**

1140 Pacific Ave #1
Long Beach, CA
90813

☑ Check the box if you wish to be added to the mailing list.

Sincerely,

Kelly Carroll

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project, _____

I really want the old bridge to be retained & useful to our neighborhood— such a unique asset...!!!

**Please provide your mailing address below.**

_____

_____

_____

_____

☐ Check the box if you wish to be added to the mailing list.

Sincerely,

Terry Beebe

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project,

Moving the road to utilize the park area is great.

Concerned about how 7th street traffic will flow if it is 2-way + how it will affect the school. Need to keep or build new pedestrian bridge across 7th St.

Need wonderful signage entering Long Beach via 7th or Broadway + also signage leaving Long Beach.

**Please provide your mailing address below.**

951 MAGNOLIA AVE
LB 90802

☒ Check the box if you wish to be added to the mailing list.

Sincerely,

CHERYL PERRY

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

### Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project, I truly liked the arch! Great look and attraction for Long Beach.

* Keep the old bridge and turn it into a fitness park. Several residents run and bike on the river bed, this will be a great point to end a workout in. There are great parks surrounding this bridge (Drake & Chavez park) So definitely throw in some fitness ideas in this project!

* the roundabout sounds dangerous, as for when it is dark and cars are driving fast they can get into accidents and when it happens think about the traffic that will be caused! What if people drive around the roundabout like a "donut" very dangerous! Drunk drivers need to be thought about bc we can't control their actions! No roundabout.

**Please provide your mailing address below.**

132 E. Burnett St Ap3
Long Beach CA 90805

☑ Check the box if you wish to be added to the mailing list.

Sincerely,

Hilda Jurado

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project, _____

I'd like to make sure that if the park aspect of the park is implemented, that it is ADA compliant. Also- I really like the design concept that includes the arches.

**Please provide your mailing address below.**

932 Daisy Ave.
Apt. 2
Long Beach, CA 90813
mswheelchairca2010@yahoo.com

☒ Check the box if you wish to be added to the mailing list.

Sincerely,

Jennifer Kumiyama

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project,

1) COST OF PROJECT ?
2) WHERE DOES $ COME FROM?
3) CLOSING 9TH ST ONRAMP TO BRIDGE WILL DISRUPT MANY L.B. CITIZENS
4) NO ACCESS TO 6TH ST SAME AS ABOVE
5) WHY NOT WIDEN THE EXISTING BRIDGE TO SOLVE CONJESTON FOR 6TH ST OFF RAMP TO WIDEN SOUTH BOUND COULD HAVE A LANE TO JOIN 6TH ST FURTHER DOWN AND ANOTHER LANE TO DOWN TO EXISTING SOUTH BOUND TO BROADWAY & BEYOND
6) THE NORTH EXTENSION COULD SOLVE THE 9TH STREET EXIT
7) ALL OF ABOVE A COST SAVINGS IN TOTAL
8) TURNING THE EXISTING BRIDGE INTO PARK LAND ~~EXT~~ EXT IS ONLY FOR DREAMERS

**Please provide your mailing address below.**

1356 W. COWLES ST
L. B. CA 90813

☐ Check the box if you wish to be added to the mailing list.

Sincerely,

ROBERT BOYDSTON

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project, My biggest concern about the project is the loss of access between the Westside of Long Beach and Downtown. If the 9th and 10th street ramps are gone, then it will be more difficult for people to access the Westside from Downtown. This will cut off many Westside businesses from their customers. Even though access may be available through other routes, e.g. Anaheim, the inconvenience of using these other routes will severely limit their use. In addition, it will be much more difficult for emergency services to access the Westside and will restrict the ability of Westside residents to travel Downtown and to other parts of Long Beach. It will effectively cut off the Westside from the rest of Long Beach.

I do like the possibility of having bike routes to the Westside since currently there is no easy way to get from downtown to the Westside by bicycle.

**Please provide your mailing address below.**

Vincent Passanisi
Santa Fe Importers
1401 Santa Fe Ave.
Long Beach 90813

☑ Check the box if you wish to be added to the mailing list.

Sincerely,

Vincent Passanisi

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project, I strongly support Alternative #2, to repurpose the existing Shoemaker Bridge into a green park space. Specifically, I think downtown cycling infrastructure should be connected to new bike route(s) over the LA river and connecting to LART. I support a roundabout as a traffic-calming measure, but safe transitions for cyclists and pedestrians need to be considered if the new bridge is multi-modal. Since air quality is already a huge concern in this neighborhood, I am very interested in learning how/if this project will impact air quality.

**Please provide your mailing address below.**

Sharon MacNett
821 Chestnut Ave #4
Long Beach, CA 90813

☒ Check the box if you wish to be added to the mailing list.

Sincerely,

Sharon MacNett

Please print your name

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project,

1) Don't remove the old bridge. Converting it to additional park ~~shape~~ space is a wonderful idea

2) Add an area for lawn bowling (bocce court). It will include the "Seniors" in the use of the park. Adding lawn bowling is a cross culture activity not everyone rides bikes or plays soccer

**Please provide your mailing address below.**

Sheila Gibbons
720 W 4th St
#216
LB CA 90802

☒ Check the box if you wish to be added to the mailing list.

Sincerely,

Sheila Gibbons

Please print your name

Sheila Gibbons

# COMMENT SHEET

## Shoemaker Bridge Replacement Project

## Environmental Scoping Meeting

**Please use the space below to identify issues you feel should be studied on the Shoemaker Bridge Replacement Project Environmental Document. This form should be completed and returned to the address provided no later than 4:30 p.m. May 2, 2016.**

**PLEASE PRINT**

Regarding the Shoemaker Bridge Replacement Project, Will the project increase the air pollution? What is the projection when the project built.

**Please provide your mailing address below.**

555 Maine Ave.
Unit 421
Long Beach, CA
90802

☐ Check the box if you wish to be added to the mailing list.

Sincerely,

Ann Salas-Rock

Please print your name

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# F.4 Initial Study for Shoemaker Bridge Replacement

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# INITIAL STUDY

# FOR

# SHOEMAKER BRIDGE REPLACEMENT PROJECT

Prepared By:
**City of Long Beach**
**Public Works Department**
333 W. Ocean Boulevard, 9th Floor
Long Beach, California 90802

April 2016

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# INITIAL STUDY

## BACKGROUND

1. **Project Title:** Shoemaker Bridge Replacement Project.

2. **Lead Agency Name and Address:** City of Long Beach Public Work Department; 333 W. Ocean Boulevard, 9th Floor, Long Beach, CA 90802

3. **Contact Person and Phone Number:** Sean Crumby, City Engineer at 1-(800) 511-4109.

4. **Project Location:** The proposed project is located at the southern end of I-710 Freeway in the City of Long Beach, in the County of Los Angeles, and is bisected by the Los Angeles River, which is maintained by the Los Angeles County Flood Control District (LACFCD).

5. **Project Sponsor's Name and Address:**
   City of Long Beach
   Public Works Department
   333 W. Ocean Boulevard, 9th Floor
   Long Beach, California 90802

6. **General Plan Designation:** The Shoemaker Bridge Replacement Project will include improvements to existing roadways within the Project Limits. According to the Mobility Element of the City of Long Beach (City) General Plan, West Broadway, 3rd Street, 6th Street, 9th Street, Anaheim Street, Magnolia Avenue (south of 3rd Street), Santa Fe Avenue, and Pacific Avenue are classified as Major Avenues. The City defines a Major/Primary Avenue as the major route for the movement of traffic within the City as well as a connector to neighboring cities. Magnolia Avenue (north of 3rd Street) and 10th Street are identified as Minor Avenues. The City defines a Minor Avenue as a roadway that provides for the movement of traffic to neighborhood activity centers and serves as a route between neighborhoods.

   Based on the Land Use Element of the City of Long Beach (City) General Plan, the surrounding land uses include high density residential (LUD 4), mixed use (LUD 7), traditional retail strip commercial (LUD 8A), restricted industrial (LUD 9R), open space and park (LUD 11), harbor/airport (LUD 12), and right-of-way uses (LUD 13).

7. **Zoning:** According to the City of Long Beach Municipal Code, the proposed project is located within Zoning Maps 3 and 9. Areas within the project limits of Map 3 include Downtown Shoreline (PD-6), Queensway Bay (PD-21), and Downtown Plan (PD-30). Areas within the project limits of Map 9 include Public Right-of-Way (PR), Downtown Shoreline (PD-6), Willmore City (PD-10), Queensway Bay (PD-21), and Downtown Plan (PD-30).

8. **Description of Project:**
   The City, in cooperation with Caltrans, is proposing to replace the Shoemaker Bridge (West Shoreline Drive) in the City of Long Beach, California. The Shoemaker Bridge Replacement Project (proposed project) is an Early Action Project of the Interstate 710

(I-710) Corridor Improvement Project and is located at the southern end of I-710 in the City of Long Beach and is bisected by the Los Angeles River. The Regional Location and Project Vicinity (Figure 1-1) is provided below.

The purpose of the proposed project is to:

- Improve existing traffic safety and operations;
- Increase multi-modal connectivity within the project limits and surrounding area;
- Enhance Complete Streets elements by providing bicycle, pedestrian, and streetscape improvements on major thoroughfares; and
- Address non-standard features and design deficiencies.

Three alternatives, a No Build Alternative (Alternative 1), and two Build Alternatives (Alternatives 2 and 3) are being evaluated as part of the proposed project. Both Alternatives 2 and 3 will replace the existing Shoemaker Bridge over the Los Angeles River with a new bridge located just south of the existing bridge. Both Alternatives will include the evaluation of design options for a roundabout or a "Y" intersection at the easterly end of the bridge. The primary difference between Alternatives 2 and 3 is that Alternative 2 provides for the re-purposing of the existing bridge for non-motorized transportation and recreational use and Alternative 3 includes removal of the existing bridge.

Alternatives 2 and 3 will also provide improvements to associated roadway connectors to downtown Long Beach and along West Shoreline Drive from I-710. Improvements include the realignment of the existing West Shoreline Drive in downtown Long Beach to facilitate the City's future planned expansion of the Cesar E. Chavez and Drake Parks. Both alternatives include improvements along I-710 from just south of Anaheim Street to just south of West Shoreline Drive.

Under Alternatives 2 and 3, proposed street improvements are also anticipated along West Shoreline Drive, 3$^{rd}$ Street, 6$^{th}$ Street, 7$^{th}$ Street, Ocean Boulevard, and Broadway Avenue. The proposed project will also evaluate potential improvements along Magnolia Ave. and Anaheim Street. The proposed street improvements may include additional street lighting, re-striping, turn lanes, bicycle, pedestrian, and streetscape improvements. Additionally, as an early action project of the I-710 Corridor Improvement Project, Alternatives 2 and 3 will evaluate the impacts from the closure of the 9$^{th}$ and 10$^{th}$ Street ramp connections into downtown Long Beach.

Although most of the improvements and construction would occur within the existing Caltrans or City of Long Beach right-of-way, acquisition of property and easements from the Los Angeles County Flood Control District (LACFCD) will be required.

The proposed project is included in the Final 2015 Federal Transportation Improvement Program (FTIP) and the Southern California Association of Government's (SCAG) 2012 Regional Transportation Plan (RTP) for Los Angeles County as Project ID: LAOG830.1, the project description provided in the FTIP and RTP states the following:

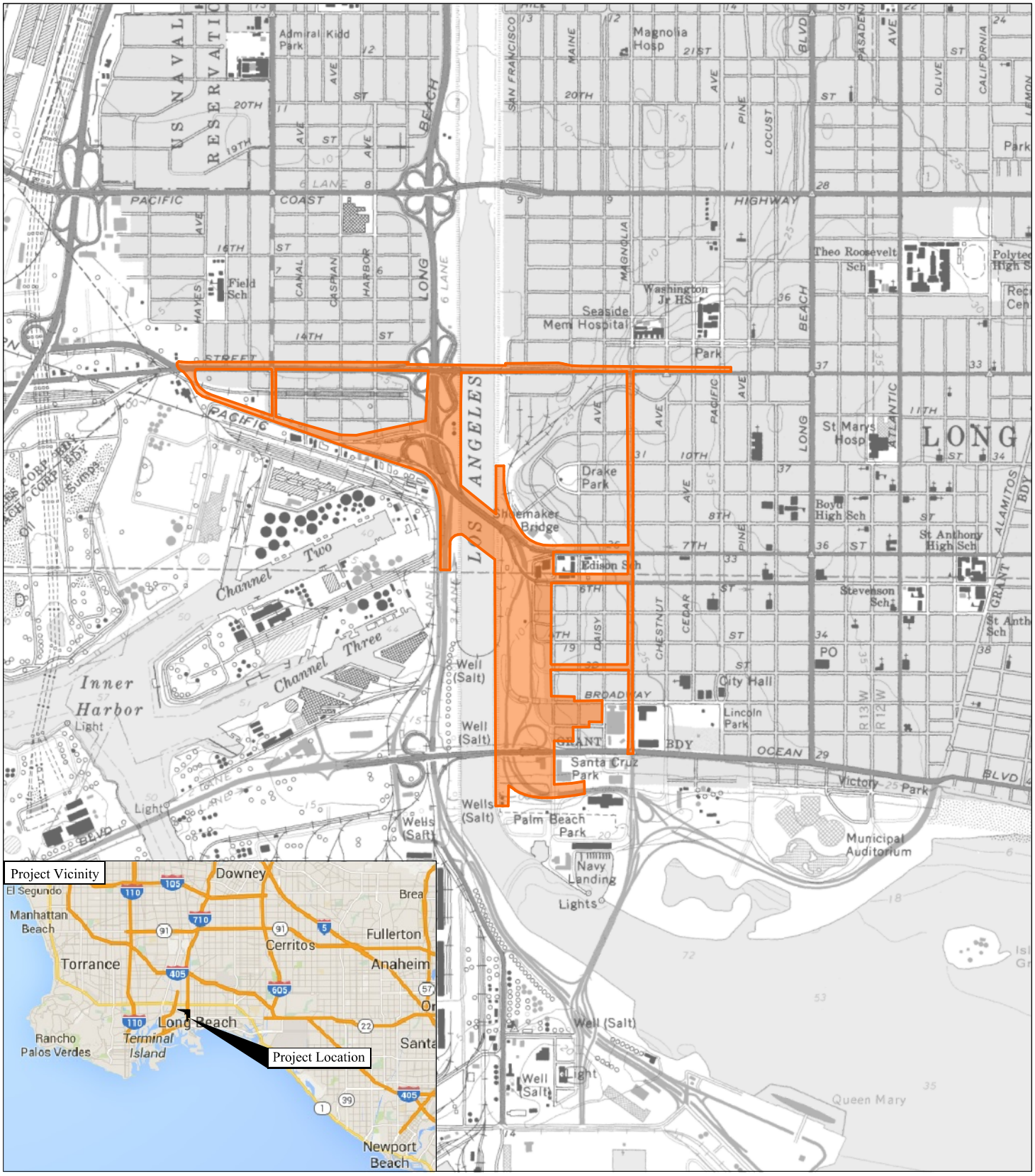
> I-710 Improvements/Shoemaker Bridge - Downtown Exits. The project makes bicycle, pedestrian, and streetscape improvements on major thoroughfares.

9. **Surrounding Land Uses and Setting:** Land use categories surrounding the project area are provided below:

    - Land uses within the project limits include commercial and services, industrial, open space and recreation, residential, and transportation and utilities.
    - Land uses located north of the project limits include industrial, transportation and utilities, residential, and commercial and services.
    - Land uses located east of the project limits include open space and recreation, residential, commercial and services, and industrial.
    - Land uses located south of the project limits include primarily commercial and services, open space and recreation, and transportation and utilities.
    - Land uses located west of the project limits include primarily transportation and utilities and industrial.
    - Land uses located within the project limits include transportation and utilities, industrial, open space and recreation, and commercial and services.

10. **Other Public Agencies Whose Approval is Required:**

    - Federal Highway Administration (FHWA)
    - California Coastal Commission (CCC)
    - State Water Resources Control Board (SWRCB)
    - Potentially Affected Utilities: Long Beach Water District, Los Angeles County Sanitation District, Long Beach Oil and Gas, Southern California Gas, Southern California Edison, Charter Communication, Verizon and (American Telephone & Telegraph) AT&T.
    - Los Angeles County Flood Control District (LACFCD)
    - Los Angeles County Sanitation District
    - California Department of Fish and Wildlife (CDFW)
    - U.S. Army Corps of Engineers (USACE)
    - Regional Water Quality Control Board (RWQCB)
    - South Coast Air Quality Management District (SCAQMD)




LEGEND

Project Limits

FIGURE 1-1

0 1000' 2000'

FEET

SOURCE: USGS 7.5min. Quad. (LONG BEACH, 1978)

*Shoemaker Bridge Replacement Project*

Regional Location and Project Vicinity

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

- ☒ Aesthetics
- ☐ Agriculture and Forestry Resources
- ☒ Air Quality
- ☒ Biological Resources
- ☒ Cultural Resources
- ☒ Geology / Soils
- ☒ Greenhouse Gas Emissions
- ☒ Hazards & Hazardous Materials
- ☒ Hydrology / Water Quality
- ☒ Land Use / Planning
- ☐ Mineral Resources
- ☒ Noise
- ☐ Population / Housing
- ☒ Public Services
- ☐ Recreation
- ☒ Transportation / Traffic
- ☒ Utilities / Service Systems
- ☒ Mandatory Findings of Significance

## DETERMINATION (MANDATORY FINDINGS OF SIGNIFICANCE)

On the basis of the environmental analysis and review completed as part of this Initial Study's preparation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Sean Crumby
City Engineer

3/30/16
Date

# SECTION 1 – INITIAL STUDY CHECKLIST

The environmental analysis in Section 3.0 of this Initial Study indicates that the project may result in potentially significant impacts. The Initial Study Checklist, provide below and on the following pages, summarizes the findings of the environmental analysis.

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **I. AESTHETICS. Would the project:** | | | | |
| a) Have a substantial adverse effect on a scenic vista? | | | | X |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | X |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | X | | | |
| d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? | X | | | |
| **II. AGRICULTURE & FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:** | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | | | | X |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | X |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | | | | X |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | | | | X |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | | | | X |
| **III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:** | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | X | | | |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | X | | | |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | X | | | |
| d) Expose sensitive receptors to substantial pollutant concentrations? | X | | | |
| e) Create objectionable odors affecting a substantial number of people? | | | X | |
| **IV. BIOLOGICAL RESOURCES. Would the project:** | | | | |
| a) 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 Wildlife or U.S. Fish and Wildlife Service? | X | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| b) 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 Wildlife or U.S. Fish and Wildlife Service? | X | | | |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | X | | | |
| d) 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? | | X | | |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | X | |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan? | | | X | |
| **V. CULTURAL RESOURCES. Would the project:** | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | X | | | |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? | X | | | |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | X | | | |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | X | | | |
| **VI. GEOLOGY AND SOILS. Would the project:** | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| i) 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? Refer to Division of Mines and Geology Special Publication 42. | X | | | |
| ii) Strong seismic ground shaking? | X | | | |
| iii) Seismic-related ground failure, including liquefaction? | X | | | |
| iv) Landslides? | X | | | |
| b) Result in substantial soil erosion or the loss of topsoil? | X | | | |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | X | | | |
| d) Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2013), creating substantial risks to life or property? | X | | | |
| e) 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? | | | | X |
| **VII. GREENHOUSE GAS EMISSIONS** | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | X | | | |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | X | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:** | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials? | X | | | |
| b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | X | | | |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | X | | | |
| d) 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? | X | | | |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | | | | X |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | | | | X |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | X | | | |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | | | | X |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **IX. HYDROLOGY AND WATER QUALITY. Would the project:** | | | | |
| a) Violate any water quality standards or waste discharge requirements? | X | | | |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | | | X | |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | X | | | |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | X | | | |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | X | | | |
| f) Otherwise substantially degrade water quality? | X | | | |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map? | | | | X |
| h) Place within 100-year flood hazard area structures, which would impede or redirect flood flows? | X | | | |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | X | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| j) Inundation by seiche, tsunami, or mudflow? | X | | | |
| **X. LAND USE AND PLANNING. Would the project:** | | | | |
| a) Physically divide an established community? | X | | | |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | X | | | |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | X | | | |
| **XI. MINERAL RESOURCES. Would the project:** | | | | |
| a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state? | | | | X |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | | | | X |
| **XII. NOISE. Would the project result in:** | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | X | | | |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | | | X | |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | X | | | |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | X | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| e) 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 expose people residing or working in the project area to excessive noise levels? | | | | X |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | | | | X |
| **XIII. POPULATION AND HOUSING. Would the project:** | | | | |
| a) Induce substantial 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)? | | | | X |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | | | | X |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | | | | X |
| **XIV. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:** | | | | |
| a) Fire protection? | X | | | |
| b) Police protection? | X | | | |
| c) Schools? | X | | | |
| d) Parks? | X | | | |
| e) Other public facilities? | | | | X |
| **XV. RECREATION**. | | | | |
| a) Would the project 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? | | | | X |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? | | | | X |
| **XVI. TRANSPORTATION/TRAFFIC. Would the project:** | | | | |
| a) Conflict with an applicable plan, ordinance or policy establishing measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, street, highways and freeways, pedestrian and bicycle paths, and mass transit? | | X | | |
| b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. | | | X | |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks? | | | | X |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | X | |
| e) Result in inadequate emergency access? | X | | | |
| f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | | | X | |
| **XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:** | | | | |
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | | X |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | | X |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | X | | | |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed? | | | | X |
| e) 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? | | | | X |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | X | | | |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | X | | | |
| **V. MANDATORY FINDINGS OF SIGNIFICANCE.** | | | | |
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | X | | | |

| Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | X | | | |
| c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly? | X | | | |

# SECTION 2 - ENVIRONMENTAL ANALYSIS

This section provides an evaluation of the impact categories and questions contained in the Environmental Checklist.

## 2.1 AESTHETICS

**a) Have a substantial adverse effect on a scenic vista?**

**No Impact.** According to the City's Open Space Element of the General Plan, no scenic vistas exist within the project limits. Therefore, no impacts to scenic vistas are anticipated and no further analysis is required in the EIR.

**b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?**

**No Impact.** Shoemaker Bridge is not located on a State Highway. In addition, according to the Caltrans list of Eligible and Officially Designated State Scenic Highways, there are no scenic highways adjacent to the project limits. Therefore no impacts to State Scenic Highways are anticipated and no further analysis is required in the EIR.

**c) Substantially degrade the existing visual character or quality of the site and its surroundings?**

**Potentially Significant Impact.** The proposed project would result in replacement of the existing Shoemaker Bridge. Implementation of the proposed project may result in a change of the existing visual character or quality of the project site and its surroundings. The EIR will evaluate potential impacts to visual character and quality during construction and operation of the proposed project.

**d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?**

**Potentially Significant Impact.** Within the project limits light and glare is attributed to existing traffic and street lighting and limited light sources from nearby residential development. Existing lighting on the streets and along the ramps would likely be modified or relocated as a part of the proposed project in those areas where improvements are proposed. Since the project involves the replacement of an existing bridge in a predominantly built out environment, it is unlikely the project would adversely affect day or nighttime views with mitigation incorporated. However, the EIR will further analyze and identify the potential impacts from light and glare as a result of the proposed project.

## 2.2 AGRICULTURE & FORESTRY RESOURCES

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

**No Impact.** As shown in the City's general plan land use map for District 9, the project study area is in a highly urbanized area comprised of residential, commercial and services, industrial, transportation and utilities, and open space and recreation. In addition,

according to the California Department of Conservation, the project study area is not designated as Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance (DOC 2014). Implementation of the proposed project would not convert mapped farmland to nonagricultural use. Therefore, no impacts to prime or unique farmland, or Farmland of Statewide Importance are anticipated and no further analysis is required in the EIR.

**b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

**No Impact.** According to the California Department of Conservation's Division of Land Resource Protection no land located within the City of Long Beach has a Williamson Act contract (DLRP 2013). In addition, per Chapter 21.30 of the City's Municipal Code, the City does not have any land zoned for agricultural use (Long Beach 2014b). Therefore, implementation of the proposed project would not conflict with existing zoning for agricultural use. Therefore, no impacts to existing zoned farmland or land under a Williamson Act contract would occur.

**c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?**

**No Impact.** According to Land Use Element of the City's General Plan and information from the Farmland Mapping and Monitoring Program (FMMP), the City does not have any land zoned as forest land or timberland, (Long Beach 2014b). Therefore, project implementation would have no impact on forestland or timberland, and no further analysis is required in the EIR.

**d) Result in the loss of forest land or conversion of forest land to non-forest use?**

**No Impact.** Refer to Response 2.2(c).

**e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or the conversion of forest land to a non-forest use?**

**No Impact.** Refer to Responses 2.2(a) through 2.2(c).

## 2.3 AIR QUALITY

**a) Conflict with or obstruct implementation of the applicable air quality plan?**

**Potentially Significant Impact.** The City of Long Beach, including the project study area, is in the South Coast Air Basin (SCAB) and is subject to the Air Quality Management Plan (AQMP) prepared by the South Coast Air Quality Management District (SCAQMD). SCAQMD's 2012 AQMP is based on regional growth forecasts for the Southern California Association of Governments (SCAG) region. The EIR will evaluate the proposed project for consistency with regional growth forecasts and any impacts the proposed project may have on the attainment of regional air quality objectives.

**b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

**Potentially Significant Impact.** Construction activities associated with the proposed project would generate exhaust from construction equipment and vehicle trips, fugitive dust from demolition and ground-disturbing activities, and off-gas emissions from paving. Operation of the proposed project may result in mobile-source emissions. The EIR will analyze and identify potential project construction and operational air quality emissions and proposed mitigation measures if those emissions would exceed SCAQMD's regional significant thresholds.

**c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**

**Potentially Significant Impact.** Refer to Response 2.3(b).

**d) Expose sensitive receptors to substantial pollutant concentrations?**

**Potentially Significant Impact.** Sensitive receptors are defined as facilities (schools, hospitals) or land uses (residential neighborhoods) that include members of the population (children, elderly, and people with illnesses) that are particularly sensitive to effects of air pollutants. As identified previously, the project study area is located within a heavily urbanized area which includes residential neighborhoods and educational facilities. This topic will be analyzed as part of the EIR.

**e) Create objectionable odors affecting a substantial number of people?**

**Less Than Significant Impact.** The EIR will analyze and evaluate the potential for construction and operational activities of the proposed project to generate objectionable odors. The California Air Resources Board's (ARB's) Air Quality and Land Use Handbook identifies a list of the most common sources of odor complaints received by local air districts. Typical sources of odor complaints include facilities such as sewage treatment plants, landfills, recycling facilities, petroleum refineries, and livestock operations. The proposed project is not expected to construct any long-term odor sources. Some phases of construction, particularly asphalt paving, would result in short-term odors in the immediate area of each paving site. Such odors would be quickly dispersed below detectable thresholds as distance from the site(s) increases. Therefore, impacts to the public as a result of objectionable odors generated during the construction and operation of the proposed project are likely less than significant.

## 2.4 BIOLOGICAL RESOURCES

**a) 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 Wildlife or U.S. Fish and Wildlife Service?**

**Potentially Significant Impact.** Implementation of the proposed project may result in direct and/or indirect impacts to special-status species and habitats within the project study area. A search of the California Natural Diversity Database (CNDDB) for the Long Beach, California 7.5' USGS Topographic Quadrangle identified a minimum of eighteen special-status plants and animals known to occur in the vicinity of the project. Since the project area is highly disturbed, most of these species are not likely to occur within the project area. The Los Angeles River may provide habitat and serve as a movement and/or foraging corridor for marine and/or bird species. Regulations that protect plant and/or wildlife species that are applicable to the proposed project include the State and Federal Endangered Species Acts, the Magnuson-Stevens Fishery Conservation and Management Act, Marine Mammal Protection Act, Marine Life Protection Act, and Migratory Bird Treaty Act. The EIR will evaluate special-status species, current regulatory requirements, and potential impacts to special-status species and habitats.

**b) 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 Wildlife (CDFW) or U.S. Fish and Wildlife Service?**

**Potentially Significant Impact.** The Los Angeles River is a natural-bottom channel within the project area and contains deep water that does not support emergent vegetation or riparian habitat. The rest of the project area is highly disturbed and does not support any known sensitive natural communities. Although it lacks vegetation, the Los Angeles River is potentially subject to the jurisdiction of the CDFW pursuant to Section 1602 of the California Fish and Game Code. A Streambed Alteration Notification (SAN) is expected to be required for the project. The project is not located within any area identified as designated critical habitat for any federally listed species. The EIR will evaluate sensitive species, current regulatory requirements, and potential impacts to sensitive species and habitats.

A portion of the Los Angeles River within the project area is designated as Essential Fish Habitat (EFH) for the northern anchovy by the National Marine Fisheries Service (NMFS). In order to ensure that project impacts to EFH are not significant, consultation with NMFS will be required. The EIR will evaluate sensitive species, current regulatory requirements, and potential impacts to sensitive species and habitats.

**c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

**Potentially Significant Impact.** The Los Angeles River crosses through a portion of the project study area. The Los Angeles River parallels I-710 and has a natural bottom and riprap sides within the project limits. Since the Los Angeles River does not support

emergent vegetation within the study area, it is not expected to support federally protected wetlands as defined by Section 404 of the Clean Water Act. Implementation of the proposed project may result in temporary and permanent impacts to potentially jurisdictional non-wetland waters of the U.S. Authorization to conduct project activities in the Los Angeles River and is anticipated to require authorization from the US Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act. Avoidance, minimization, and/or mitigation measures to reduce project impacts to USACE jurisdictional areas to a less than significant level will be required in order to obtain issuance of the Section 404 Permit. This topic will be addressed in the EIR.

**d) 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?**

**Less than Significant Impact with Mitigation Incorporation.** Wildlife movement corridors, also called dispersal corridors or landscape linkages, are linear features primarily connecting at least two substantial habitat areas. Wildlife corridors and linkages are important features in the landscape, and the viability and quality of a corridor or linkage are dependent upon site-specific factors. The Los Angeles River serves as a wildlife corridor between the Pacific Ocean and upstream habitat areas. Marine mammals, such as harbor seals and California sea lions, are known to use upstream areas of the Los Angeles River for basking and foraging. The River corridor is also known to serve as a flyway for birds, including terns, gulls, and other marine birds. Shoemaker Bridge has the potential to support roosting bats and bats may use the Los Angeles River within the project area to access foraging habitat north of the project area.

Due to the small footprint of permanent structures to be located within the Los Angeles River, project activities are not expected to interfere substantially with wildlife use of the Los Angeles River. Avoidance and/or minimization measures can be implemented during project construction in order to minimize the project footprint within the Los Angeles River. The EIR will identify and evaluate potential impacts associated with movement of native resident or migratory fish or wildlife species within the project area.

**e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**Less Than Significant Impact.** Trees in the City are protected under Chapter 14.28 (Trees and Shrubs) of the City's Municipal Code, which regulates the planting, maintenance, and removal of trees in along any City street. If the project will require removal or maintenance of any trees along City streets, a permit will be acquired from the Director of Public Works, as required per Section 14.28.060 of the City's Municipal Code. Guards will be placed around any trees in the vicinity of project construction activities located along the street, alley, court or other public place in order to prevent injury to protected trees. Since any removal or maintenance of trees along City streets will be conducted per the requirements of Chapter 14.28, the project is anticipated to have a less than significant impact on local policies or ordinances protecting biological resources.

**f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

**Less Than Significant Impact.** A portion of the project area west of the Los Angeles River is located within the Coastal Zone, which is potentially subject to the jurisdiction of the California Coastal Commission (CCC). There are no other known Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans that cover the project area. No impacts to Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, required, or state habitat conservation plan are anticipated. However, impacts related to the project within the Coastal Zone will be further evaluated in the EIR.

## 2.5 CULTURAL RESOURCES

**a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?**

**Potentially Significant Impact.** Section 15064.5 defines historic resources as resources listed or determined to be eligible for listing by the State Historical Resources Commission, a local register of historical resources, or the lead agency. Generally a resource is considered "historically significant" if it meets one of the following criteria:

i) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

ii) Is associated with the lives of persons important in our past;

iii) Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values;

iv) Has yielded, or may be likely to yield, information important in prehistory or history.

According to the map of the City's Historic Districts, the proposed project in the area of Magnolia Street (roughly between Anaheim Street at the north and 3rd Street on the south) and 7th Street (west of Magnolia) are located within the Drake Park/Willmore Historic District. In addition, based on information in the City's Historic Preservation Element (adopted by the City on June 22, 2010), the James E. Porter Residence (1902) located at 351 Magnolia Ave. (on the corner of 4th and Magnolia) has been identified as a historic landmark located within the project limits. The EIR will evaluate the proposed project's impacts on any potentially historic resources within the project study area.

**b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?**

**Potentially Significant Impact.** Implementation of the proposed project may cause the disturbance of previously unknown archaeological resources within the project study area. Construction in undeveloped areas or redevelopment that requires excavation to depths greater than current foundations has the potential to encounter unknown archaeological

resources. The EIR will evaluate potential impacts on sensitive archeological resources resulting from implementation of the proposed project.

**c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Potentially Significant Impact.** Paleontological resources, or fossils, are the remains of extinct organisms, and provide the only direct evidence of ancient life. They are considered to be non-renewable resources because they cannot be replaced once they are destroyed. In general, surface disturbing activities such as grading and excavation have the potential to cause adverse effects on surface and subsurface paleontological resources (if present). This topic will be addressed in the EIR.

**d) Disturb any human remains, including those interred outside of formal cemeteries?**

**Potentially Significant Impact.** California Health and Safety Code, Section 7050.5; CEQA Section 15064.5; and Public Resources Code, Section 5097.98 mandate the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. Specifically, California Health and Safety Code, Section 7050.5, requires that if human remains are discovered on a project site, disturbance of the site shall remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. If the coroner determines that the remains are not subject to his or her authority and if the coroner has reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Since soil-disturbing activities associated with the proposed project could result in the discovery of human remains, significant impacts to human remains could occur. The EIR will evaluate the proposed project's impact on any potentially historic resources within the project study area.

## 2.6 GEOLOGY AND SOILS

**a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**

**i) 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? Refer to Division of Mines and Geology Special Publication 42.**

**Potentially Significant Impact.** The project limits is not located within an Alquist-Priolo Earthquake Fault Zone as defined by the State of California (California Division of Mines and Geology, 1990). The project study area is however located in seismically-active Los Angeles County. There are several known active faults in the region, including the Newport-Inglewood Fault system and the Puente Hills Fault. Therefore, any major earthquake along these active earthquake faults will likely cause seismic ground shaking in the project study area. Impacts related to seismic activity in the area will be further evaluated in the EIR.

**ii) Strong seismic ground shaking?**

**Potentially Significant Impact.** Refer to Response 2.6 (a.i).

**iii) Seismic-related ground failure, including liquefaction?**

**Potentially Significant Impact.** Liquefaction is the sudden and temporary loss of soil strength when sandy, unconsolidated soils/sediments with fine grain characteristics, loose consistency and low confining pressure, saturated by groundwater within 50 feet of the surface are subjected to strong ground shaking or dynamic loading. Liquefaction is also associated with lateral spreading, excessive settlement, and failure of shallow bearing foundations. As shown in Plate 7 of the City's Seismic General Plan, the majority of the project is situated on an area that has potentially significant susceptibility to liquefaction. This topic will be studied further in the EIR for the proposed project.

**iv) Landslides?**

**Potentially Significant Impact.** Slopes within the City are generally less than 50 feet sloping flatter than 1-1/2: 1, horizontal to vertical. In addition, according to Plate 9 in the City's Seismic Safety Element of the General Plan, the project is not located in an area of relatively steep slopes. This topic will be further studied in the EIR.

**b) Result in substantial soil erosion or the loss of topsoil?**

**Potentially Significant Impact.** According to the Seismic Safety Element of the City's General Plan subsurface soil within the project area is predominantly interlayered sand, silt, and clay that were noted to be soft to very stiff (loose to medium dense). During construction of the proposed project, excavated soil would be exposed, and there would be a potential increase for soil erosion compared to existing conditions. This topic will be further discussed in the EIR.

**c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

**Potentially Significant Impact.** Refer to Response 2.6 (a.iii) regarding liquefaction and Response 2.6 (a.iv) regarding landslides.

**d) Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2013), creating substantial risks to life or property?**

**Potentially Significant Impact.** Expansive soils shrink or swell as moisture content decreases or increases; the shrinking or swelling of the soil can shift, crack, or break structures and structure foundations built on such soils. There is a potential for expansive soils to exist within the project study area. This issue will be further evaluated in the EIR.

**e) Have soils capable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

**No Impact.** Implementation of the proposed project would result in the replacement of existing Shoemaker Bridge. The proposed project does not include any commercial or

residential development and would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, no impact associated with this issue would occur and no further evaluation in the EIR is necessary.

## 2.7 GREENHOUSE GAS EMISSIONS

**a) Generate greenhouse gas emission either directly or indirectly, that may have a significant impact on the environment?**

**Potentially Significant Impact.** Emissions of greenhouse gases (GHG) contributing to global climate change are largely attributable to human activities associated with industrial/manufacturing, utility, transportation, residential and agricultural uses. About three quarters of human emissions of CO2 to the global atmosphere during the past 20 years are due to the burning of fossil fuel. California produces roughly 1.4 percent of the world's, and 6.2 percent of the total U.S. GHG emissions. In order to control and reduce GHG emissions, California has taken a proactive role. California's major initiatives for reducing climate change or GHG emissions are outlined in Assembly Bill 32 (signed into law 2006), 2005 Executive Order and a 2004 ARB regulation to reduce passenger car GHG emissions. These efforts aim at reducing GHG emissions to 1990 levels by 2020 - a reduction of about 25 percent, and then an 80 percent reduction below 1990 levels by 2050. The EIR will evaluate the potential for the proposed project to generate GHG emissions during construction and operation.

**b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

**Potentially Significant Impact.** The California Air Resources Board's Scoping Plan is California's GHG reduction strategy to achieve the state's GHG emissions reduction target, established by AB 32, of 1990 emission levels by year 2020. The Southern California Association of Governments' 2012 Regional Transportation Plan/ Sustainable Communities Strategy sets forth a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce GHG emissions from transportation (excluding goods movement) in accordance with the region's per capita GHG reduction goals under SB 375. In addition, the City of Long Beach adopted a Sustainable City Action Plan to provide a framework for achieving the City's local sustainability goals, including GHG reduction. The EIR will evaluate the proposed project's consistency with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

## 2.8 HAZARDS AND HAZARDOUS MATERIALS

**a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?**

**Potentially Significant Impact.** Materials hazardous to humans, wildlife, and sensitive environments would be present during project construction. These materials include diesel fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets. The potential exists for direct impacts to human health and biological resources from accidental spills of small amounts of hazardous materials from construction equipment during construction of the project. However, the project would be required to comply with Federal, State, and City of Long

Beach regulations which regulate and control those materials handled on-site. This topic will be further discussed in the EIR.

**b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous material into the environment?**

**Potentially Significant Impact.** Refer to Response 2.8(a).

**c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

**Potentially Significant Impact.** The nearest schools to the project study area are Cesar Chavez Elementary School (located at 730 W 3rd Street) and Edison Elementary School (located at 625 Maine Avenue). Both schools are located within a quarter mile of the project study area. This topic will be further discussed in the EIR.

**d) 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?**

**Potentially Significant Impact.** California Government Code Section 65962.5 specifies lists of the following types of hazardous materials sites: hazardous waste facilities; hazardous waste discharges for which the State Water Quality Control Board has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated. Further evaluation in the EIR is required to identify whether hazardous materials sites exist on or in the vicinity of the project study area

**e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**

**No Impact.** The closest public/public use airport is the Long Beach Municipal Airport, located approximately 4.1 miles northeast of the project study area. The project study area is located outside of the airport influence area boundary for the Long Beach Municipal Airport[1]. No impacts associated with this issue are anticipated to occur and no mitigation is required. This topic will not be discussed further in the EIR.

**f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?**

**No Impact.** There are no private airstrips within the vicinity of the project study area. The proposed project would not result in an airport safety hazard to people within the project study area. No impact is identified and no mitigation is required. This topic will not be discussed further in the EIR.

[1] Long Beach Municipal Airport Influence Area Map, Los Angeles County Airport Land Use Commission, http://planning.lacounty.gov/assets/upl/project/aluc_airport-long-beach.pdf, May 2013.

**g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Potentially Significant Impact.** The Public Safety Element of the City's General Plan addresses emergency operating procedures for the City which includes the project study area. The proposed project would comply with the City's design and safety standards as set forth by Chapter 18.48 (Fire Code) of the City's Municipal Code, to ensure that the proposed project does not interfere with the provision of local emergency services (e.g., provision of adequate access roads to accommodate emergency response vehicles during construction activities). However, there is a potential that the proposed project may incur short-term impacts during construction activities and long-term impacts during operation with the closure of 9th and 10th Streets. Therefore, a potential to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan during construction and operation of the proposed project may still occur and these impacts will be discussed further in the EIR.

**h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

**No Impact.** The project study area does not fall into an area characterized as either (1) a wildland area that may contain substantial forest fire risk and hazard, or (2) very high fire hazard severity zone. [2] In addition, the project study area is located in a highly urbanized, built-out portion of the City. Therefore, the development and operation of the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. No impacts associated with this issue are anticipated to occur and no mitigation is required. This topic will not be discussed further in the EIR.

## 2.9 HYDROLOGY AND WATER QUALITY

**a) Violate any water quality standards or waste discharge requirements?**

**Potentially Significant Impact.** The U.S. Environmental Protection Agency (EPA) establishes national water quality standards. Pursuant to Section 402 of the Clean Water Act, the EPA has also established regulations under the National Pollution Discharge Elimination System (NPDES) program to control direct stormwater discharges. The Los Angeles Regional Water Quality Control Board (Los Angeles RWQCB) administers the NPDES permitting programs for the City of Long Beach and is responsible for developing waste discharge requirements. There are also several regional Total Maximum Daily Loads (TMDLs) currently in effect within the Los Angeles River watershed to reduce trash, heavy metals and pathogens in the local receiving waters. The City of Long Beach's Sustainable Action Plan includes implementation of a three-stage "treatment train" to prevent trash from entering the existing catch basins and filter baskets to reduce oils/greases, pesticides, sediment and bacteria levels within stormwater. The City adopted a Low Impact Development (LID) Ordinance on November 16, 2010 as Chapter 18.74 of the Long Beach Municipal Code (LBMC), requiring projects to implement specific water quality treatment and runoff reduction techniques. Based on the proposed project's proximity to receiving waters (i.e., Los Angeles River and Pacific Ocean), water quality

[2] Draft Fire Hazard Severity Zones in Local Responsibility Area, CalFire, http://frap.fire.ca.gov/webdata/maps/los_angeles/LosAngelesCounty.pdf, May 2012.

impacts associated with the construction and operation of the project may be potentially significant. These impacts will be further analyzed in the EIR.

**b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**

**Less Than Significant Impact.** The proposed project does not propose to use groundwater resources or to otherwise affect any groundwater resources that are used for water supply. While it is not anticipated that the proposed project would not use groundwater resources, this topic will be further discussed in the EIR.

**c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?**

**Potentially Significant Impact.** Implementation of the proposed project may result in changes to the existing drainage pattern. The EIR will evaluate and identify what these changes may include and if those changes would result in impacts within the project study area.

**d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?**

**Potentially Significant Impact.** Refer to Response 2.9(c).

**e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

**Potentially Significant Impact.** Refer to Response 2.9(c).

**f) Otherwise substantially degrade water quality?**

**Potentially Significant Impact.** Refer to Response 2.9(a).

**g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map?**

**No Impact.** The proposed project would result in the replacement of the existing Shoemaker Bridge. Since no housing is proposed as part of the project, the proposed project would not result in the placement of housing within a 100-year flood hazard area as mapped on a Federal flood hazard map. No impacts associated with this issue are anticipated to occur and no mitigation measures are required. This topic will not be discussed further in the EIR.

**h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?**

**Potentially Significant Impact.** The proposed project would result in the replacement of the existing Shoemaker Bridge. The replacement of the bridge and associated improvements may result in the placement of supporting infrastructure within a 100-year flood hazard area (e.g. Los Angeles River). This topic will be further discussed in the EIR.

**i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

**Potentially Significant Impact.** Refer to Response 2.9(c).

**j) Inundation by seiche, tsunami, or mudflow?**

**Potentially Significant Impact.** Due to the project study area's proximity to the Los Angeles River and the Pacific Ocean, there is a possibility of inundation by seiche, tsunami, or mudflow that could be potentially significant. This topic will be further discussed in the EIR.

## 2.10 LAND USE AND PLANNING

**a) Physically divide an established community?**

**Potentially Significant Impact.** Although the proposed project primarily focuses on the replacement of the existing Shoemaker Bridge, and would not result in a physical divide of an established community, there may be indirect traffic impacts from the implementation of the I-710 Corridor Project which may result in the closure of 9$^{th}$ and 10$^{th}$ Streets. Since the proposed project has been identified as an Early Action Project the potential closure of 9$^{th}$ and 10$^{th}$ Streets will be addressed as part of the proposed project; and therefore, may result in a potential physical divide of an established community. This topic will be further discussed in the EIR.

**b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

**Potentially Significant Impact.** Refer to Response 2.10(a).

**c) Conflict with any applicable habitat conservation plan or natural community conservation plan?**

**Potentially Significant Impact.** Refer to Response 2.10(a).

## 2.11 MINERAL RESOURCES

**a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?**

**No Impact.** The City's General Plan does not identify mineral resources within the project study area and there are no active oil wells or natural resource extraction activities within the area where the improvements are proposed. Therefore, no impact is anticipated and no mitigation is required. This topic will not be further discussed in the EIR

**b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

**No Impact.** There are no mineral, oil or energy extraction and/or generation activities within the project area or in the immediate area. The resources and materials that would be used to construct the project will not include any materials that are considered to be rare or unique. In addition, the project study area site is not designated by the City of Long Beach as a locally important mineral resource recovery site. Therefore, no impact is anticipated to occur with implementation of the project and no mitigation measures are required. This topic will not be further discussed in the EIR.

## 2.12 NOISE

**a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

**Potentially Significant Impact.** Project-related demolition and construction activities could generate substantial noise affecting existing residents in the surrounding areas. Project-related traffic volumes could expose sensitive land uses to noise levels exceeding the local noise standards. The EIR will address the potential noise impacts associated with construction and operation of the proposed project.

**b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?**

**Less Than Significant Impact.** During construction, the proposed project could generate ground-borne noise and vibration. However, due to the distance between the proposed construction and the sensitive receptors, no significant ground-borne noise or vibration impacts are anticipated.

**c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Potentially Significant Impact.** Refer to Response 2.12(a).

**d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Potentially Significant Impact.** As discussed in Response 2.12(a), the construction activities could generate substantial noise affecting existing residents in the surrounding areas.

**e) 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 expose people residing or working in the project area to excessive noise levels?**

**No Impact.** Refer to Response 2.8(e).

**f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

**No Impact.** Refer to Response 2.8(f).

## 2.13 POPULATION AND HOUSING

**a) Induce substantial 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)?**

**No Impact.** The proposed project would not involve housing or business development and, thus, would not lead to the introduction of permanent residents or employees into the City of Long Beach area or along the project site. In addition, no extension of utility lines or roadways to unserved areas is proposed as part of the project. Construction activities would lead to a temporary increase in the daytime population, but workers would be limited in number and would not generate a large and steady demand for local goods or services that could spur business development in the surrounding area. No impact related to direct or indirect population growth would occur with the proposed project and no mitigation measures are required. This topic will not be further discussed in the EIR.

**b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

**No Impact.** The project study area does not contain existing housing and the residences within the project limits. Therefore, substantial numbers of existing housing necessitating a need for replacement housing elsewhere would not be displaced or demolished as part of the project. This topic will not be further discussed in the EIR.

**c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

**No Impact.** Please refer to Response 2.13(b).

## 2.14 PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

**a) Fire protection?**

**Potentially Significant Impact.** The proposed project may include closures of streets used by fire protection. However detours and a traffic management plan will be implemented. This topic will be further discussed in the EIR.

**b) Police protection?**

**Potentially Significant Impact.** The proposed project may include closures of streets used by police protection, However detours and a traffic management plan will be implemented. This topic will be further discussed in the EIR.

**c) Schools?**

**Potentially Significant Impact.** Long Beach Unified School District (LBUSD) provides school services to student residents residing adjacent to the project study area. Schools serving the project area include Edison Elementary School and Cesar Chavez Elementary School. Impacts on LBUSD's schools and resources will be evaluated in the EIR.

**d) Parks?**

**Potentially Significant Impact.** Parks and recreational facilities in the City are maintained and operated by the City's Parks, Recreation, and Marine Department. Parks that are located within the project study area include Drake Park and Cesar Chavez Park. Project impacts on park facilities and services will be addressed in the EIR.

**e) Other public facilities?**

**No Impact.** As previously indicated, the proposed project would not increase the local population. Therefore, the proposed project would not create additional demand for local library or medical services and facilities in the area. In addition, no other new governmental services would be needed and the proposed project is not anticipated to have any impact on existing governmental services. No impact is anticipated to occur and no mitigation is required. This topic will not be further discussed in the EIR.

## 2.15 RECREATION

**a) Would the project 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?**

**No Impact.** The proposed project is not a growth inducing project, and will be limited to the replacement of the existing bridge, therefore there are no impacts related to the increase in use of existing neighborhood and regional parks or other recreational facilities and this topic will not be further discussed in the EIR.

**b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?**

**No Impact.** Refer to Response 2.15(a).

## 2.16 TRANSPORTATION/TRAFFIC

**a) Conflict with an applicable plan, ordinance or policy establishing measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, street, highways and freeways, pedestrian and bicycle paths, and mass transit?**

**Less Than Significant Impact with Mitigation Incorporation.** The proposed project would result in the replacement of the existing Shoemaker Bridge and therefore, is unlikely to conflict with an applicable plan, ordinance or policy establishing measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system. However, there is a potential for a decrease in the performance of the existing circulation system during construction of the proposed project. As a response to these potential short-term impacts to traffic and circulation, the EIR will include a measure that requires a Traffic Management Plan (TMP) be prepared during final design. This topic will be further discussed in the EIR.

**b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

**Less Than Significant Impact.** The City does not have a Congestion Management Program (CMP). However, based on the Mobility Element of the City's General Plan, the proposed project will need to be consistent with the 2010 LA County CMP administered by Metro. Therefore, this topic will be further discussed in the EIR.

**c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?**

**No Impact.** The proposed project would not generate air traffic or require air transportation nor would it interfere with air traffic in the study area. Therefore, the proposed project would not change air traffic levels at the Long Beach Municipal Airport and would not create safety risks or obstructions to air navigation. No impacts associated with this issue would occur and no mitigation is required. This topic will not be further discussed in the EIR.

**d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**Less Than Significant Impact.** Implementation of the proposed project would result in the replacement of the existing Shoemaker Bridge, as well as improving the safety of the existing bridge. The proposed project will improve hazards due to non standard design features and will provide improved vehicular safety. The topic will be further evaluated in the EIR.

**e) Result in inadequate emergency access?**

**Potentially Significant Impact.** There is a potential that the proposed project may include the permanent closure of local roadways in the City of Long Beach. Therefore, the EIR will further evaluate the potential impacts to access routes for emergency vehicles.

**f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

**Less than Significant Impact.** Implementation of the proposed project would result in the replacement of the existing Shoemaker Bridge and is unlikely to conflict with adopted policies, plans, or programs supporting public transit, bicycle, or pedestrian facilities or decrease the performance or safety of such facilities. The project improvements are anticipated with to provide for safe and efficient non-motorized transportation improvements consistent with City mobility plans. This topic will be further evaluated in the EIR.

## 2.17 UTILITIES AND SERVICE SYSTEMS

**a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

**No Impact.** Local governments and districts are responsible for complying with State and Federal regulations, both for wastewater plant operation and the collection systems (e.g. sanitary sewers) that convey wastewater to the wastewater treatment facility. Proper operation and maintenance is critical for sewage collection and treatment as impacts from these processes can degrade water resources and affect human health. For these reasons, publicly owned treatment works (POTWs) receive Waste Discharge Requirements (WDRs) to ensure that such wastewater facilities operate in compliance with water quality regulations set forth by the State. WDRs, issued by the State, establish effluent limits on the kinds and quantities of pollutants that POTWs can discharge. These permits also contain pollutant monitoring, record keeping, and reporting requirements. The proposed project would result in the replacement of the existing Shoemaker Bridge with supporting improvements. The proposed project does not include any restroom facilities as part of the project and would not generate new wastewater. Therefore, no impacts associated with this issue are anticipated to occur and no mitigation is required. This topic will not be further discussed in the EIR.

**b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**No Impact.** The proposed project includes the replacement of the existing bridge and is not considered a growth inducing project and therefore, would not require any water treatment facilities. No impacts associated with this issue are anticipated to occur and no mitigation is required. This topic will not be further discussed in the EIR.

**c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**Potentially Significant Impact.** The proposed project would introduce impervious surfaces which may result in a change in drainage patterns and runoff. The EIR will evaluate potential impacts associated with stormwater and drainage facilities that may need to be implemented as part of the proposed project.

**d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

**No Impact.** Refer to Response 2.17(a).

**e) 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?**

**No Impact.** Refer to Response 2.17(b).

**f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

**Potentially Significant Impact.** Implementation of the proposed project may generate substantial amounts of solid waste. The landfill located closest to the proposed project is the Southeast Resource Recovery Facility. Therefore, existing and planned landfill capacity and estimated solid waste generation resulting from project implementation will be discussed in the EIR.

**g) Comply with federal, state, and local statutes and regulations related to solid waste?**

**Potentially Significant Impact.** Refer to Response 2.17(f).

# SECTION 3 - MANDATORY FINDINGS OF SIGNIFICANCE

The following are Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

**a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

**Potentially Significant Impact.** Implementation of the proposed project could have the potential to degrade the quality of the environment for certain environmental resources. The EIR will evaluate and identify impacts associated with implementation of the proposed project.

**b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)**

**Potentially Significant Impact.** Implementation of the proposed project could have the potential to generate cumulative impacts. The EIR will evaluate and identify impacts associated with implementation of the proposed project.

**c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?**

**Potentially Significant Impact.** Project construction could have the potential to generate significant adverse impacts on human beings, either directly or indirectly. The EIR will evaluate and identify impacts associated with implementation of the proposed project.

# SECTION 4 - PERSONS AND ORGANIZATIONS CONSULTED

This section identifies those persons who prepared or contributed to preparation of this document. This section is prepared in accordance with Section 15129 of the CEQA Guidelines.

## 4.1 CITY OF LONG BEACH

- Sean Crumby, City Engineer
- Meredith Elguira, Capital Projects Coordinator
- Craig Chalfant, Environmental Planner
- Eric Widstrand, City Traffic Engineer

## 4.2 KOA CONSULTING

- Kekoa Anderson, Program Manager
- Traci Gleason, Deputy Program Manager

## 4.3 HDR, Inc.

- Angie Kung, Senior Environmental Planner
- Keith Lay, Senior Air Quality Specialist
- Nina Delu, Environmental Planner
- Kelsey McGrath, Environmental Planner
- Sarah Barrera, Senior Biologist
- Douglas Smith, Senior Program Manager
- Camilo Rocha, Business Class Area Manager DOT
- Mario Montes, Senior Program Manager

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# Appendix G. Regional Transportation Plan/Federal Transportation Improvement Program

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**TABLE 2** Financially-Constrained RTP/SCS Projects - Continued

| System | Lead Agency | RTP ID | Route # | Route Name | From | To | Description | Completion Year | Project Cost ($1,000's) |
|---|---|---|---|---|---|---|---|---|---|
| **County: Los Angeles** | | | | | | | | | |
| LOCAL HIGHWAY | LONG BEACH | 7120018-LA0G1448 | 0 | | PIER J | PIER G | DOUBLE TRACK ACCESS FROM PIER G TO PIER J. CREATING A NEW 9,000-FOOT DEPARTURE TRACK FOR TRAINS SERVING FOUR MARINE TERMINALS ALONG THE EAST BASIN: PIER J PCT, PIER G ITS, PIER G METRO, AND PIER E/F LBCT. REMOVES ONE TRACK FROM ITS SOUTH RAILYARD, TOTALING 1,800 FEET. ADDS 7 NEW TRACKS TOTALING 5,700 FEET TO STORAGE YARD EAST OF PIER J AVE. | 2022 | $25,000 |
| LOCAL HIGHWAY | LONG BEACH | 7120018-LA0G1449 | 0 | | MIDDLE HARBOR EXIT GATE | PICO AVE. | PIER D STREET REALIGNMENT PROJECT. REALIGN PIER D ST BETWEEN MIDDLE HARBOR OUT GATE AND PICO AVE AND BROADWAY BETWEEN OLD POLB MAINTENANCE YARD (WESTERN TERMINUS OF THE ROADWAY) AND PICO AVE. | 2023 | $32,000 |
| LOCAL HIGHWAY | LONG BEACH | LA0C8094-LA0C8094 | 0 | | 9TH STREET | PIER B ST. S. | PIER B INTERMODAL RAILYARD EXPANSION. PROJECT WILL EXPAND PIER B INTERMODAL RAILYARD TO FACILITATE ADDITIONAL RAIL SHIPMENTS. | 2032 | $440,007 |
| LOCAL HIGHWAY | LONG BEACH | LA0G830-LA0G830 | 0 | | N/A | N/A | I-710 IMPROVEMENTS/SHOEMAKER BRIDGE REPLACEMENT: REPLACE THE EXISTING SHOEMAKER BRIDGE WITH A NEW BRIDGE. THE NEW BRIDGE WILL BE REDUCED TO HAVE TWO MIXED-FLOW LANES IN THE NB AND IN THE SB DIRECTIONS TO TIE THE FLOW INTO I-710. THE NEW BRIDGE WILL ALSO INCLUDE PEDESTRIAN AND BICYCLE ACCESS. ADDITIONALLY, BICYCLE, PEDESTRIAN, AND STREET ENHANCEMENTS WILL BE PROVIDED ON ADJACENT THOROUGHFARES. | 2025 | $330,000 |
| LOCAL HIGHWAY | LONG BEACH | LAE0701-LAE0701 | 0 | | 710 FREEWAY | LONG BEACH BLVD. | DEVELOP AND IMPLEMENT TRAFFIC CALMING MEASURES FOR TRAFFIC EXITING THE I-710 INTO LONG BEACH | 2019 | $1,920 |
| LOCAL HIGHWAY | LOS ANGELES COUNTY | 1A1005-LAF3136 | 0 | | MAGIC MOUNTAIN PARKWAY | HENRY MAYO DRIVE | WIDEN THE OLD ROAD FROM N. OF MAGIC MOUNTAIN PKWY TO HENRY MAYO DR TO 1200 FT WEST OF THE OLD ROAD. PROJECT LOCATED ON THE OLD RD. FROM APPROX. 700 FT NORTH OF MAGIC MOUNTAIN PKWY TO HENRY MAYO DR FROM THE OLD ROAD TO THE SR126 HOOK RAMPS, AND RYE CANYON RD BTWN THE OLD ROAD & AVENUE STANFORD. WIDENING BRIDGE APPROACHES FROM 4 TO 6 LANES, REPLACE BRIDGE #53C0327 & #53C0328, TO REDUCE BOTTLENECK. | 2023 | $61,798 |
| LOCAL HIGHWAY | LOS ANGELES COUNTY | 1AL04-LA0G1068 | 0 | | 500' EAST OF NORWALK BLVD | 500' WEST OF NORWALK BLVD | INTERSECTION IMPROVEMENTS AT NORWALK BOULEVARD AND WASHINGTON BOULEVARD. PROVIDE ADDITIONAL WESTBOUND THRU LANE ALONG WASHINGTON BOULEVARD. INCREASE NORTHBOUND LEFT TURN STORAGE ALONG NORWALK BOULEVARD. | 2019 | $560 |
| LOCAL HIGHWAY | LOS ANGELES COUNTY | 1AL04-LA0G1069 | 0 | | 500' EAST OF WHITTIER BOULEVARD | 500' WEST OF WHITTIER BOULEVARD | VARIOUS INTERSECTION IMPROVEMENTS AT NORWALK BOULEVARD AND WHITTIER BOULEVARD INCLUDING LEFT TURN PHASING, RIGHT TURN PHASING, ADDING RIGHT TURN LANES, AND LEFT TURN STORAGE LENGTHENING. A THRU LANE WILL BE CONFIGURED THROUGH SOME WIDENING AND RE-STRIPPING ON SOUTHBOUND NORWALK ABOUT 350 FEET ON BOTH SIDES OF THE INTERSECTION | 2020 | $2,930 |

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Local Highways
2019 FTIP - Including Amendments 1-11 & 13-15

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *FTIP ID* | LA0G830 | *FTIP Amendment* | LA County (METRO) 19-01 | *Conform Category* | NON-EXEMPT | *Total Project Cost* | $330,000 |
| *Lead Agency* | LONG BEACH | | | *Modeling* | YES | | |
| County | Los Angeles | Primary Program Code | CAX77 - ROAD DIET ELIMINATING TRAVEL LANES | Air Basin | SCAB | RTP ID | LA0G830 |
| System | Local Hwy | | | | | | |
| *Project Limits* | From N/A to N/A, Begin: 6 End: 6.4 | | | | | | |

*Description* I-710 Improvements/Shoemaker Bridge Replacement: Replace the existing Shoemaker bridge with a new bridge. The new bridge will be reduced to have two mixed-flow lanes in the NB and in the SB directions to tie the flow into I-710. The new bridge will also include pedestrian and bicycle access. Additionally, bicycle, pedestrian, and street enhancements will be provided on adjacent thoroughfares.

| Phase | Fund Source (in $000s) | Prior | 18/19 | 19/20 | 20/21 | 21/22 | 22/23 | 23/24 | Future | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| PE | CITY - City Funds | $2,664 | - | - | - | - | - | - | - | $2,664 |
| PE | MR20H - Measure R 20% Highway | $5,500 | $5,500 | - | - | - | - | - | - | $11,000 |
| PE | STIP AC | - | $14,000 | - | - | - | - | - | - | $14,000 |
| | *Total Preliminary Engineering* | $8,164 | $19,500 | - | - | - | - | - | - | $27,664 |
| | ***Total Programmed*** | **$8,164** | **$19,500** | - | - | - | - | - | - | **$27,664** |

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# Appendix H. U.S. Fish and Wildlife Service Regional Species List

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# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
http://www.fws.gov/carlsbad/

In Reply Refer To:
Consultation Code: 08ECAR00-2017-SLI-0229
Event Code: 08ECAR00-2020-E-02875
Project Name: Shoemaker Bridge Replacement Project

June 24, 2020

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Carlsbad Fish And Wildlife Office**
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

## Project Summary

Consultation Code: 08ECAR00-2017-SLI-0229

Event Code: 08ECAR00-2020-E-02875

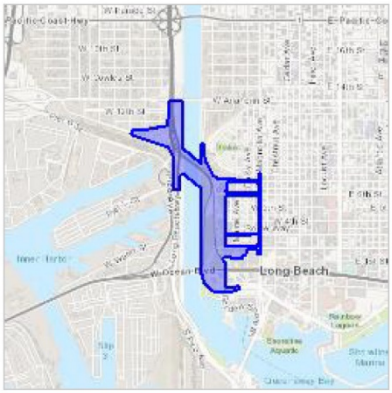
Project Name: Shoemaker Bridge Replacement Project

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: The Shoemaker Bridge Replacement Project, City of Long Beach, County of Los Angeles

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/33.77389049855062N118.2030989845981W




Counties: Los Angeles, CA

## Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Mammals

| NAME | STATUS |
|---|---|
| Pacific Pocket Mouse *Perognathus longimembris pacificus*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/8080 | Endangered |

### Birds

| NAME | STATUS |
|---|---|
| California Least Tern *Sterna antillarum browni*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/8104 | Endangered |

### Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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# Appendix I. State Historic Preservation Officer Concurrence Memo

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State of California • Natural Resources Agency Gavin Newsom, *Governor*

**DEPARTMENT OF PARKS AND RECREATION** Lisa Ann L. Mangat, *Director*
**OFFICE OF HISTORIC PRESERVATION**

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

July 3, 2019

VIA EMAIL

In reply refer to: FHWA_2019_0620_001
CATRA_2019_0620_001

Ms. Kelly Ewing-Toledo
Heritage Resource Coordinator
Caltrans District 7, Division of Environmental Planning
100 S Main Street, Suite 100, MS 16A
Los Angeles, CA 90012

Subject: Determinations of Eligibility for the Proposed Shoemaker Bridge Replacement Project, Long Beach, Los Angeles County, CA

Dear Ms. Ewing-Toledo:

Caltrans is initiating consultation regarding the above project in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA). Caltrans is also consulting in accordance with the Public Resources Code 5024 and pursuant to the *Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code 5024 and Governor's Executive Order W-26-92* (5024 MOU). As part of your documentation, Caltrans submitted a Historic Property Survey Report (HPSR), a Historical Resources Evaluation Report (HRER), and an Archaeological Survey Report for the proposed project.

The City of Long Beach, in cooperation with Caltrans, proposes to replace the existing Shoemaker Bridge (Bridge No. 53C0932) along with several associated improvements. A complete project description and area of potential effect boundaries are located on pages 1-3 of the HPSR.

Pursuant to Stipulation VIII.C.6 of the PA and Stipulation VIII.C.6 of the MOU, Caltrans determined that the following properties are not eligible for the National Register of Historic Places (NRHP):

- 620 San Francisco Avenue, Long Beach, CA

- 621 Golden Avenue, Long Beach, CA
- 400 Oceangate, Long Beach, CA
- SCE Seabright Substation, Long Beach, CA

In accordance with Stipulation VIII.C.4 for the PA and Stipulation VIII.C.4 of the MOU, Caltrans is assuming that the Los Angeles River Flood Channel is eligible for the NRHP for the purposes of this project. It is outside of the scope of this project for Caltrans to evaluate the entirety of this resource.

Based on review of the submitted documentation, I concur with the above determinations.

If you have any questions, please contact Natalie Lindquist at (916) 445-7014 with e-mail at natalie.lindquist@parks.ca.gov or Alicia Perez at (916) 445-7020 with e-mail at alicia.perez@parks.ca.gov .

Sincerely,

Julianne Polanco
State Historic Preservation Officer

# Appendix J. Public Notice, Notice of Availability, and Public Hearing

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# J.1 Public Notice and NOA

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ORIGINAL FILED

SEP 27 2019

LOS ANGELES, COUNTY CLERK

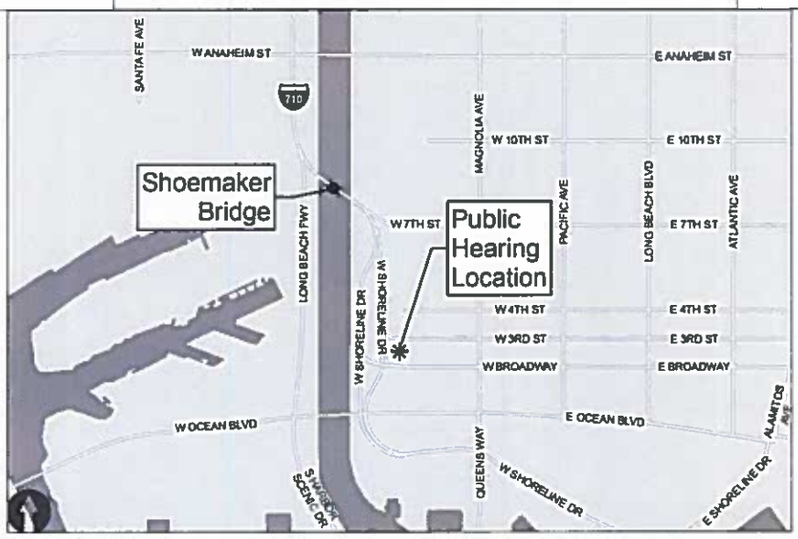
CITY OF LONG BEACH

# PUBLIC NOTICE

**Notice of Availability Draft Environmental Impact Report/ Environmental Assessment for the Shoemaker Bridge Replacement Project**

**Announcement of Public Hearing**

Caltrans




| | |
|---|---|
| **What's Being Planned?** | The City of Long Beach, in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the Shoemaker Bridge (West Shoreline Drive) in the City of Long Beach, California. The proposed project would reconstruct Shoemaker Bridge and realign local street connections in the area. Major features include the construction of a new bridge, improvements along associated roadway connectors to downtown Long Beach, West Shoreline Drive from SR-710, and portions of 3rd Street, 6th Street, 7th Street, and West Broadway from Cesar E. Chavez Park to Magnolia Avenue. The proposed improvements also include additional street lighting, restriping, turn lanes, bicycle, pedestrian, and streetscape improvements. The project would improve safety, operations, and connectivity between downtown Long Beach and regional transportation facilities. |
| **Why This Ad?** | The City and Caltrans have studied the effects that the proposed project may have on the environment and community. The results of these studies are contained in Draft Environmental Impact Report/Environmental Assessment (EIR/EA). The purpose of this notice is to inform the public of its completion and availability to any interested individuals, and to provide the public an opportunity to comment or attend the public hearing on the project. |
| **What's Available?** | Copies of the Draft EIR/EA are available for review at the following locations:<br>• Caltrans District 7 Office, 100 South Main Street, Los Angeles, CA 90012<br>• City of Long Beach, Billie Jean King Main Library, 200 West Broadway, Long Beach, CA 90802<br>• City of Long Beach, Mark Twain Neighborhood Library, 1401 East Anaheim Street, Long Beach, CA 90813<br>• City of Long Beach, Public Works Department, 411 West Ocean Boulevard, Long Beach, CA 90802<br><br>Electronic versions of the Draft EIR/EA on USB Flash Drives are available for review at the above public libraries. The Draft EIR/EA may also be viewed online at: http://www.longbeach.gov/pw/resources/general/shoemaker-bridge/<br><br>A public hearing will be held at the date and location provided below:<br>Thursday October 17, 2019 from 6:30p.m. to 8:30 p.m.<br>Cesar Chavez Elementary School Gymnasium, 730 W. Third Street, Long Beach, CA 90802<br><br>American Sign Language, Spanish, Khmer, and Tagalog language interpreters will be available for the public hearing. |
| **Where You Come In/Contacts** | Have the potential impacts been addressed? Do you have information that should be included? If you wish to make a comment on the Draft EIR/EA, you may submit your written comments until Tuesday, November 12, 2019 to:<br><br>Kelly Ewing-Toledo<br>Caltrans District 7, Division of Environmental Planning<br>100 South Main Street, MS 16A<br>Los Angeles, CA 90012<br>Attn: Shoemaker Bridge Replacement Project<br><br>or send an e-mail to: info@shoemakerprojectlb.com<br><br>For additional information, please contact Jason Roach at (213) 897-0357, or via email at jason.roach@dot.ca.gov. |
| **Special Accommodations** | Individuals who require special accommodation (American Sign Language interpreter, accessible seating, documentation in alternate formats, etc.) are requested to contact Caltrans District 7, Attn: Amy Tran at (213) 897-2860, or via email at amy.tran@dot.ca.gov at least 14 days prior to the scheduled public hearing. TDD users may contact the California Relay Service TTY line at 711. |
| Thank you for your interest in this transportation project. | |

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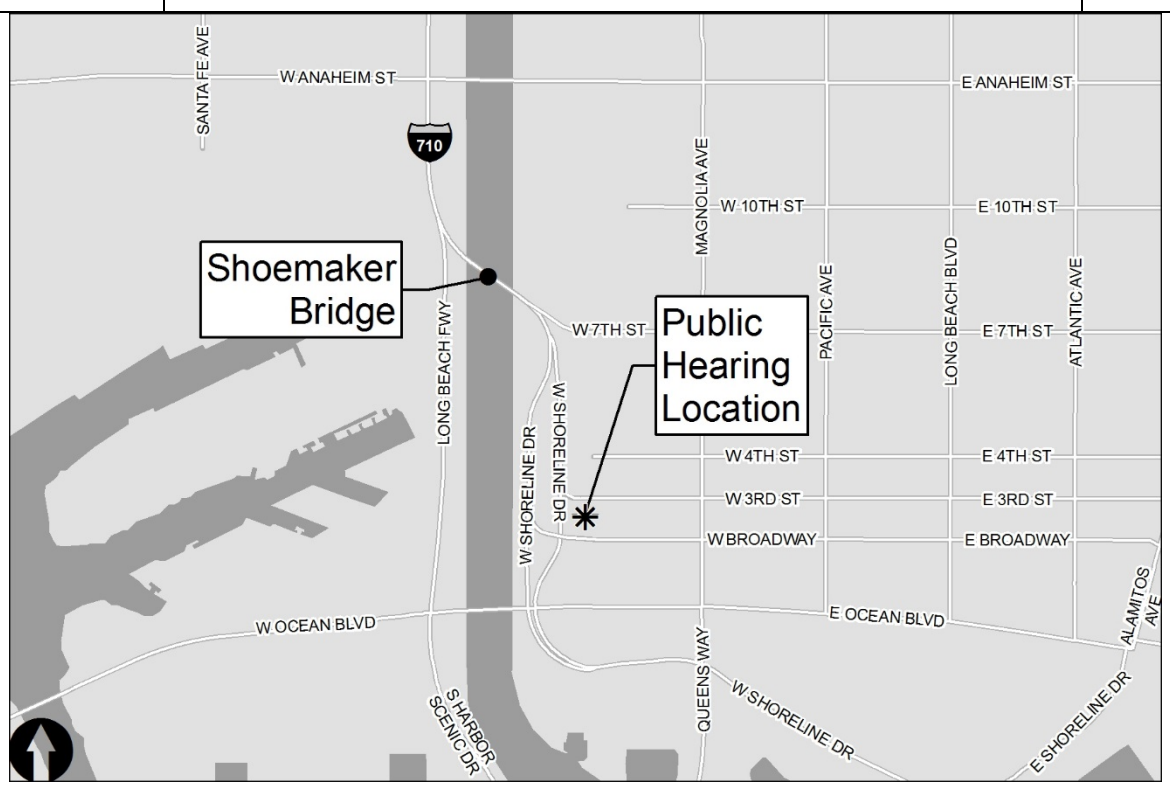
# PUBLIC NOTICE

**Notice of Availability Draft Environmental Impact Report/ Environmental Assessment for the Shoemaker Bridge Replacement Project**

**Announcement of Public Hearing**




| | |
|---|---|
| **What's Being Planned?** | The City of Long Beach, in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the Shoemaker Bridge (West Shoreline Drive) in the City of Long Beach, California. The proposed project would reconstruct Shoemaker Bridge and realign local street connections in the area. Major features include the construction of a new bridge, improvements along associated roadway connectors to downtown Long Beach, West Shoreline Drive from SR-710, and portions of 3rd Street, 6th Street, 7th Street, and West Broadway from Cesar E. Chavez Park to Magnolia Avenue. The proposed improvements also include additional street lighting, restriping, turn lanes, bicycle, pedestrian, and streetscape improvements. The project would improve safety, operations, and connectivity between downtown Long Beach and regional transportation facilities. |
| **Why This Ad?** | The City and Caltrans have studied the effects that the proposed project may have on the environment and community. The results of these studies are contained in Draft Environmental Impact Report/Environmental Assessment (EIR/EA). The purpose of this notice is to inform the public of its completion and availability to any interested individuals, and to provide the public an opportunity to comment or attend the public hearing on the project. |
| **What's Available?** | Copies of the Draft EIR/EA are available for review at the following locations:<br>• Caltrans District 7 Office, 100 South Main Street, Los Angeles, CA 90012<br>• City of Long Beach, Billie Jean King Main Library, 200 West Broadway, Long Beach, CA 90802<br>• City of Long Beach, Mark Twain Neighborhood Library, 1401 East Anaheim Street, Long Beach, CA 90813<br>• City of Long Beach, Public Works Department, 411 West Ocean Boulevard, Long Beach, CA 90802<br><br>Electronic versions of the Draft EIR/EA on USB Flash Drives are available for review at the above public libraries. The Draft EIR/EA may also be viewed online at: http://www.longbeach.gov/pw/resources/general/shoemaker-bridge/<br><br>A public hearing will be held at the date and location provided below:<br>Thursday October 17, 2019 from 6:30p.m. to 8:30 p.m.<br>Cesar Chavez Elementary School Gymnasium, 730 W. Third Street, Long Beach, CA 90802<br><br>American Sign Language, Spanish, Khmer, and Tagalog language interpreters will be available for the public hearing. |
| **Where You Come In/Contacts** | Have the potential impacts been addressed? Do you have information that should be included? If you wish to make a comment on the Draft EIR/EA, you may submit your written comments until Tuesday, November 12, 2019 to:<br>Kelly Ewing-Toledo<br>Caltrans District 7, Division of Environmental Planning<br>100 South Main Street, MS 16A<br>Los Angeles, CA 90012<br>Attn: Shoemaker Bridge Replacement Project<br><br>or send an e-mail to: info@shoemakerprojectlb.com<br><br>For additional information, please contact Jason Roach at (213) 897-0357, or via email at jason.roach@dot.ca.gov. |
| **Special Accommodations** | Individuals who require special accommodation (American Sign Language interpreter, accessible seating, documentation in alternate formats, etc.) are requested to contact Caltrans District 7, Attn: Amy Tran at (213) 897-2860, or via email at amy.tran@dot.ca.gov at least 14 days prior to the scheduled public hearing. TDD users may contact the California Relay Service TTY line at 711. |
| Thank you for your interest in this transportation project. | |

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## NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT

**TO:** Agencies, Organizations, and Interested Parties

**SUBJECT**: Notice of Availability of a Draft Environmental Impact Report (EIR) for the Shoemaker Bridge Replacement Project (SCH No. 2016041007)

As the Lead Agency overseeing this project's environmental review, the City of Long Beach initiated the preparation of an EIR to determine the nature and extent of the proposed project's impact upon the environment. An EIR also identifies ways to reduce environmental effects and analyzes reasonable alternatives to avoid or minimize significant environmental effects.

Pursuant to California Code of Regulations, Title 14, Section 15087(a), this Notice has been prepared to advise that the City of Long Beach has completed a Draft EIR for the proposed project listed above and described below. The Draft EIR is available for public review.

**PROJECT TITLE:** Shoemaker Bridge Replacement Project

**PROJECT LOCATION:** The Project is located at the southern end of State Route 710/Interstate 710 (SR-710/I-710) and is bisected by the Los Angeles River. The Project limits are generally bounded by 9th Street and 10th Street ramp connections and West Shoreline Drive to the west, Magnolia Avenue to the east, Ocean Boulevard and West Shoreline Drive to the south, and Anaheim Street to the north. The Project limits on the east side extend beyond Magnolia Avenue along Anaheim Street and 6th and 7th Streets to Atlantic Boulevard.

**PROJECT DESCRIPTION:** The Project proposes to reconstruct Shoemaker Bridge and realign local street connections in the area. Major features include the construction of a new bridge, improvements along associated roadway connectors to downtown Long Beach, West Shoreline Drive from SR-710, and portions of 3rd Street, 6th Street, 7th Street, and West Broadway from Cesar E. Chavez Park to Magnolia Avenue. The proposed improvements also include additional street lighting, restriping, turn lanes, bicycle, pedestrian, and streetscape improvements. As a stand-alone project, the Project's design would accommodate the future construction of the I-710 Corridor Project and improve safety, operations, and connectivity between downtown Long Beach and regional transportation facilities.

**SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROJECT:** The Draft EIR has determined that the Project would not have potentially significant and unavoidable environmental impacts after implementation of the identified avoidance, minimization, and mitigation measures or were determined to be not significant under CEQA.

**PUBLIC COMMENT PERIOD:** The public comment period during which the City of Long Beach will receive written comments on the Draft EIR is:

**Beginning:** Friday, September 27, 2019 **Ending:** Tuesday, November 12, 2019

The City of Long Beach must receive all written comments relating to the Draft EIR no later than 5:00 p.m. on Tuesday, November 12, 2019. Comments should be sent to:

Alvin Papa, City Engineer
Public Works Department
City of Long Beach
411 West Ocean Boulevard
Long Beach, CA 90802

Or via email to: info@shoemakerprojectlb.com

**PUBLIC HEARING:** A public hearing will be held at the date and location provided below:

- Thursday October 17, 2019 from 6:30 p.m. to 8:30 p.m. - Cesar Chavez Elementary School Gymnasium, 730 W. Third Street, Long Beach, CA 90802

**DOCUMENT AVAILABILITY:** The Draft EIR is available for public review online and at the locations listed below during the following business hours:

- Caltrans District 7 Office, 100 South Main Street, Los Angeles, CA 90012 (Open on Monday through Friday from 9:00 a.m. to 3:00 p.m.)
- City of Long Beach, Public Works Department, 411 West Ocean Boulevard, Long Beach, CA 90802 (Open Monday through Friday from 7:30 a.m. to 4:30 p.m.)
- Billie Jean King Main Library, 200 West Broadway, Long Beach, CA 90802 (Open Tuesday and Thursday from 12:00 p.m. to 7:00 p.m., Wednesday from 12:00 p.m. to 6:00 p.m., and Friday and Saturday from 10:00 a.m. to 5:00 p.m.)
- City of Long Beach, Mark Twain Neighborhood Library, 1401 East Anaheim Street, Long Beach, CA 90813 (Open Tuesday and Thursday from 12:00 p.m. to 7:00 p.m., Wednesday from 12:00 p.m. to 6:00 p.m., and Friday and Saturday from 10:00 a.m. to 5:00 p.m.)

Online at: http://www.longbeach.gov/pw/resources/general/shoemaker-bridge/

If you require additional information, please contact Alvin Papa at: info@shoemakerprojectlb.com

# AVISO PÚBLICO

**Aviso de disponibilidad del informe preliminar de impacto ambiental/evaluación de impacto ambiental para el proyecto de reemplazo del puente Shoemaker**

**Anuncio de audiencia pública**

| | |
|---|---|
| **¿Qué se está planeando?** | El Departamento de Transporte de California (Caltrans), en cooperación con la ciudad de Long Beach, propone reemplazar el puente Shoemaker (West Shoreline Drive) de la ciudad de Long Beach, California. El proyecto propuesto consistiría en la reconstrucción del puente Shoemaker y la realineación de las conexiones de las calles locales en el área. Las características principales incluyen la construcción de un puente nuevo, mejoras a lo largo de las uniones de las carreteras vinculadas al centro de Long Beach, West Shoreline Drive desde SR-710 y partes de 3rd Street, 6th Street, 7th Street y West Broadway desde Cesar E. Chavez Park hasta Magnolia Avenue. Los mejoramientos propuestos también incluyen mejoras adicionales en el alumbrado público, el repintado de las líneas de tráfico sobre el pavimento, los carriles de giro, las ciclovías, las sendas peatonales y el paisaje urbano. Como proyecto independiente, el diseño del proyecto adaptaría la construcción futura del proyecto de la ruta I-710 y mejoraría la seguridad, las operaciones y la conectividad entre el centro de Long Beach y las instalaciones de transporte regionales. |
| **¿Por qué existe este anuncio?** | Caltrans ha estudiado los efectos que el proyecto propuesto puede tener sobre el medio ambiente y la comunidad. Los resultados de estos estudios se incluyen en el informe preliminar de impacto ambiental/evaluación de impacto ambiental (EIR/EA). El propósito de este anuncio es informar al público sobre la finalización y la disponibilidad de este informe para cualquier persona interesada, y brindarle al público la oportunidad de comentar o asistir a la audiencia pública sobre el proyecto. |
| **¿Qué es lo que se encuentra disponible?** | Las copias del informe preliminar de impacto ambiental/evaluación de impacto ambiental (EIR/EA) están disponibles para la revisión en las siguientes ubicaciones:<br>• Caltrans District 7 Office, 100 South Main Street, Los Angeles, CA 90012.<br>• City of Long Beach, Billie Jean King Main Library, 200 West Broadway, Long Beach, CA 90802.<br>• City of Long Beach, Mark Twain Neighborhood Library, 1401 East Anaheim Street, Long Beach, CA 90813.<br>• City of Long Beach, Public Works Department, 411 West Ocean Boulevard, Long Beach, CA 90802.<br><br>Las versiones electrónicas del informe preliminar de impacto ambiental/evaluación de impacto ambiental están disponibles en memorias USB para la revisión en las bibliotecas públicas mencionadas anteriormente.<br>El informe preliminar de impacto ambiental/evaluación de impacto ambiental también se puede ver en línea en: http://www.longbeach.gov/pw/resources/general/shoemaker-bridge/<br><br>Se llevará a cabo una audiencia pública en la fecha y el lugar indicados a continuación:<br>Jueves 17 de Octubre de 2019 de las 6:30 p.m. a 8:30 p.m.<br>Cesar Chavez Elementary School Gymnasium, 730 W. Third Street, Long Beach, CA 90802<br><br>Intreprete de Lengua en Señales Estadounidense, Español, Camboyano, y tagalo estara disponible para la audiencia. |
| **Cuál es su rol/contactos** | ¿Se han abordado los posibles impactos? ¿Tiene información que debería incluirse? Si desea hacer un comentario sobre el informe preliminar de impacto ambiental/evaluación de impacto ambiental, puede hacerlo por escrito hasta el Martes, 12 de Noviembre de 2019 a la siguiente dirección:<br>Kelly Ewing-Toledo<br>Caltrans District 7, Division of Environmental Planning<br>100 South Main Street, MS 16A<br>Los Angeles, CA 90012<br>Attn: Shoemaker Bridge Replacement Project<br>(A la atención de: Proyecto de reemplazo del puente Shoemaker)<br><br>o puede enviar un correo electrónico a info@shoemakerprojectlb.com<br><br>Para obtener más información, comuníquese con Jason Roach al (213) 897-0357 o por correo electrónico a jason.roach@dot.ca.gov. |
| **Adaptaciones especiales** | Las personas que requieren adaptaciones especiales (intérprete de lengua de señas estadounidense, asientos accesibles, documentación en formatos alternativos, etc.) deben comunicarse con el distrito 7 de Caltrans, a la atención de Amy Tran al (213) 897-2860 o por correo electrónico a amy.tran@dot.ca.gov al menos 14 días antes de la audiencia pública programada. Los usuarios de TDD pueden comunicarse con la línea TTY del servicio de retransmisión de California al 711. |
| Gracias por su interés en este proyecto de transporte. | |

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**AVISO DE DISPONIBILIDAD DEL INFORME PRELIMINAR DE IMPACTO AMBIENTAL**

**A LA ATENCIÓN DE:** Agencias, organizaciones y partes interesadas

**ASUNTO**: Aviso de disponibilidad del informe preliminar de impacto ambiental (EIR) del proyecto de reemplazo del puente Shoemaker (SCH n.º 2016041007)

Como el organismo principal que supervisa el estudio de los efectos ambientales de este proyecto, la ciudad de Long Beach inició la preparación de un informe de impacto ambiental (EIR) para determinar la naturaleza y el alcance del impacto del proyecto propuesto sobre el medio ambiente. Un informe de impacto ambiental (EIR) también identifica formas de reducir los efectos ambientales y analiza alternativas razonables para evitar o minimizar los efectos ambientales significativos.

De conformidad con el Código de Regulaciones de California, título 14, sección 15087 (a), este aviso se ha preparado para informar que la ciudad de Long Beach ha completado un informe preliminar de impacto ambiental para el proyecto propuesto mencionado anteriormente y descrito a continuación. El informe preliminar de impacto ambiental está disponible para la revisión pública.

**TÍTULO DEL PROYECTO:** Proyecto de reemplazo del puente Shoemaker

**LUGAR DEL PROYECTO:** El proyecto está ubicado en el extremo sur de la ruta estatal 710/interestatal 710 (SR-710/I-710) y está atravesado por el río de Los Ángeles. En términos generales, los confines del proyecto están delimitados por las conexiones de rampa de 9th Street y 10th Street y West Shoreline Drive hacia el oeste, Magnolia Avenue hacia el este, Ocean Boulevard y West Shoreline Drive hacia el sur y Anaheim Street hacia el norte. Los confines del proyecto en el lado este sobrepasan Magnolia Avenue a lo largo de Anaheim Street y 6th y 7th Street hasta Atlantic Boulevard.

**DESCRIPCIÓN DEL PROYECTO:** El proyecto propone reconstruir el puente Shoemaker y realinear las conexiones de las calles locales en el área. Las características principales incluyen la construcción de un puente nuevo, mejoras a lo largo de las uniones de las carreteras vinculadas al centro de Long Beach, West Shoreline Drive desde SR-710 y partes de 3rd Street, 6th Street, 7th Street y West Broadway desde Cesar E. Chavez Park hasta Magnolia Avenue. Los mejoramientos propuestos también incluyen mejoras adicionales en el alumbrado público, el repintado de las líneas de tráfico sobre el pavimento, los carriles de giro, las ciclovías, las sendas peatonales y el paisaje urbano. Como proyecto independiente, el diseño del proyecto adaptaría la construcción futura del proyecto de la ruta I-710 y mejoraría la seguridad, las operaciones y la conectividad entre el centro de Long Beach y las instalaciones de transporte regionales.

**EFECTOS AMBIENTALES SIGNIFICATIVOS DEL PROYECTO:** El informe preliminar de impacto ambiental ha determinado que el proyecto no tendría impactos ambientales potencialmente significativos ni inevitables después de la implementación de las medidas de prevención, minimización y mitigación identificadas, o se determinó que no eran significativas conforme a la Ley de Calidad Ambiental de California (California Environmental Quality Act, CEQA).

**PERIODO DE COMENTARIO PÚBLICO:** El periodo de comentarios públicos durante el cual la ciudad de Long Beach recibirá comentarios por escrito sobre el informe preliminar de impacto ambiental se llevará a cabo en la siguiente fecha:

**Comienzo:** Viernes, 27 de Septiembre de 2019 **Fin:** Martes, 12 de Noviembre de 2019

La ciudad de Long Beach debe recibir todos los comentarios por escrito relacionados con el informe preliminar de impacto ambiental a más tardar a las 5:00 p.m. del Martes, 12 de Noviembre de 2019. Los comentarios deben enviarse a la siguiente dirección:

Alvin Papa, City Engineer
Public Works Department
City of Long Beach
411 West Ocean Boulevard
Long Beach, CA 90802

O por correo electrónico a: info@shoemakerprojectlb.com

**AUDIENCIA PÚBLICA:** Se llevará a cabo una audiencia pública en la fecha y el lugar provistos a continuación:

- Jueves, 17 de Octubre 2019 de las 6:30 p.m. a 8:30 p.m. - Cesar Chavez Elementary School Gymnasium, 730 W. Third Street, Long Beach, CA 90802

**DISPONIBILIDAD DE DOCUMENTOS:** El informe preliminar de impacto ambiental está disponible para la revisión pública en línea y en los lugares que se enumeran a continuación durante el siguiente horario comercial:

- Caltrans District 7 Office, 100 South Main Street, Los Angeles, CA 90012 (abierto de lunes a viernes de 9:00 a.m. a 3:00 p.m).

- City of Long Beach, Public Works Department, 411 West Ocean Boulevard, Long Beach, CA 90802 (abierto de lunes a viernes de 7:30 a.m. a 4:30 p.m).

- Billie Jean King Main Library, 200 West Broadway, Long Beach, CA 90802 (abierto martes y jueves de 12:00 p.m. a 7:00 p.m., miércoles de 12:00 p.m. a 6:00 p.m. y viernes y sábado a partir de las 10:00 a.m. a 5:00 p.m.).

- City of Long Beach, Mark Twain Neighborhood Library, 1401 East Anaheim Street, Long Beach, CA 90813 (abierto martes y jueves de 12:00 p.m. a 7:00 p.m., miércoles de 12:00 p.m. a 6:00 p.m. y viernes y sábados de 10:00 a.m. a 5:00 p.m.).

En línea en http://www.longbeach.gov/pw/resources/general/shoemaker-bridge/

Si necesita más información, comuníquese con Alvin Papa a info@shoemakerprojectlb.com

# ABISO SA PUBLIKO

**Abiso ng Pagiging Available ng Draft Environmental Impact Report/ Environmental Assessment para sa Proyektong Pagpapalit ng Shoemaker Bridge**

**Anunsiyo ng Pagdinig ng Publiko**

| | |
|---|---|
| **Ano ang Pinaplano?** | Ipinapanukala ng California Department of Transportation (Caltrans), sa pakikipagtulungan ng Lungsod ng Long Beach, na palitan ang Shoemaker Bridge (West Shoreline Drive) sa Lungsod ng Long Beach, California. Muling itatayo ng panukalang proyekto ang Shoemaker Bridge at muling ihahanay ang mga koneksiyon ng lokal na kalye sa lugar. Kabilang sa mga pangunahing feature ang pagtatayo ng bagong tulay, mga pagpapaganda sa mga kaugnay na kalsadang kumukonekta sa downtown Long Beach, West Shoreline Drive mula sa SR-710, at mga bahagi ng 3rd Street, 6th Street, 7th Street, at West Broadway mula sa Cesar E. Chavez Park hanggang Magnolia Avenue. Kabilang din sa panukalang pagpapaganda ang mga karagdagang ilaw sa kalye, pagpapalit ng mga marka sa kalsada, mga turn lane, bisikleta, pedestrian, at mga pagpapaganda ng tanawin sa kalye. Bilang isang proyekto na stand-alone, magpapaunlak ang disenyo ng proyekto sa pagtatayo sa hinaharap ng I-710 Corridor Project at pahuhusayin ang kaligtasan, mga operasyon, at pagkakakonekta sa pagitan ng downtown Long Beach at mga panrehiyon na pasilidad ng transportasyon. |
| **Bakit ang Ad na Ito?** | Pinag-aralan ng Caltrans ang mga epekto na maaaring idulot ng panukalang proyekto sa kapaligiran at komunidad. Nakapaloob ang mga resulta ng mga pag-aaral na ito sa Draft Environmental Impact Report/ Environmental Assessment (EIR/EA). Layunin ng abisong ito na ipaalam sa publiko ang pagtatapos nito at pagiging available sa sinumang interesadong indibidwal, at upang magbigay sa publiko ng pagkakataon na magkomento o dumalo sa pagdinig ng publiko tungkol sa proyekto. |
| **Ano ang Available?** | Makukuha ang mga kopya ng Draft EIR/EA para sa pagrepaso sa mga sumusunod na lokasyon:<br>• Caltrans District 7 Office, 100 South Main Street, Los Angeles, CA 90012<br>• City of Long Beach, Billie Jean King Main Library, 200 West Broadway, Long Beach, CA 90802<br>• City of Long Beach, Mark Twain Neighborhood Library, 1401 East Anaheim Street, Long Beach, CA 90813<br>• City of Long Beach, Public Works Department, 411 West Ocean Boulevard, Long Beach, CA 90802<br><br>Makukuha ang mga elektronikong bersiyon ng Draft EIR/EA sa mga USB Flash Drive upang repasuhin sa mga nabanggit na pampublikong aklatan. Maaari ding tingnan ang Draft EIR/EA sa online sa: http://www.longbeach.gov/pw/resources/general/shoemaker-bridge/<br><br>Gaganapin ang isang pagdinig ng publiko sa petsa at lugar na ibinigay sa ibaba:<br>Huwebes, Oktubre 17, 2019 mula 6:30 p.m. hanggang 8:30 p.m.<br>Cesar Chavez Elementary School Gymnasium, 730 W. Third Street, Long Beach, CA 90802<br><br>May mga magagamit ng interpreter [tagasalin ng wika] para sa American Sign Language, Kastila, Khmer, at Tagalog. |
| **Kung Saan Ka Papasok/Mga Contact** | Natugunan ba ang mga posibleng epekto? Mayroon ka bang impormasyon na dapat isama? Kung nais mong magkomento sa Draft EIR/EA, maaari mong isumite ang iyong nakasulat na mga komento hanggang Martes, Nobyembre 12, 2019 kay:<br>Kelly Ewing-Toledo<br>Caltrans District 7, Division of Environmental Planning<br>100 South Main Street, MS 16A<br>Los Angeles, CA 90012<br>Attn: Proyektong Pagpapalit ng Shoemaker Bridge<br><br>o magpadala ng e-mail sa: info@shoemakerprojectlb.com<br><br>Para sa karagdagang impormasyon, mangyaring makipag-ugnayan kay Jason Roach sa (213) 897-0357, o sa email sa jason.roach@dot.ca.gov. |
| **Mga Espesyal na Akomodasyon** | Hinihiling sa mga indibidwal na nangangailangan ng espesyal na akomodasyon (interpreter ng American Sign Language, maa-access na upuan, dokumentasyon sa mga alternatibong format, atbp.) na makipag-ugnayan sa Caltrans District 7 Attn: Amy Tran sa (213) 897-2860, o sa email sa amy.tran@dot.ca.gov nang hindi lalampas sa 14 araw bago ang nakaiskedyul na pagdinig ng publiko. Maaaring tumawag ang mga gumagamit ng TDD sa California Relay Service TTY line sa 711. |
| Salamat sa iyong interes sa proyektong ito ng transportasyon. | |

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**ABISO NG PAGIGING AVAILABLE NG DRAFT ENVIRONMENTAL IMPACT REPORT**

**PARA SA:** Mga Ahensiya, Organisasyon, at Interesadong Partido

**PAKSA**: Abiso ng Pagiging Available ng Draft Environmental Impact Report (EIR) para sa Proyektong Pagpapalit ng Shoemaker Bridge (SCH No. 2016041007)

Bilang Pinunong Ahensiya na nangangasiwa ng pagsusuri ng kapaligira para sa proyektong ito, sinimulan ng Lungsod ng Long Beach ang paghahanda ng isang EIR upang matukoy ang kalikasan at hangganan ng epekto sa kapaligiran ng panukalang proyekto. Tinutukoy rin ng isang EIR ang mga paraan upang mabawasan ang mga epekto sa kapaligiran at sinusuri ang mga makatwirang alternatibo upang maiwasan o mabawasan ang malalaking epekto sa kapaligiran.

Alinsunod sa California Code of Regulations, Title 14, Section 15087(a), inihanda ang Abisong ito upang magpayo na natapos na ng Lungsod ng Long Beach ang isang Draft EIR para sa panukalang proyekto na nakalista sa itaas at inilalarawan sa ibaba. Available ang Draft EIR para sa pagsusuri ng publiko.

**TITULO NG PROYEKTO:** Proyektong Pagpapalit ng Shoemaker Bridge

**LOKASYON NG PROYEKTO:** Matatagpuan ang Proyekto sa dulong timog ng State Route 710/Interstate 710 (SR-710/I-710) at nahahati ng Los Angeles River. Ang mga limit ng Proyekto ay pangkalahatang napapalibutan ng mga koneksyon sa rampa ng 9th Street at 10th Street at West Shoreline Drive sa kanluran, Magnolia Avenue sa silangan, Ocean Boulevard at West Shoreline Drive sa timog, at Anaheim Street sa hilaga. Ang mga limit ng Proyekto sa silangang bahagi ay umaabot lampas sa Magnolia Avenue sa kahabaan ng Anaheim Street at 6th at 7th Street patungong Atlantic Boulevard.

**PAGLALARAWAN NG PROYEKTO:** Ipinapanukala ng Proyekto ang muling pagtatayo ng Shoemaker Bridge at muling ihahanay ang mga koneksiyon ng lokal na kalye sa lugar. Kabilang sa mga pangunahing feature ang pagtatayo ng bagong tulay, mga pagpapaganda sa mga kaugnay na kalsadang kumukonekta sa downtown Long Beach, West Shoreline Drive mula sa SR-710, at mga bahagi ng 3rd Street, 6th Street, 7th Street, at West Broadway mula sa Cesar E. Chavez Park hanggang Magnolia Avenue. Kabilang din sa panukalang pagpapaganda ang mga karagdagang ilaw sa kalye, pagpapalit ng mga marka sa kalsada, mga turn lane, bisikleta, pedestrian, at mga pagpapaganda ng tanawin sa kalye. Bilang isang proyekto na stand-alone, magpapaunlak ang disenyo ng Proyekto sa pagtatayo sa hinaharap ng I-710 Corridor Project at pahuhusayin ang kaligtasan, mga operasyon, at pagkakakonekta sa pagitan ng downtown Long Beach at mga panrehiyon na pasilidad ng transportasyon.

**MALALAKING EPEKTO SA KAPALIGIRAN NG PROYEKTO:** Natukoy ng Draft EIR na walang magiging posibleng malaki at hindi maiiwasang epekto sa kapaligiran ang Proyekto pagkatapos ng pagpapatupad ng mga natukoy na hakbang sa pag-iwas, pagpapaliit, at pagpapagaan o natukoy na hindi malaki sa ilalim ng CEQA.

**PANAHON NG KOMENTO NG PUBLIKO:** Ang panahon ng komento ng publiko na kung kailan tatanggap ang Lungsod ng Long Beach na mga nakasulat na komento tungkol sa Draft EIR ay:

**Simula:** Biyernes, Setyembre 27, 2019 **Wakas:** Martes, Nobyembre 12, 2019

Ang Lungsod ng Long Beach ay dapat tumanggap ng lahat ng nakasulat na mga komento na may kaugnayan sa Draft EIR hindi lalampas sa 5:00 p.m sa Martes, Nobyembre 12, 2019. Ang mga komento ay dapat ipadala sa:

Alvin Papa, City Engineer
Public Works Department
City of Long Beach
411 West Ocean Boulevard
Long Beach, CA 90802

O sa email sa: info@shoemakerprojectlb.com

**PAGDINIG SA PUBLIKO:** Gaganapin ang isang pagdinig sa publiko sa petsa at lugar na ibinigay sa ibaba:

- Huwebes, Oktubre 17, 2019 mula 6:30 p.m. hanggang 8:30 p.m. - Cesar Chavez Elementary School Gymnasium, 730 W. Third Street, Long Beach, CA 90802

**PAGIGING AVAILABLE NG DOKUMENTO:** Available ang Draft EIR para sa pagsusuri ng publiko online at sa mga lugar na nakalista sa ibaba sa sumusunod na mga oras na may pasok:

- Caltrans District 7 Office, 100 South Main Street, Los Angeles, CA 90012 (Bukas nang Lunes hanggang Biyernes mula 9:00 a.m. hanggang 3:00 p.m.)
- City of Long Beach, Public Works Department, 411 West Ocean Boulevard, Long Beach, CA 90802 (Bukas Lunes hanggang Biyernes 7:30 a.m. hanggang 4:30 p.m.)
- Billie Jean King Main Library, 200 West Broadway, Long Beach, CA 90802 (Bukas Martes at Huwebes mula 12:00 p.m. hanggang 7:00 p.m., Miyerkules mula 12:00 p.m. hanggang 6:00 p.m., at Biyernes at Sabado mula 10:00 a.m. hanggang 5:00 p.m.)
- City of Long Beach, Mark Twain Neighborhood Library, 1401 East Anaheim Street, Long Beach, CA 90813 (Bukas Martes at Huwebes mula 12:00 p.m. hanggang 7:00 p.m., Miyerkules mula 12:00 p.m. hanggang 6:00 p.m., at Biyernes at Sabado mula 10:00 a.m. hanggang 5:00 p.m.)

Online sa: http://www.longbeach.gov/pw/resources/general/shoemaker-bridge/

Kung kailangan mo ng karagdagang impormasyon, mangyaring makipag-ugnayan kay Alvin Papa sa: info@shoemakerprojectlb.com

# សេចក្តីជូនដំណឹងសាធារណៈ

**សេចក្តីជូនដំណឹងអំពីវត្តមាននៃរបាយការណ៍ពង្រាងស្តីពីផលប៉ះពាល់បរិស្ថាន/ការវាយតម្លៃបរិស្ថានសម្រាប់គម្រោងប្តូរស្ពានដើរ**

**សេចក្តីជូនដំណឹងអំពីសវនាការសាធារណៈ**

| | |
|---|---|
| **តើកំពុងរៀបចំផែនការអ្វីខ្លះ?** | ក្រសួងដឹកជញ្ជូនរដ្ឋ California (Caltrans) សហការជាមួយសាលាក្រុង Long Beach កំពុងស្នើសុំផ្លាស់ប្តូរស្ពានដើរ (West Shoreline Drive) នៅទីក្រុង Long Beach រដ្ឋ California ។ គម្រោងដែលបានស្នើនឹងសាងសង់ស្ពានដើរឡើងវិញ និង រៀបចំការតភ្ជាប់ផ្លូវក្នុងតំបន់ឡើងវិញ។ មុខងារសំខាន់ៗរួមមានការសាងសង់ស្ពានថ្មី ការកែលម្អ នៅតាមបណ្តាញភ្ជាប់ផ្លូវថ្នល់ដែលជាប់ទាក់ទងទៅទីប្រជុំជន Long Beach, West Shoreline Drive ពី SR-710 និង<br><br>ចំណែកនៃផ្លូវទី 3 ផ្លូវទី 6 ផ្លូវទី 7 និង West Broadway ពី Cesar E. Chavez Park ទៅផ្លូវ Magnolia Avenue ។ ការកែលម្អដែលបានស្នើក៏រួមបញ្ចូលទាំងភ្លើងបំភ្លឺផ្លូវបន្ថែម ការដាក់កម្រិត ផ្លូវបត់ កង់ អ្នកថ្មើរជើង និង ការកែលម្អដងផ្លូវ។ ក្នុងនាមជាគម្រោងតែមួយគត់-ការចនារបស់គម្រោងអាចនឹងទទួលបានការស្តាបនាគម្រោងច្រករបៀង I-710 នា<br><br>ពេលអនាគត និងកែលម្អសុវត្ថិភាព ប្រតិបត្តិការ និងការតភ្ជាប់រវាងទីប្រជុំជន Long Beach និងមជ្ឈោ ជាយដឹកជញ្ជូនក្នុងតំបន់។ |
| **ហេតុអ្វីមានការផ្សាយពាណិជ្ជកម្មនេះ?** | Caltrans បានសិក្សាពីផលប៉ះពាល់ដែលគម្រោងដែលបានស្នើអាចនឹងមានទៅលើបរិស្ថាន និងសហគមន៍។ លទ្ធផលនៃការសិក្សាទាំងនេះមាននៅក្នុងសេចក្តីព្រាងរបាយការណ៍ស្តីពីផលប៉ះពាល់បរិស្ថាន/ការវាយតម្លៃបរិស្ថាន (EIR/EA)។ គោលបំណងនៃសេចក្តីជូនដំណឹងនេះ គឺដើម្បីជូនដំណឹងដល់សាធារណជនអំពីការបញ្ចប់ និងភាពអាចរកបានចំពោះបុគ្គលដែលមានចំណាប់អារម្មណ៍ និងផ្តល់ដល់ សាធារណៈជននូវឱកាសផ្តល់យោបល់ ឬចូលរួមសវនាការសាធារណៈលើគម្រោង។ |
| **តើមានអ្វីខ្លះ?** | ច្បាប់ចម្លងនៃសេចក្តីព្រាង EIR/EA អាចរកបានសម្រាប់ត្រួតពិនិត្យឡើងវិញនៅទីតាំងដូចខាងក្រោម៖<br>• Caltrans District 7 Office, 100 South Main Street, Los Angeles, CA 90012<br>• City of Long Beach, Billie Jean King Main Library, 200 West Broadway, Long Beach, CA 90802<br>• City of Long Beach, Mark Twain Neighborhood Library, 1401 East Anaheim Street, Long Beach, CA 90813<br>• City of Long Beach, Public Works Department, 411 West Ocean Boulevard, Long Beach, CA 90802<br><br>កំណែអេឡិចត្រូនិកនៃសេចក្តីព្រាង EIR/EA នៅលើផ្លាស USB អាចរកបានសម្រាប់ការពិនិត្យមើលឡើងវិញនៅបណ្ណាល័យសាធារណៈខាងលើ។ សេចក្តីព្រាង EIR/EA អាចក៏មើលតាមអនឡាញលើគេហទំព័រ៖http://www.longbeach.gov/pw/resources/general/shoemaker-bridge/<br><br>សវនាការសាធារណៈនឹងត្រូវធ្វើឡើងនៅកាលបរិច្ឆេទ និងទីតាំងដែលបានផ្តល់ជូនខាងក្រោម៖<br>ថ្ងៃព្រហស្បតិ៍, តុលា 17, 2019 ពីម៉ោង 6:30 ល្ងាច ដល់ ម៉ោង 8:30 យប់<br>បន្ទប់កីឡា សាលាបឋមសិក្សា Cesar Chavez Elementary School, 730 W. Third Street, Long Beach, CA 90802<br><br>អ្នកបកប្រែភាសាកាយរិការអាមេរិកាំង, ស្ប៉ានីស, ខ្មែរ, និង តាហ្គាឡុក នឹងត្រូវបានផ្តល់ជូនសម្រាប់សវនាការសាធារណៈ |
| **កន្លែងដែលអ្នកចូល/ទំនាក់ទំនង** | តើផលប៉ះពាល់សក្តានុពលត្រូវបានដោះស្រាយទេ? តើអ្នកមានព័ត៌មានដែលគួរដាក់បញ្ចូលទេ? ប្រសិនបើអ្នកចង់បញ្ចេញមតិលើសេចក្តីព្រាង EIR/EA អ្នកអាចដាក់បញ្ជូនមតិជាលាយលក្ខណ៍អក្សររបស់អ្នករហូតដល់ ថ្ងៃអង្គារ, វិច្ឆិកា 12, 2019 ទៅ៖<br><br>Kelly Ewing-Toledo<br>Caltrans District 7, Division of Environmental Planning<br>100 South Main Street, MS 16A<br>Los Angeles, CA 90012<br>Attn: Shoemaker Bridge Replacement Project<br>(តាមរយៈ៖ គម្រោងប្តូរស្ពានដើរ)<br><br>ឬផ្ញើអ៊ីមែលទៅ៖ info@shoemakerprojectlb.com<br><br>ចំពោះព័ត៌មានបន្ថែមសូមទាក់ទង Jason Roach តាមលេខ (213) 897-0357 ឬតាមរយៈអ៊ីមែល jason.roach@dot.ca.gov ។ |
| **ការផ្តល់ការស្នាក់នៅពិសេស** | បុគ្គលដែលត្រូវការកន្លែងស្នាក់នៅពិសេស (អ្នកបកប្រែភាសាសញ្ញាអាមេរិក កន្លែងអង្គុយ ឯកសារនៅក្នុងទម្រង់ជំនួស។ល។ ) ត្រូវបានស្នើសុំឱ្យទាក់ទងទៅ Caltrans មណ្ឌលទី 7 តាមរយៈ៖ Amy Tran តាមលេខ (213) 897-2860ឬតាមរយៈអ៊ីមែលតាម amy.tran@dot.ca.gov យ៉ាងហោចណាស់ 14 ថ្ងៃមុនពេលបើកសវនាការជាសាធារណៈដែលបានគ្រោងទុក។ អ្នកប្រើប្រាស់ TDD អាចទាក់ទងតាមខ្សែទូរសព្ទ California Relay Service TTY តាមលេខ 711។ |
| សូមអរគុណចំពោះការចាប់អារម្មណ៍របស់អ្នកលើគម្រោងដឹកជញ្ជូននេះ។ | |

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**សេចក្តីជូនដំណឹងអំពីវត្តមាននៃរបាយការណ៍ពង្រាងស្តីពីផលប៉ះពាល់បរិស្ថាន**

**ជូនចំពោះ៖** ទីភ្នាក់ងារ អង្គភាព និងភាគីពាក់ព័ន្ធ

**ប្រធានបទ៖** សេចក្តីជូនដំណឹងអំពីវត្តមាននៃរបាយការណ៍ពង្រាងស្តីពីផលប៉ះពាល់បរិស្ថាន (EIR) សម្រាប់គម្រោងប្តូរស្ពានដើរ (SCH លេខ 2016041007)

ក្នុងនាមជាទីភ្នាក់ងារនាំមុខក្នុងការគ្រប់គ្រងតាមដានការពិនិត្យឡើងវិញនូវបរិស្ថានរបស់គម្រោងនេះ សាលាក្រុង Long Beach បានផ្តួចផ្តើមរៀបចំរបាយការណ៍ EIR ដើម្បីកំណត់លក្ខណៈ និងទំហំនៃផលប៉ះពាល់នៃគម្រោងដែលបានស្នើទៅលើបរិស្ថាន។ របាយការណ៍ EIR ក៏កំណត់វិធីដើម្បីកាត់បន្ថយផលប៉ះពាល់បរិស្ថាននិងវិភាគជម្រើសសមស្រប ដើម្បីចៀសវាង ឬកាត់បន្ថយផលប៉ះពាល់បរិស្ថានសំខាន់ៗផងដែរ។

អនុលោមតាមក្រមនៃបទប្បញ្ញត្តិរដ្ឋ California ចំណងជើងទី 14 ផ្នែក 15087(a) សេចក្តីជូនដំណឹងនេះត្រូវបានរៀបចំ ដើម្បីណែនាំថា សាលាក្រុង Long Beach បានបញ្ចប់សេចក្តីព្រាង EIR សម្រាប់គម្រោងដែលបានស្នើ ដែលបានរាយឈ្មោះខាងលើ និងបានពណ៌នាខាងក្រោម។ សេចក្តីព្រាង EIR អាចរកបានសម្រាប់ការពិនិត្យឡើងវិញជាសាធារណៈ។

**ចំណងជើងគម្រោង៖** គម្រោងប្តូរស្ពានដើរ

**ទីតាំងគម្រោង៖** គម្រោងនេះមានទីតាំងស្ថិតនៅចុងខាងត្បូងនៃផ្លូវរដ្ឋ 710/Interstate 710 (SR-710/I-710) ហើយខណ្ឌដោយទន្លេ Los Angeles ។ ដែនកំណត់នៃគម្រោងជាទូទៅភ្ជាប់ជាមួយផ្លូវលេខ 9 និងផ្លូវលេខ 10 និងពីផ្លូវ West Shoreline Drive ទៅប៉ែកខាងលិច ពីផ្លូវ Magnolia Avenue ទៅប៉ែកទិសខាងកើត ពីមហាវិថី Ocean និង West Shoreline Drive ទៅប៉ែកខាងត្បូង និងពីផ្លូវ Anaheim ទៅប៉ែកខាងជើង។ ដែនកំណត់គម្រោងនៅចំហៀងខាងកើតលាតសន្ធឹងហួសផ្លូវ Magnolia តាមបណ្តោយវិថី Anaheim និងផ្លូវលេខ 6 និង ផ្លូវលេខ 7 ដល់មហាវិថីអាត្លង់ទិក។

**ការពណ៌នាគម្រោង៖** គម្រោងស្នើសុំសាងសង់ស្ពានដើរថ្មី និងរៀបចំការតភ្ជាប់ក្នុងតំបន់ឡើងវិញ។ មុខងារសំខាន់ៗរួមមានការសាងសង់ស្ពានថ្មី ការកែលម្អ
នៅតាមបណ្តាញភ្ជាប់ផ្លូវថ្នល់ដែលជាប់ទាក់ទងទៅទីប្រជុំជន Long Beach, West Shoreline Drive ពី SR-710 និង ចំណែកនៃផ្លូវទី 3 ផ្លូវទី 6 ផ្លូវទី 7 និង West Broadway ពី Cesar E. Chavez Park ទៅផ្លូវ Magnolia Avenue ។ ការកែលម្អដែលបានស្នើក៏រួមបញ្ចូលទាំងភ្លើងបំភ្លឺផ្លូវបន្ថែម ការដាក់កម្រិតផ្លូវបត់ កង់ អ្នកថ្មើរជើង និង ការកែលម្អដងផ្លូវ។
ក្នុងនាមជាគម្រោងតែមួយគត់-ការចនារបស់គម្រោងអាចនឹងទទួលបានការស្តាបនាគម្រោងច្រកបៀង I-710 នាពេលអនាគត និងកែលម្អសុវត្ថិភាព ប្រតិបត្តិការ និងការតភ្ជាប់រវាងទីប្រជុំជន Long Beach និងមធ្យោបាយដឹកជញ្ជូនក្នុងតំបន់។

**ផលប៉ះពាល់បរិស្ថានគួរឱ្យកត់សម្គាល់ទៅលើគម្រោង៖** សេចក្តីព្រាង EIR បានកំណត់ថា គម្រោងនេះនឹងមិនមានផលប៉ះពាល់បរិស្ថានគួរឱ្យកត់សម្គាល់ និងមិនអាចចៀសផុតបានបន្ទាប់ពីការអនុវត្តវិធានការចៀសវាង ការកាត់បន្ថយអប្បបរមា និងវិធានការបន្ទូរបន្ថយ ឬត្រូវបានកំណត់ថា មិនសំខាន់ទេនៅក្រោម CEQA ។

**រយៈពេលផ្តល់មតិសាធារណៈ៖** រយៈពេលផ្តល់មតិសាធារណៈក្នុងអំឡុងពេលដែលសាលាក្រុង Long Beach នឹងទទួលបានមតិជាលាយលក្ខណ៍អក្សរអំពីសេចក្តីព្រាង EIR គឺ៖

**ចាប់ផ្តើម៖** ថ្ងៃសុក្រទី ២៧ ខែកញ្ញាឆ្នាំ ២០១៩ ។ **បញ្ចប់៖** ថ្ងៃអង្គារទី ១២ ខែវិច្ឆិកាឆ្នាំ ២០១៩ ។

សាលាក្រុង Long Beach ត្រូវតែទទួលបានរាល់មតិជាលាយលក្ខណ៍អក្សរទាក់ទងទៅនឹងសេចក្តីព្រាង EIR មិនឲ្យលើសពីម៉ោង ម៉ោង 5:00 ល្ងាច។ នៅ ថ្ងៃច័ន្ទទី ១១ ខែវិច្ឆិកាឆ្នាំ ២០១៩ ។ ។
មតិគួរតែត្រូវបានផ្ញើទៅ៖

Alvin Papa, City Engineer
Public Works Department
City of Long Beach
411 West Ocean Boulevard
Long Beach, CA 90802

ឬតាមអ៊ីមែលទៅ៖ info@shoemakerprojectlb.com

**កិច្ចប្រជុំសាធារណៈ៖** កិច្ចប្រជុំសាធារណៈនឹងត្រូវធ្វើឡើងនៅកាលបរិច្ឆេទ និង ទីតាំងដែលបានផ្តល់ជូនខាងក្រោម៖

- ថ្ងៃព្រហស្បតិ៍ទី ១៧ ខែតុលាឆ្នាំ ២០១៩ ។ ពី។ 6:30 ល្ងាច ទៅ 8:30 ល្ងាច - Cesar Chavez Elementary School Gymnasium, ផ្លូវ 730 W. Third Street, ទីក្រុង Long Beach, CA 90802

**ភាពអាចរកបាននៃឯកសារ៖** សេចក្តីព្រាង EIR អាចរកបានសម្រាប់ការពិនិត្យឡើងវិញ ជាសាធារណៈតាមអនឡាញនិងនៅទីតាំងដែលបានរាយខាងក្រោមក្នុងម៉ោងធ្វើការដូចខាងក្រោម៖

- ការិយាល័យ Caltrans មណ្ឌលទី 7, ផ្លូវ 100 South Main, Los Angeles, CA 90012 (បើកពីថ្ងៃចន្ទ ដល់ថ្ងៃសុក្រចាប់ពីម៉ោង 9:00 ព្រឹកដល់ម៉ោង 3:00 រសៀល)

- សាលាក្រុង Long Beach ក្រសួងសាធារណៈការ មហាវិថី 411 West Ocean, Long Beach, CA 90802 (បើកពីថ្ងៃច័ន្ទដល់ថ្ងៃសុក្រចាប់ពីម៉ោង 7:30 ព្រឹកដល់ម៉ោង 4:30 ល្ងាច)

- បណ្ណាល័យ Billie Jean King Main, ផ្លូវជំ 200 West Broadway,ទីក្រុង Long Beach, CA 90802 (បើកថ្ងៃអង្គារ និងថ្ងៃព្រហស្បតិ៍ចាប់ពីម៉ោង 12:00 ថ្ងៃត្រង់ដល់ម៉ោង 7:00 ល្ងាច ថ្ងៃពុធពីម៉ោង 12:00 ថ្ងៃត្រង់ដល់ម៉ោង 6:00 ល្ងាច និងថ្ងៃសុក្រ និងថ្ងៃសៅរ៍ចាប់ពីម៉ោង 10:00 ព្រឹកដល់ 5:00 ល្ងាច)

- សាលាក្រុង Long Beach, បណ្ណាល័យ Mark Twain Neighborhood, ផ្លូវ 1401 East Anaheim, ទីក្រុង Long Beach, CA 90813 (បើកថ្ងៃអង្គារ និងថ្ងៃព្រហស្បតិ៍ចាប់ពីម៉ោង 12:00 ថ្ងៃត្រង់ដល់ម៉ោង 7:00 ល្ងាច ថ្ងៃពុធពីម៉ោង 12:00 ថ្ងៃត្រង់ដល់ម៉ោង 6:00 ល្ងាច និងថ្ងៃសុក្រ និងថ្ងៃសៅរ៍ចាប់ពីម៉ោង 10:00 ព្រឹកដល់ 5:00 ល្ងាច)

តាមអនឡាញ៖ http://www.longbeach.gov/pw/resources/general/shoemaker-bridge/

ប្រសិនបើអ្នកត្រូវការព័ត៌មានបន្ថែម សូមទាក់ទង Alvin Papa តាម info@shoemakerprojectlb.com ។

# J.2 Proof of Posting Long Beach Press-Telegram and La Opinion- Publication of Shoemaker Bridge Replacement Project Public Notice

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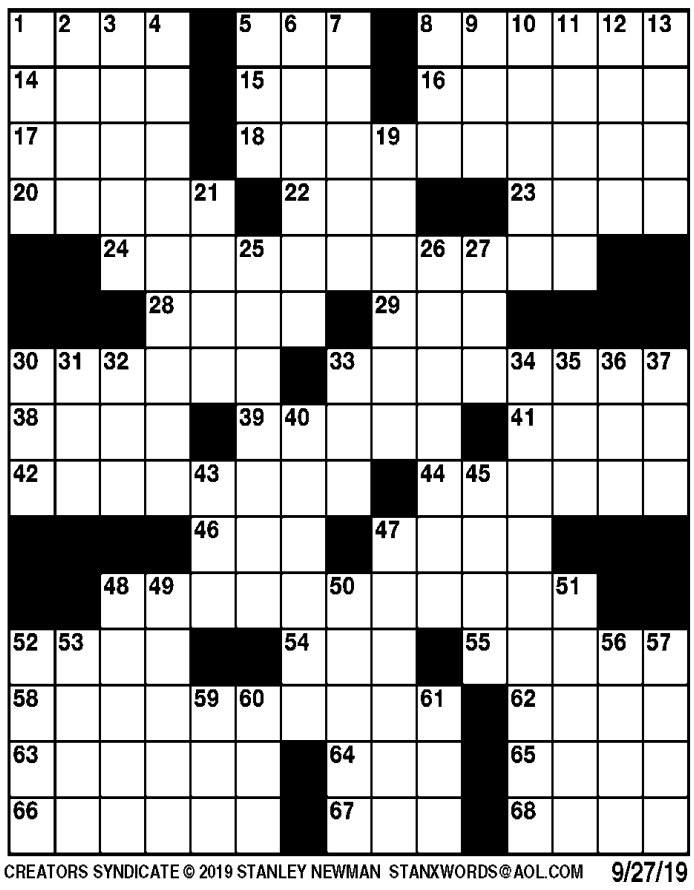
# Newsday Crossword

**PROPER PLACEMENTS** by S.N.
Edited by Stanley Newman
www.stanxwords.com

**ACROSS**
1 Schmidt once of Google
5 Common cask material
8 Political body
14 Looking up
15 Trusted authority
16 Major along with the Masters
17 Rough up
18 Good rep
20 Italian battleground of '44
22 See 24 Across
23 Intends
24 Bewitched [and what the answer is]
28 Wonderland waddler
29 Product from pines
30 Period of major changes
33 Baritone line starter
38 Persian poet
39 Maneuver around
41 Sleek, so to speak
42 It's north of Nogales on I-10
44 Fire up
46 *Curious George* byline
47 Paper mill material
48 Trapped [and what the answer is]
52 Rather big hair
54 See 48 Across
55 Occasions to celebrate, for short
58 Ready to drive away
62 Something coming to mind
63 Twix competitor
64 Celebrity roast garb
65 Sunday-through-Friday flyer
66 Vulgarian
67 Starter for center
68 Nothing other than

**DOWN**
1 First name in suburban humor
2 Stallion with speckles
3 Japanese truckmaker
4 Manicotti, essentially
5 Photo __ (snapping sessions)
6 "Joint" prefix
7 Taekwondo's origin
8 Name on the cover of "Is for" fiction
9 Caesar's "is"
10 Lite to the max
11 Blossoming time
12 Be overrun
13 Extremities
19 Old-Timers' Day player
21 Possible memory trigger
25 Male with the most acting Emmys
26 Big name in vaccination history
27 Hosp. hubs
30 "Maybe __"
31 Feathery fast runner
32 WWII female vet
33 Industry, familiarly
34 Motivational motto
35 Wildflower locale
36 Measure of work
37 Ill-wisher
40 Summer Olympics vehicles
43 Gold holder
45 Federal meditators' agcy.
47 PC scrolling key
48 Speak at a podium
49 Popular potation in Poland
50 Midler of music
51 Cider server
52 Clumsy vessels
53 Thwart
56 About 32 million seconds
57 Vendition
59 Whirling toon omnivore
60 Bastille Day season
61 Early sixth-century year



CREATORS SYNDICATE © 2019 STANLEY NEWMAN STANXWORDS@AOL.COM 9/27/19

Friday, September 27, 2019

## GOREN BRIDGE

WITH BOB JONES
©2019 Tribune Content Agency, LLC

**WHAT TO OPEN?**

North-South vulnerable, South deals

**NORTH**
♠ 6 2
♡ J 8 7 4
◇ Q 5 4
♣ A 9 6 3

**WEST**
♠ Q 10 9 4 3
♡ 10
◇ 10 8 7
♣ K Q J 10

**EAST**
♠ A K J 8 7 5
♡ 9 5
◇ Void
♣ 8 7 5 4 2

**SOUTH**
♠ Void
♡ A K Q 6 3 2
◇ A K J 9 6 3 2
♣ Void

The bidding:

| SOUTH | WEST | NORTH | EAST |
|---|---|---|---|
| 1◇ | 1♠ | Dbl* | 4♠ |
| 7♡ | Pass | Pass | 7♠ |
| Dbl | All pass | | |

*Negative

Opening lead: Four of ◇

What would you open with the South hand in today's deal? Non-experts would open two clubs, thinking that they have game in hand. They do, but only in playing strength. The hand might prove disappointing on defense against a spade or a club contract. Experts won't open two clubs with a two-suited hand unless the high-card strength is overwhelming. Enemy pre-emption might make it very difficult to get both of their suits into the auction.

When this hand was played in a team game in England some years ago, one table had the auction shown above. South had to settle for down two, doubled. It might have been even worse. East might have doubled seven hearts asking for an unusual lead. After South's one diamond opening, West would have had no trouble finding the killing diamond lead.

At the other table, the South player opened one heart — one spade by West, two hearts by partner, four spades by East. South also bid seven hearts at that table, but East did double that for an unusual lead. West thought a long time between leading a diamond or leading a club. Diamonds had never been bid at this table, so West's greater club length convinced him to lead a club. South happily ruffed and claimed 13 tricks. It was, perhaps, a bit lucky, but … nice opening bid decision!

*(Bob Jones welcomes readers' responses sent in care of this newspaper or to Tribune Content Agency, LLC., 16650 Westgrove Dr., Suite 175, Addison, TX 75001.)*

**Answer to previous puzzle**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | I | T | A | R | ■ | L | I | N | D | A | ■ | N | A | H |
| A | M | A | Z | E | ■ | O | W | I | E | S | ■ | O | L | E |
| P | O | C | K | E | T | W | A | T | C | H | ■ | N | O | D |
| ■ | ■ | ■ | A | K | R | O | N | ■ | O | O | L | O | N | G |
| S | T | A | B | ■ | A | N | T | S | ■ | R | A | N | G | E |
| A | R | I | A | S | ■ | ■ | I | N | B | E | T | A | ■ | ■ |
| T | U | R | N | S | I | G | N | A | L | ■ | S | N | O | W |
| E | S | P | ■ | E | A | R | ■ | G | O | B | ■ | E | P | A |
| S | T | U | N | ■ | G | A | S | S | C | O | O | T | E | R |
| ■ | ■ | R | E | C | O | I | L | ■ | ■ | O | U | T | R | E |
| A | K | I | R | A | ■ | N | O | V | A | ■ | T | E | A | S |
| D | E | F | O | R | M | ■ | W | E | B | M | D | ■ | ■ | ■ |
| U | N | I | ■ | W | A | T | E | R | C | O | O | L | E | R |
| L | Y | E | ■ | A | M | I | S | S | ■ | S | O | O | T | Y |
| T | A | R | ■ | X | A | C | T | O | ■ | T | R | U | C | E |

9/27/19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CITY OF LONG BEACH

Caltrans

**SHOEMAKER BRIDGE REPLACEMENT PROJECT**

## PUBLIC NOTICE

**Notice of Availability Draft Environmental Impact Report/ Environmental Assessment for the Shoemaker Bridge Replacement Project**

**WHAT'S BEING PLANNED?**

The City of Long Beach in cooperation with the California Department of Transportation (Caltrans) is proposing to replace the Shoemaker Bridge (West Shoreline Drive) in the City of Long Beach, California. The proposed project would reconstruct Shoemaker Bridge and realign local street connections in the area.

Major features include the construction of a new bridge, improvements along associated roadway connectors to downtown Long Beach, West Shoreline Drive from SR-710, and portions of 3rd Street, 6th Street, 7th Street, and West Broadway from Cesar E. Chavez Park to Magnolia Avenue. The proposed improvements also include additional street lighting, restriping, turn lanes, bicycle, pedestrian, and streetscape improvements. As a stand alone project, the project's design would improve safety, operations, and connectivity between downtown Long Beach and regional transportation facilities.

**WHY THIS AD?**

Caltrans has studied the effects that the proposed project may have on the environment and community. The results of these studies are contained in Draft Environmental Impact Report/Environmental Assessment (EIR/EA). The purpose of this notice is to inform the public of its completion and availability to any interested individuals, and to provide the public an opportunity to comment or attend the public hearing on the project.

**WHAT'S AVAILABLE?**

Copies of the Draft EIR/EA are available for review at the following locations:

**Caltrans District 7 Office**
100 South Main Street, Los Angeles, CA 90012

**City of Long Beach , Billie Jean King Main Library**
200 West Broadway, Long Beach, CA 90802

**City of Long Beach, Mark Twain Neighborhood Library**
1401 East Anaheim Street, Long Beach, CA 90813

**City of Long Beach, Public Works Department**
411 West Ocean Boulevard, Long Beach, CA 90802

Electronic versions of the Draft EIR/EA on USB Flash Drives are also available for review at the above public libraries. The Draft EIR/EA may also be viewed online at:

http://www.longbeach.gov/pw/resources/general/shoemaker-bridge/

A public hearing will be held at the date and location provided below:
Thursday October 17, 2019 from 6:30 p.m. to 8:30 p.m.
**Cesar Chavez Elementary School Gymnasium**
730 W. Third Street, Long Beach, CA 90802
American Sign Language, Spanish, Khmer, and Tagalog language interpreters will be available for the public hearing.

**WHERE YOU COME IN/CONTACTS**

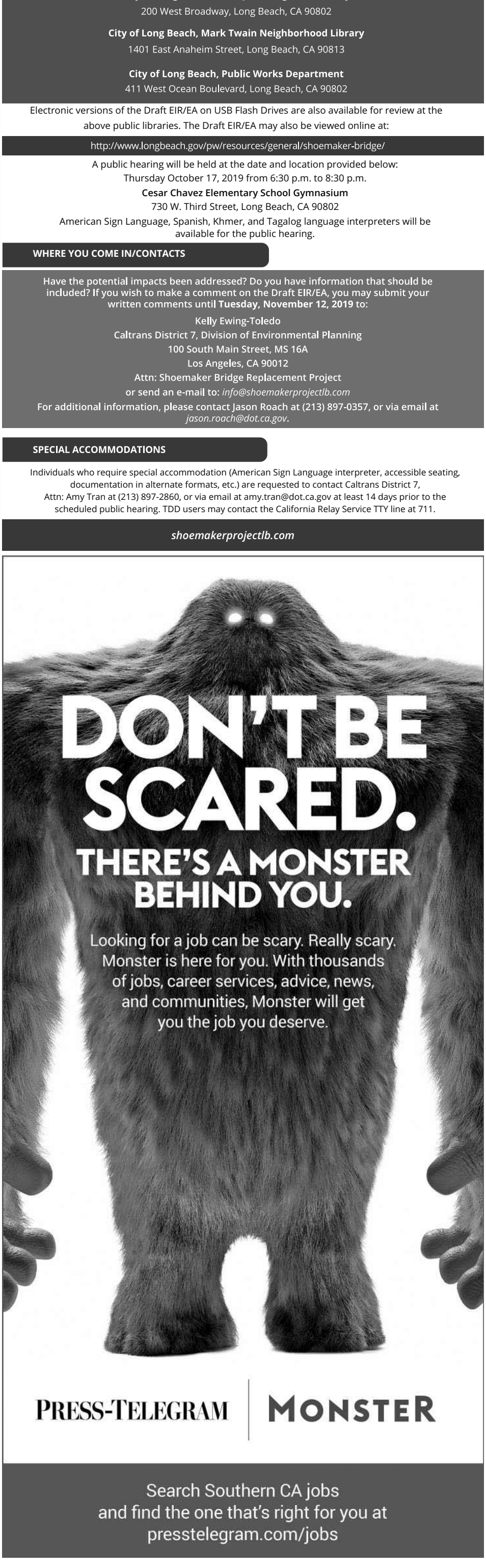
Have the potential impacts been addressed? Do you have information that should be included? If you wish to make a comment on the Draft EIR/EA, you may submit your written comments until **Tuesday, November 12, 2019** to:

Kelly Ewing-Toledo
Caltrans District 7, Division of Environmental Planning
100 South Main Street, MS 16A
Los Angeles, CA 90012
Attn: Shoemaker Bridge Replacement Project
or send an e-mail to: *info@shoemakerprojectlb.com*
For additional information, please contact Jason Roach at (213) 897-0357, or via email at *jason.roach@dot.ca.gov*.

**SPECIAL ACCOMMODATIONS**

Individuals who require special accommodation (American Sign Language interpreter, accessible seating, documentation in alternate formats, etc.) are requested to contact Caltrans District 7, Attn: Amy Tran at (213) 897-2860, or via email at amy.tran@dot.ca.gov at least 14 days prior to the scheduled public hearing. TDD users may contact the California Relay Service TTY line at 711.

*shoemakerprojectlb.com*

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# Clasificados!

Llame gratis **800-626-8332**

Búsquenos también **clasificados.laopinion.com**

## Avisos Legales Ficticious Name

**FICTITIOUS BUSINESS NAME STATEMENT #2019252845**
The following person is doing business as:

**TACOS PACO**
**131 1/2 E 111TH PL**
**Los Angeles, CA 90061**
**(LA COUNTY)**

**Hildeberto Rios Perez**
**131 1/2 E 111TH PL**
**Los Angeles, CA 90061**

This business is conducted by: **An Individual.**
The registrant has commenced to transact business under the fictitious business names listed herein. on 09/2019
**SIGNED: Hildeberto Rios Perez (owner)**
This statement was filed with the County Clerk of Los Angeles County on: **09/19/19**
NOTICE: THIS FICTITIOUS NAME STATEMENT EXPIRES FIVE YEARS FROM DATE IT WAS FILED IN THE OFFICE OF THE COUNTY CLERK. A NEW FICTITIOUS BUSINESS NAME STATEMENT MUST BE FILED PRIOR TO THAT DATE. The filing of this statement does not of itself authorize the use in this state of a fictitious business name in violation of the rights of another under federal, state, or common law (See section 14411 et seq., Business and Professions Code.
**Pub: 09/20, 09/27, 10/04, 10/11/2019**

## Avisos Legales Ficticious Name

**FICTITIOUS BUSINESS NAME STATEMENT #2019257669**
The following person is doing business as:

**DORIS TACOS**
**1147 1/2 Marine Ave.**
**Wilmington, CA 90744**
**(LA COUNTY)**

**Gloria Camacho Mendez**
**1147 1/2 Marine Ave.**
**Wilmington, CA 90744**

This business is conducted by: **An Individual.**
The registrant has not commenced to transact business under the fictitious business names listed herein.
**SIGNED: Gloria Camacho Mendez (owner)**
This statement was filed with the County Clerk of Los Angeles County on: **09/25/19**
NOTICE: THIS FICTITIOUS NAME STATEMENT EXPIRES FIVE YEARS FROM DATE IT WAS FILED IN THE OFFICE OF THE COUNTY CLERK. A NEW FICTITIOUS BUSINESS NAME STATEMENT MUST BE FILED PRIOR TO THAT DATE. The filing of this statement does not of itself authorize the use in this state of a fictitious business name in violation of the rights of another under federal, state, or common law (See section 14411 et seq., Business and Professions Code.
**Pub: 09/27, 10/04, 10/11, 10/18/2019**

## Avisos Legales Ficticious Name

**FICTITIOUS BUSINESS NAME STATEMENT #2019225365**
The following person is doing business as:

**LA CHARLA JUICE BAR**
**11659 S. Atlantic Ave.**
**Lynwood, CA 90262**
**(LA COUNTY)**

**Gregorio Bonaparte Morales**
**3123 Cedar Ave**
**Lynwood, CA 90262**

This business is conducted by: **An Individual.**
The registrant has commenced to transact business under the fictitious business names listed herein. on 08/2019
**SIGNED: Gregorio Bonaparte Morales (owner)**
This statement was filed with the County Clerk of Los Angeles County on: **08/20/19**
NOTICE: THIS FICTITIOUS NAME STATEMENT EXPIRES FIVE YEARS FROM DATE IT WAS FILED IN THE OFFICE OF THE COUNTY CLERK. A NEW FICTITIOUS BUSINESS NAME STATEMENT MUST BE FILED PRIOR TO THAT DATE. The filing of this statement does not of itself authorize the use in this state of a fictitious business name in violation of the rights of another under federal, state, or common law (See section 14411 et seq., Business and Professions Code.
**PUB: 09/20, 09/27, 10/04, 10/11/2019**

## Casas de Venta


**VENDA SU CASA COSTOS DE VENTA 1.5%**

**Luis A. Venegas**
**(310) 988.1801**
VenegasCapitalRE.com


## Avisos Legales

**FICTITIOUS BUSINESS NAME STATEMENT #2019257689**
The following person is doing business as:
**BEAUTY AND BARBER SALON LA RIVERA**
**1214 Pacific Coast Hwy**
**Harbor City CA 90710**
**(LA COUNTY)**

**Esther Rivera**
**24413 Deepwater Ave.**
**Wilmington, CA90744**

This business is conducted by: **An Individual.**
The registrant has commenced to transact business under the fictitious business names listed herein. on 07/2014
**SIGNED: Esther Rivera (owner)**
This statement was filed with the County Clerk of Los Angeles County on: **09/25/19**
NOTICE: THIS FICTITIOUS NAME STATEMENT EXPIRES FIVE YEARS FROM DATE IT WAS FILED IN THE OFFICE OF THE COUNTY CLERK. A NEW FICTITIOUS BUSINESS NAME STATEMENT MUST BE FILED PRIOR TO THAT DATE. The filing of this statement does not of itself authorize the use in this state of a fictitious business name in violation of the rights of another under federal, state, or common law (See section 14411 et seq., Business and Professions Code.
**Pub: 09/27, 10/04, 10/11, 10/18/2019**

## Aptos. de Renta


**SOUTH GATE**
Bonito y amplio apartamento de
**1 RÉCAMARA.**
$1,300 al mes.
9408 Victoria Ave.
**323-358-3420**


## Avisos Legales

**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY (LACMTA) INVITATION FOR BID**

LACMTA will receive bids for **VM65890 – COPIER PAPER** at the 9th Floor Receptionist Desk, Vendor/ Contract Management Department, One Gateway Plaza, Los Angeles, CA 90012.

A Pre-Bid conference will not be held. This project is a Small Business Enterprise (SBE) Set-Aside contract. To participate in this IFB, bidders must be SBE certified with LACMTA prior to proposal due date. For information on the Set-Aside program, visit: https://business.metro.net/VendorPortal/faces/home1/certifications

All Bids must be submitted on forms furnished by LACMTA and must be filed at the reception desk, 9th floor, V/CM Department, on or before 1:00 p.m. Pacific Time on October 29, 2019at which time bids will be opened and publicly read. Bids received later than the above date and time will be rejected and returned to the bidder unopened. Each bid must be sealed and marked **Bid No. VM65890.**

For a copy of the Proposal/Bid specification visit our Solicitation Page on our Vendor Portal at https://business.metro.net or for further information email Tanya Allen at allentm@metro.net.
9/27/19
**CNS-3298532#**
**LA OPINION**


Informe a otros lo que usted tiene para vender llame ***GRATIS*** al:
**800-626-8332**
**Clasificados!**


## Aptos. de Renta


**DOWNEY**
Apartamento de
**1 RECÁMARA**
Algunas utilidades pagadas.
$1,300 al mes.
$1,000 deposito
9242 Telegraph Rd.
**323-573-6848**

**INGLEWOOD**
**APTO. GRANDE**
**1 RECAMARA**
$1,375 al mes.
Cocina de granito y baño nuevos, piso de madera, microondas, y estacionamiento.
Edificio cercado.
**Imperial & Inglewood**
**213-282-1015**

**BELL GARDENS**
**Apartamento de**
**1 RECÁMARA**
**en renta.**
$1,400 al mes.
Sección 8 OK.
No mascotas.
**8018 Garfield Ave.**
Manager Apt. 12
**323-574-3276**

**Clasificados!**
Anúnciese en la sección de clasificados de
**La Opinión** laopinion.com
Para anunciarse llame GRATIS al:
**800-626-8332**

Cómprelo en los **Clasificados!**


## Avisos Legales

## Avisos Legales

## Avisos Legales

## Avisos Legales

### Distrito Escolar Unificado de Compton
### Aviso de Audiencia Pública sobre la Composición de la Junta Directiva (Áreas Fiduciarias)
### 25 de septiembre de 2019

Tenga en cuenta que, el 30 de septiembre de 2019, la Junta de la Mesa Directiva del Distrito Escolar Unificado de Compton llevara a cabo una **PRIMERA AUDIENCIA PÚBLICA,** que comenzara a las 6:00 de la tarde, para recibir comentarios del público sobre la composición de los Distritos de la Mesa Directiva (áreas fiduciarias).

Tenga en cuenta que, el 4 de octubre de 2019, la Junta de la Mesa Directiva del Distrito Escolar Unificado de Compton llevara a cabo una **SEGUNDA AUDIENCIA PUBLICA,** que comenzara a las 10:00 de la mañana, para recibir comentarios públicos sobre la composición de los Distritos de la Mesa Directiva (áreas fiduciarias).

Las audiencias públicas se llevarán a cabo en la Sala de Juntas de las Oficinas Administrativas del Distrito, ubicada en el 501 S. Santa Fe Avenue, Compton, California 90221.

La Mesa Directiva se elige actualmente utilizando un sistema electoral en general, en el que todos los miembros de la Mesa Directiva son elegidos por los votantes de todo el Distrito. Estas audiencias públicas son parte del proceso para establecer un sistema de elección de área por fideicomisario. Es un sistema en el cual el Distrito se dividirá en siete áreas por fideicomisario y, para cada área por fideicomisario, un miembro de la Mesa Directiva será elegido solo por los votantes registrados que residan en esa área por fideicomisario en particular. Para ser elegible para la elección, los candidatos deberán residir en el área del fiduciario en el que se postulan para la elección

Las audiencias públicas programadas para el 30 de septiembre de 2019 y el 4 de octubre de 2019 tienen el propósito de recibir comentarios públicos sobre la composición de las áreas por fideicomisario que se formaran. Se alienta a los miembros del público a participar y brindar su opinión en las audiencias.

CITY OF LONG BEACH

Caltrans

## SHOEMAKER BRIDGE REPLACEMENT PROJECT

# AVISO PÚBLICO

Aviso de disponibilidad del informe preliminar de impacto ambiental/evaluación de impacto ambiental para el proyecto de reemplazo del puente Shoemaker

### ¿QUÉ SE ESTÁ PLANEANDO?

La ciudad de Long Beach,en cooperación con el Departamento de Transporte de California (Caltrans), propone reemplazar el puente Shoemaker (West Shoreline Drive) de la ciudad de Long Beach, California. El proyecto propuesto consistiría en la reconstrucción del puente Shoemaker y la realineación de las conexiones de las calles locales en el área. Las características principales incluyen la construcción de un puente nuevo, mejoras a lo largo de las uniones de las carreteras vinculadas al centro de Long Beach, West Shoreline Drive desde SR-710 y partes de 3rd Street, 6th Street, 7th Street y West Broadway desde Cesar E. Chavez Park hasta Magnolia Avenue. Los mejoramientos propuestos también incluyen mejoras adicionales en el alumbrado público, el repintado de las líneas de tráfico sobre el pavimento, los carriles de giro, las ciclovías, las sendas peatonales y el paisaje urbano. Como proyecto independiente, el diseño del proyecto mejoraría la seguridad, las operaciones y la conectividad entre el centro de Long Beach y las instalaciones de transporte regionales.

### ¿POR QUÉ EXISTE ESTE ANUNCIO?

Caltrans ha estudiado los efectos que el proyecto propuesto puede tener sobre el medio ambiente y la comunidad. Los resultados de estos estudios se incluyen en el informe preliminar de impacto ambiental/evaluación de impacto ambiental (EIR/EA). El propósito de este anuncio es informar al público sobre la finalización y la disponibilidad de este informe para cualquier persona interesada, y brindarle al público la oportunidad de comentar o asistir a la audiencia pública sobre el proyecto.

### ¿QUÉ ES LO QUE SE ENCUENTRA DISPONIBLE?

Las copias del informe preliminar de impacto ambiental/evaluación de impacto ambiental (EIR/EA) están disponibles para revisión en las siguientes ubicaciones:

**Caltrans District 7 Office**
100 South Main Street, Los Angeles, CA 90012

**City of Long Beach ,**
**Billie Jean King Main Library**
200 West Broadway, Long Beach, CA 90802

**City of Long Beach,**
**Mark Twain Neighborhood Library**
1401 East Anaheim Street, Long Beach, CA 90813

**City of Long Beach, Public Works Department**
411 West Ocean Boulevard, Long Beach, CA 90802

Las versiones electrónicas del informe preliminar de impacto ambiental/evaluación de impacto ambiental están disponibles en memorias USB para revisión en las bibliotecas públicas mencionadas anteriormente. El informe preliminar de impacto ambiental/evaluación de impacto ambiental también se puede ver en línea en:

http://www.longbeach.gov/pw/resources/general/shoemaker-bridge/

Se llevará a cabo una audiencia pública en la fecha y el lugar indicados a continuación:
**Jueves 17 de Octubre 2019 de las 6:30 p.m. a 8:30 p.m.**
**Cesar Chavez Elementary School Gymnasium**
730 W. Third Street, Long Beach, CA 90802
Intreprete de Lengua en Señales Estadounidense, Español, Camboyano, y tagalo estara disponible para la audiencia.

### CUÁL SU ROL/CONTACTOS

¿Se han abordado los posibles impactos? ¿Tiene información que debería incluirse? Si desea hacer un comentar sobre el informe preliminar de impacto ambiental/evaluación de impacto ambiental, puede hacerlo por escrito hasta el Martes, 12 de Noviembre a la siguiente dirección:

Kelly Ewing-Toledo
Caltrans District 7, Division of Environmental Planning
100 South Main Street, MS 16A
Los Angeles, CA 90012

Attn: Shoemaker Bridge Replacement Project
(A la atención de: Proyecto de reemplazo del puente Shoemaker)

o puede enviar un correo electrónico a *info@shoemakerprojectlb.com*

Para obtener más información, comuníquese con Jason Roach al (213) 897-0357 o por correo electrónico a *jason.roach@dot.ca.gov*

### ADAPTACIONES ESPECIALES

Las personas que requieren adaptaciones especiales (intérprete de lengua de señas estadounidense, asientos accesibles, documentación en formatos alternativos, etc.) deben comunicarse con el distrito 7 de Caltrans, a la atención de Amy Tran al (213) 897-2860 o por correo electrónico a amy.tran@dot.ca.gov al menos 14 días antes de la audiencia pública programada. Los usuarios de TDD pueden comunicarse con la línea TTY del servicio de retransmisión de California al 711.

*shoemakerprojectlb.com*

109-74626-1

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# J.3 Public Hearing Sign-In Sheet

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CITY OF LONG BEACH

# SHOEMAKER BRIDGE REPLACEMENT PROJECT

Caltrans

## SIGN-IN SHEET/*HOJA DE REGISTRO/ Mag-sign In/* ចូល DATE/*FECHA/PETSA/*កាលបរិច្ឆេទ:

| Name/*Nombre/ Pangalan/* ឈ្មោះ | Organization/Organización/ Samahan /អង្គការ | Mailing Address/Dirección Postal/ Padalahang Tirahan/អាសយដ្ឋាន | ZIP Code/Código Postal/ Code ng Padalahan ng Sulat/កូដ | Phone/Teléfono/ Telepono ទូរស័ព្ទ | E-Mail/Correo Electrónico/ De Koryenteng Komunikasyon អីម៉ែល |
|---|---|---|---|---|---|
| Theral Golden | West Long Beach ASS. | | | | Theralty@msn.com |
| Pam Kramer | Resident | | | | kramerlap@gmail.com |
| Margaret Wirth | Resident | 555 Main Av | | | margaretwirth@hotmail.com |
| RON KOSINSKI | CALTRANS ENV | 100 S. MAIN LA CA | 90012 | | |
| MARIAH HOFFMAN | DLBA | | | | MARIAHH@DLBA.ORG |
| | | | | | |
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CITY OF LONG BEACH

# SHOEMAKER BRIDGE REPLACEMENT PROJECT

Caltrans

## SIGN-IN SHEET/*HOJA DE REGISTRO/ Mag-sign In/* ចូល DATE/*FECHA/PETSA/*កាលបរិច្ឆេទ:

| Name/*Nombre/ Pangalan/* ឈ្មោះ | Organization/Organización/ Samahan /អង្គការ | Mailing Address/Dirección Postal/ Padalahang Tirahan/អាស័យដ្ឋាន | ZIP Code/Código Postal/ Code ng Padalahan ng Sulat/កូដ | Phone/Teléfono/ Telepono ទូរស័ព្ទ | E-Mail/Correo Electrónico/ De Koryenteng Komunikasyon អីម៉ែល |
|---|---|---|---|---|---|
| T Stacy | Resident | 555 main Ave | | | |
| Alex Holford | POLB | | | | |
| Ernie Villa | WCHA | 1255 N. Lona Vista Dr | 90813 | | misterv43@yahoo.com |
| Michael Ryan | Ryan | Resident | 90802 | | MRyan90802@gmail.com |
| David & Emily Ledger | Resident | 926 N Lona Vista Dr LB 90813 | 90813 | | ledgedesign@mac.com |
| Cheryl Perry | WCHA | 351 Magnolia | 90802 | | cherylperry351@gmail.com |
| Bianca Villanueva | POLB | | 90802 | | bianca.villanueva@polb.com |
| Herlinda Haro | Resident | 417 W 4th St Unit FB | 90802 | | Helenharo19@g.mail.com |
| | | | | | |
| | | | | | |

# J.4 Public Hearing Speaker Cards

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CITY OF LONG BEACH

SHOEMAKER BRIDGE REPLACEMENT PROJECT

Caltrans

**DATE/*FECHA*:**

# SPEAKER CARD/*TARJETA DEL PRESENTADOR*

Name/*Nombre*: Trish [illegible] Stacy

Street/*Calle*: _____

City, State, Zip:
*Ciudad, Estado, Código Postal:* _____

Phone/*Teléfono*: _____ Email/*Correo Electrónico*: _____

Subject/*Asunto*: Support of Project

**Purpose of the Card:**
- Provide proper spelling of speaker's name
- Contact information for follow-up

**Speaking Rules:**
- Speakers will be called upon by the name listed on their submitted speaker card in the order they are received
- Speaker will have 2 minutes to address the subject

***Propósito de la Tarjeta:***
- *Deletree correctamente el nombre del presentador*
- *Información de contacto para seguimiento*

***Reglas para el uso de la palabra:***
- *Los presentadores serán llamados por el nombre que hayan puesto en su tarjeta de presentador y en el orden en que se haya recibido*
- *El presentador tendrá 2 minutos para abordar el tema*

2.

CITY OF LONG BEACH

SHOEMAKER BRIDGE REPLACEMENT PROJECT

Caltrans

**DATE/*FECHA*:**

## SPEAKER CARD/*TARJETA DEL PRESENTADOR*

Name/*Nombre*: Ernie Villa

Street/*Calle*:

City, State, Zip:
*Ciudad, Estado, Código Postal:*

Phone/*Teléfono*: Email/*Correo Electrónico*:

Subject/*Asunto*: Safety, Beautification, Support

**Purpose of the Card:**
- Provide proper spelling of speaker's name
- Contact information for follow-up

**Speaking Rules:**
- Speakers will be called upon by the name listed on their submitted speaker card in the order they are received
- Speaker will have 2 minutes to address the subject

***Propósito de la Tarjeta:***
- *Deletree correctamente el nombre del presentador*
- *Información de contacto para seguimiento*

***Reglas para el uso de la palabra:***
- *Los presentadores serán llamados por el nombre que hayan puesto en su tarjeta de presentador y en el orden en que se haya recibido*
- *El presentador tendrá 2 minutos para abordar el tema*

3.

CITY OF LONGBEACH

SHOEMAKER BRIDGE REPLACEMENT PROJECT

Caltrans

**DATE/*FECHA*:**

## SPEAKER CARD/*TARJETA DEL PRESENTADOR*

Name/*Nombre*: [redacted] Golden, Thera

Street/*Calle*:

City, State, Zip:
*Ciudad, Estado, Código Postal:*

Phone/*Teléfono*: Email/*Correo Electrónico*:

Subject/*Asunto*: Design

**Purpose of the Card:**
- Provide proper spelling of speaker's name
- Contact information for follow-up

**Speaking Rules:**
- Speakers will be called upon by the name listed on their submitted speaker card in the order they are received
- Speaker will have 2 minutes to address the subject

***Propósito de la Tarjeta:***
- *Deletree correctamente el nombre del presentador*
- *Información de contacto para seguimiento*

***Reglas para el uso de la palabra:***
- *Los presentadores serán llamados por el nombre que hayan puesto en su tarjeta de presentador y en el orden en que se haya recibido*
- *El presentador tendrá 2 minutos para abordar el tema*

4.

CITY OF LONG BEACH

SHOEMAKER BRIDGE REPLACEMENT PROJECT

Caltrans

**DATE/*FECHA*:**

## SPEAKER CARD/*TARJETA DEL PRESENTADOR*

Name/*Nombre*: DAVID LEDGER

Street/*Calle*: 976 N. LOMA VISTA DRIVE

City, State, Zip:
*Ciudad, Estado, Código Postal*: LONG BEACH, CA 90813

Phone/*Teléfono*: 562-243-2159 Email/*Correo Electrónico*: ledgedesign@mac.com

Subject/*Asunto*: Planning and Proposing

**Purpose of the Card:**
- Provide proper spelling of speaker's name
- Contact information for follow-up

**Speaking Rules:**
- Speakers will be called upon by the name listed on their submitted speaker card in the order they are received
- Speaker will have 2 minutes to address the subject

***Propósito de la Tarjeta:***
- *Deletree correctamente el nombre del presentador*
- *Información de contacto para seguimiento*

***Reglas para el uso de la palabra:***
- *Los presentadores serán llamados por el nombre que hayan puesto en su tarjeta de presentador y en el orden en que se haya recibido*
- *El presentador tendrá 2 minutos para abordar el tema*

5.

CITY OF LONG BEACH

SHOEMAKER BRIDGE REPLACEMENT PROJECT

Caltrans

**DATE/*FECHA*:**

## SPEAKER CARD/*TARJETA DEL PRESENTADOR*

Name/*Nombre*: Ernie Villa

Street/*Calle*: _____

City, State, Zip:
*Ciudad, Estado, Código Postal:* _____

Phone/*Teléfono*: _____ Email/*Correo Electrónico*: _____

Subject/*Asunto*: Concern everyone wants to hear answer, frustrated not answering

**Purpose of the Card:**
- Provide proper spelling of speaker's name
- Contact information for follow-up

**Speaking Rules:**
- Speakers will be called upon by the name listed on their submitted speaker card in the order they are received
- Speaker will have 2 minutes to address the subject

***Propósito de la Tarjeta:***
- *Deletree correctamente el nombre del presentador*
- *Información de contacto para seguimiento*

***Reglas para el uso de la palabra:***
- *Los presentadores serán llamados por el nombre que hayan puesto en su tarjeta de presentador y en el orden en que se haya recibido*
- *El presentador tendrá 2 minutos para abordar el tema*

9.

CITY OF LONG BEACH

SHOEMAKER BRIDGE REPLACEMENT PROJECT

Caltrans

**DATE/*FECHA*:**

# SPEAKER CARD/*TARJETA DEL PRESENTADOR*

Name/*Nombre*: Haro, Erlinda

Street/*Calle*:

City, State, Zip:
*Ciudad, Estado, Código Postal:*

Phone/*Teléfono*: Email/*Correo Electrónico*:

Subject/*Asunto*: Sixth Street just 1 way, safer for shools & dropoff

**Purpose of the Card:**
- Provide proper spelling of speaker's name
- Contact information for follow-up

**Speaking Rules:**
- Speakers will be called upon by the name listed on their submitted speaker card in the order they are received
- Speaker will have 2 minutes to address the subject

***Propósito de la Tarjeta:***
- *Deletree correctamente el nombre del presentador*
- *Información de contacto para seguimiento*

***Reglas para el uso de la palabra:***
- *Los presentadores serán llamados por el nombre que hayan puesto en su tarjeta de presentador y en el orden en que se haya recibido*
- *El presentador tendrá 2 minutos para abordar el tema*

# J.5 Public Hearing Comment Cards

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CITY OF LONGBEACH

SHOEMAKER BRIDGE REPLACEMENT PROJECT

Caltrans

**DATE/*FECHA*:**

# SPEAKER CARD/*TARJETA DEL PRESENTADOR*

Name/*Nombre*: TRISH STACY

Street/*Calle*: 535 MAINE AVE

City, State, Zip:
*Ciudad, Estado, Código Postal*: 90802 LBC

Phone/*Teléfono*: _____ Email/*Correo Electrónico*: TRIKSTAH@hotmail.com

Subject/*Asunto*: WE ARE VERY SUPPORTIVE OF THIS PROJECT. OPTION 2

**Purpose of the Card:**
- Provide proper spelling of speaker's name
- Contact information for follow-up

**Speaking Rules:**
- Speakers will be called upon by the name listed on their submitted speaker card in the order they are received
- Speaker will have 2 minutes to address the subject

***Propósito de la Tarjeta:***
- *Deletree correctamente el nombre del presentador*
- *Información de contacto para seguimiento*

***Reglas para el uso de la palabra:***
- *Los presentadores serán llamados por el nombre que hayan puesto en su tarjeta de presentador y en el orden en que se haya recibido*
- *El presentador tendrá 2 minutos para abordar el tema*

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# Appendix K. Response to Comments

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# K.1 Response to Comments

As required by the California Environmental Quality Act (CEQA) Guidelines Section 15087, a public notice of availability of the Draft Environmental Impact Report/Environmental Assessment (EIR/EA) for the Shoemaker Bridge Replacement Project (Project) was published as a display ad in the Long Beach Press Telegram and La Opinion on September 27, 2019. The Draft EIR/EA was circulated for public review for a period of 45 days, from September 27, 2019 to November 12, 2019. Copies of the Draft EIR/EA were distributed to the State Clearinghouse, the Governor's Office of Planning and Research (15 copies of summary form), and other federal, State, and local agencies. Copies of the Draft EIR/EA were available for public review at Caltrans District 7, City of Long Beach Department of Public Works, the Billie Jean King Main Library, and Mark Twain Neighborhood Library. A copy of the distribution list for the Draft EIR/EA is provided in Chapter 6 of this document.

As outlined in the Federal Highway Administration (FHWA) Guidance for Preparing and Processing Environmental and Section 4(f) Documents, Technical Advisory T 6640.8A, Section H, following the public availability period, the EA should be revised or an attachment provided, as appropriate, to (1) reflect changes in the proposed action or mitigation measures resulting from comments received on the EA or at the public hearing (if one is held) and any impacts of the changes, (2) include any necessary findings, agreements, or determination (e.g., wetlands, Section 106, Section 4(f)) required for the proposal, and (3) include a copy of pertinent comments received on the EA and appropriate responses to the comments.

## K.1.1 Index of Comments Received

Table K-1 indexes the agencies, groups, and persons who commented on the EIR/EA during the public review period from September 27, 2019 through November 12, 2019. Comments received by these groups or individuals have been organized into the follow categories: State Agencies, Local Agencies, Public Comments, Comment Cards received during the public hearing, and Public Hearing Transcript, including the speaker card comments. No comments were received from Federal Agencies; and thus, that category was not included as part of the Response to Comments. One comment was made during the public review period that was not applicable to the Environmental Document (ED). This comment has been documented within Table K-1 and included as a part of the public record, even though Caltrans and the City of Long Beach (City) are not required to respond to this comment.

Each commenting party has been assigned a code corresponding to the categories described above, as well as a number code. Number codes are associated with the comment or comments made by each commenting party within each letter or comment submitted. For example, Comment S 1-1 refers to the first comment in the letter from the California Department of Conservation – Division of Oil, Gas, and Geothermal Resources. Note that in some cases, responses to comments refer the reader to a response to a different comment or to a section of the EIR/EA.

### Table K-1. Comment Letters Received During Public Comment Period

| Letter Code | Commenter | Date Comment Received | Format of Comment |
|---|---|---|---|
| CC 1 | Trish Stacey | October 17, 2019 | Comment Card at the Public Hearing |
| PH 1 | Trish Stacey | October 17, 2019 | Comment Card at the Public Hearing |
| PH 2 | Ernie Villa | October 17, 2019 | Comment Card at the Public Hearing |
| PH 3 | Tharel Golden | October 17, 2019 | Comment Card at the Public Hearing |
| PH 4 | David Ledger | October 17, 2019 | Comment Card at the Public Hearing |
| PH 5 | Erlinda Haro | October 17, 2019 | Comment Card at the Public Hearing |
| L 1 | Cassie Truong, LA Metro | November 8, 2019 | Email |
| N/A-2 | Kaitlin Orr | October 27, 2019 | Email |
| PC 1 | Harold Hartwell | October 2, 2019 | Email |
| PC 2 | Cheryl Perry | November 3, 2019 | Email |
| S 1 | Curtis Welty, California Department of Conservation, Division of Oil, Gas, and Geothermal Resources | November 12, 2019 | Email |
| L 2 | Adriana Raza, Sanitation Districts of Los Angeles County | November 12, 2019 | Email |

Caltrans and the City distributed the Draft EIR/EA for the proposed Project for public review and comment on September 27, 2019, with the public review period ending on November 12, 2019. During this time, twelve comments were received. Comments after the close of the public circulation period were accepted through November 15, 2019. These two comment letters are documented in Table K-2. In addition, one comment was received prior to the public review period on September 25, 2019. This comment was made not regarding the ED; however, Caltrans and the City have decided to include this as a part of the public record.

### Table K-2. Comment Letters Received Outside of the Public Comment Period

| Letter Code | Commenter | Date Comment Received | Format of Comment |
|---|---|---|---|
| N/A-1 | James Hughes | September 25, 2019 | Email |
| S 2 | Steve Gibson, California Department of Fish and Wildlife | November 13, 2019 | Email |

## K.1.2 Comments from State Agencies

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California
Department of Conservation
Division of Oil, Gas, and Geothermal Resources

Gavin Newsom, Governor
David Shabazian, Director

S 1

November 12, 2019

**VIA EMAIL**

California Department of Transportation, District 7
ATTN: Jason Roach, Senior Environmental Planner
SCH #2016041007
100 South Main Street, MS 16A
Los Angeles, CA 90012
Email: jason.roach@dot.ca.gov

Dear Mr. Roach:

**NOTICE OF COMPLETION**
**DRAFT ENVIRONMENTAL IMPACT REPORT**
**SHOEMAKER BRIDGE REPLACEMENT PROJECT**
**CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 7**
**SCH: NO. 2016041007**

The Department of Conservation's Division of Oil, Gas, and Geothermal Resources (Division) has reviewed the above-referenced project for impacts with Division jurisdictional authority. The Division supervises the drilling, maintenance, and plugging and abandonment of oil, gas, and geothermal wells in California. The Division offers the following comments for your consideration. S 1-1

The project area is in Los Angeles County and lies within the Wilmington oil field. Division records indicate the presence of oil field production facilities and multiple active, idle, and plugged oil and gas wells. Division information can be found at: www.conservation.ca.gov. Individual well records are also available on the Division's web site, or by emailing dogdist1@conservation.ca.gov. S 1-2

The scope and content of information that is germane to the Division's responsibility are contained in Section 3000 et seq. of the Public Resources Code, and administrative regulations under Title 14, Division 2, Chapters 2, 3 and 4 of the California Code of Regulations.

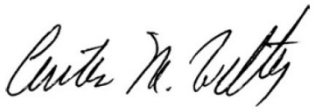
If any wells, including any plugged, abandoned or unrecorded wells, are damaged or uncovered during excavation or grading, remedial plugging operations may be required. If such damage or discovery occurs, the Division's district office must be contacted to obtain information on the requirements and approval to perform remedial operations. S 1-3

State of California Natural Resources Agency | Department of Conservation
Southern District, 3780 Kilroy Airport Way, Suite 400, Long Beach, CA 90806
conservation.ca.gov | T: (562) 637-4400 | F: (562) 424-0166

The possibility for future problems from oil and gas wells that have been plugged and abandoned, or reabandoned, to the Division's current specifications are remote. However, the Division recommends that a diligent effort be made to avoid building over any plugged and abandoned well. S 1-4

Questions regarding the Division's Construction Site Well Review Program can be addressed to the local Division's office in Long Beach by emailing DOGDIST1@conservation.ca.gov or by calling (562) 637-4400. S 1-5

Sincerely,



Curtis M. Welty, PG
Associate Oil and Gas Engineer

cc: The State Clearinghouse in the Office of Planning and Research
Email: state.clearinghouse@opr.ca.gov

Christine Hansen, DOC OGER
Email: Christine.Hansen@conservation.ca.gov

Vanessa Adame, DOC OGER
Email: Vanessa.Adame@conservation.ca.gov

Naveen Habib, DOC OGER
Email: Naveen.Habib@conservation.ca.gov

Jan Perez, DOGGR CEQA Unit
Email: Jan.Perez@conservation.ca.gov

Environmental CEQA File

### K.1.2.1 S 1. California Department of Conservation, Division of Oil, Gas, and Geothermal Resources

**S 1-1**

The comment is an introduction and is not specific to elements of the Draft EIR/EA; therefore, this comment does not require further response and has been documented as a part of the public record.

**S 1-2**

As discussed in Section 2.12, Hazardous Waste, and Materials, Table 2.12-3, the Draft EIR/EA has already identified the Wilmington oil field is within the Project limits, on the western side of the Los Angeles River (LA River). The Initial Site Assessment (ISA) prepared for the Project utilized the Division of Oil, Gas, and Geothermal Resource's website the commenter has identified when conducting the evaluation of oil and gas wells within the Project limits. Please refer to Section 2.12, Hazardous Waste and Materials of the EIR/EA for detailed information regarding this topic.

**S 1-3**

The PDT appreciates the Division of Oil Gas and Geothermal Resources' (DOGGR) comment and has incorporated the regulations and requirements regarding damaging or uncovering wells during construction activities. During construction, the Project may have the potential to encounter active and plugged oil/gas wells and water injection wells associated with APNs 7271-003-902 and 7278-011-908, within the Project limits. PF-59 was added to address these concerns. As stated in PF-59, the Project will avoid building over any plugged and abandoned wells. However, in the event a well cannot be avoided or is encountered during construction, the City Resident Engineer will notify the Department of Conservation's Division of Oil, Gas, and Geothermal Resource to determine if any remediation operations may be required. The addition of PF-59 does not change the conclusions or adequacy of analysis contained in the Draft EIR/EA.

**S 1-4**

Wells that may be potentially impacted during construction activities will be identified and avoided, if feasible, during the Plans, Specifications, and Estimates (PS&E) phase of the Project and prior to any ground disturbance activities during the construction phase. In addition, PF-59-, has been added to the Final EIR/EA to address any potential impacts regarding the damaging or covering existing wells. The addition of PF-59 does not change the conclusions or adequacy of analysis contained in the Draft EIR/EA. Coordination efforts with DOGGR will continue throughout the PS&E and Construction phases of the Project.

**S 1-5**

Please refer to response to Comment S 1-4, above.

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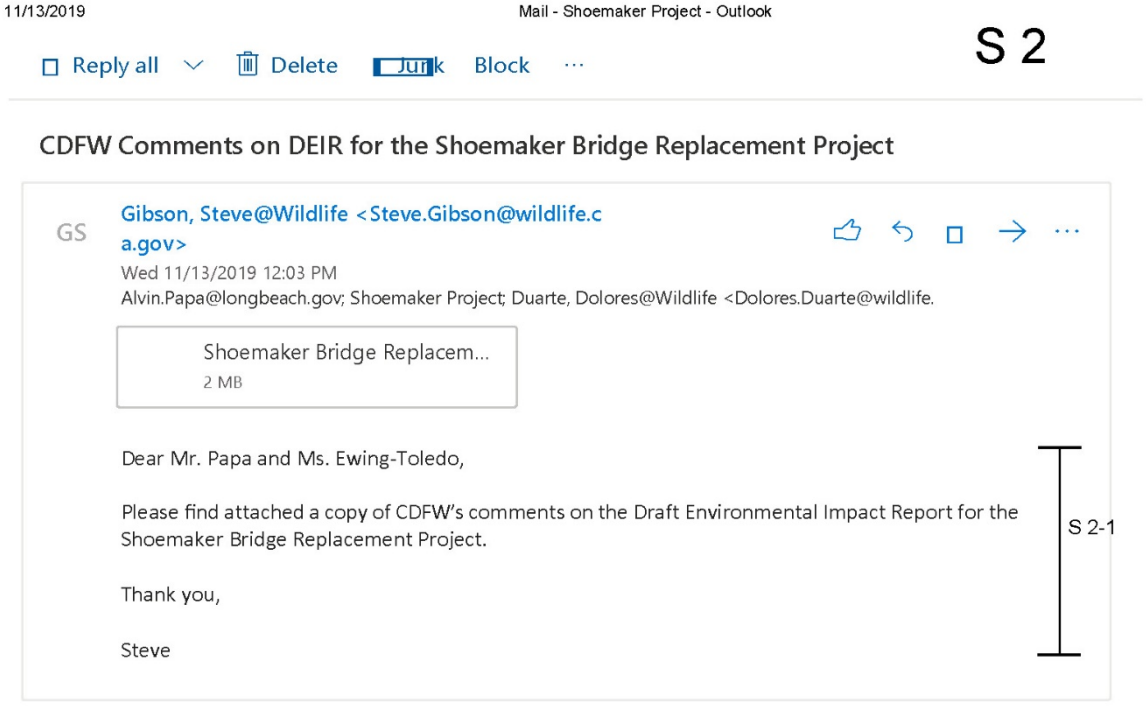

11/13/2019 Mail - Shoemaker Project - Outlook

S 2

Reply all Delete Junk Block ···

CDFW Comments on DEIR for the Shoemaker Bridge Replacement Project

GS Gibson, Steve@Wildlife <Steve.Gibson@wildlife.ca.gov>

Wed 11/13/2019 12:03 PM

Alvin.Papa@longbeach.gov; Shoemaker Project; Duarte, Dolores@Wildlife <Dolores.Duarte@wildlife.

Shoemaker Bridge Replacem...
2 MB

Dear Mr. Papa and Ms. Ewing-Toledo,

Please find attached a copy of CDFW's comments on the Draft Environmental Impact Report for the Shoemaker Bridge Replacement Project.

Thank you,

Steve

S 2-1

https://outlook.office.com/mail/deeplink?version=2019100701.11&popoutv2=1 1/1

State of California - Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor

November 13, 2019

Alvin Papa, City Engineer
Engineering Bureau
City of Long Beach Department of Public Works
411 West Ocean Boulevard
Long Beach, CA 90802
Alvin.Papa@longbeach.gov

Ms. Kelly Ewing-Toledo, Supervising Environmental Planner
Division of Environmental Planning
California Department of Transportation, District 7
100 South Main St, MS 16A
Los Angeles, CA 90012
info@shoemakerprojec tlb.com

**Subject: Comments on the Draft Environmental Impact Report for the Shoemaker Bridge Replacement Project, City of Long Beach, Los Angeles County (SCH 2016041007)**

Dear Mr. Papa and Ms. Ewing-Toledo:

The California Department of Fish and Wildlife (CDFW) has reviewed the above-referenced Draft for the Environmental Impact Report (EIR) for the Shoemaker Bridge Replacement Project (Project). The EIR's supporting documentation includes the "Shoemaker Bridge Draft Environmental Impact Report/Environmental Assessment Volumes 1-3" provided by the California Department of Transportation, District 7 (Caltrans) pursuant to the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et. seq.).

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

**CDFW's Role**

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & Game Code,§§ 711.7, subdivision (a) & 1802; Public Resources Code,§ 21070; CEQA Guidelines,§ 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

*Conserving California's Wildlife Since 1870*

CDFW is also submitting comments as a Responsible Agency under CEQA (Public Resources Code,§ 21069; CEQA Guidelines,§ 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including Lake and Streambed Alteration (LSA) regulatory authority (Fish & Game Code,§ 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" (see Fish & Game Code, § 2050) of any species protected under the California Endangered Species Act (CESA; Fish & Game Code, § 2050 et seq.) or the Native Plant Protection Act (NPPA; Fish & Game Code, § 1900 et seq.), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

**Project Location:** The proposed project is located at the southern terminus of Long Beach Freeway 1-710 in the City of Long Beach. The Shoemaker Bridge (West Shoreline Drive) spans the Los Angeles River.

**Project Description/Objective:** Caltrans is proposing to replace the Shoemaker Bridge to improve existing traffic safety and operations, increase multi-modal connectivity and bring the new bridge in compliance with today's standards. Besides streetscape improvements on major thoroughfares, the bridge will also provide access for bicycles and pedestrians. The Project consists of three alternatives that are being evaluated as part of the proposed project.

Project Alternatives:

- *Alternative 1 No Build Alternative:* No action alternative.
- *Alternative 2 Re-purpose existing bridge:* Replace the existing Shoemaker Bridge over the Los Angeles River with a new bridge located just south of the existing bridge. Re-purpose the existing bridge for non-motorized transportation and recreational use.
- *Alternative 3 Remove existing bridge:* Replace the existing Shoemaker Bridge over the Los Angeles River with a new bridge located just south of the existing bridge. Remove the existing bridge.

**COMMENTS AND RECOMMENDATIONS**

CDFW offers the following comments and recommendations to assist the City of Long Beach (Lead Agency) and Caltrans (Responsible Agency) in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

S 2-2

CDFW also recommends that Caltrans include in the DEIR measures or revisions below in a science-based monitoring program that contains adaptive management strategies as part of the Project's CEQA mitigation, monitoring and reporting program (Public Resources Code, § 21081.6 and CEQA Guidelines, § 15097).

**Comment #1: Impacts to Streams**

1) Impacts to Streams: The Project crosses the Los Angeles River. As a Responsible Agency under CEQA, CDFW has authority over activities in streams and/or lakes that will divert or obstruct the natural flow; or change the bed, channel, or bank (including vegetation associated with the stream or lake) of a river or stream; or use material from a streambed. For any such activities, the project applicant (or "entity") must provide

S 2-3

written notification to CDFW pursuant to section 1600 et seq. of the Fish and Game Code. Based on this notification and other information, CDFW determines whether a lake or Streambed Agreement (Agreement) with the applicant is required prior to conducting the proposed activities. CDFW's issuance of an Agreement for a project that is subject to CEQA will require related environmental compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document prepared by the local jurisdiction (Lead Agency) for the Project. To minimize additional requirements by CDFW pursuant to section 1600 *et seq.* and/or under CEQA, the DEIR should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the LSA (available at www.wildlife.ca.gov/habcon/1600). S 2-3

a. The Project area supports aquatic, riparian, and wetland habitats; therefore, a preliminary jurisdictional delineation of the streams and their associated riparian habitats should be included in the DEIR. The delineation should be conducted pursuant to the U. S. Fish and Wildlife Service (USFWS) wetland definition adopted by the CDFW (Cowardin et al. 1970). Some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers' section 404 permit and Regional Water Quality Control Board section 401 Certification. S 2-4

b. In areas of the Project site which may support ephemeral streams, herbaceous vegetation, woody vegetation, and woodlands also serve to protect the integrity of ephemeral channels and help maintain natural sedimentation processes; therefore, CDFW recommends effective setbacks be established to maintain appropriately-sized vegetated buffer areas adjoining ephemeral drainages. S 2-5

c. Project-related changes in drainage patterns, runoff, and sedimentation should be included and evaluated in the DEIR. S 2-6

**Comment #2: Impacts to Bats**

**Issue:** According to the DEIR, the following bat species of special concern (SSC) have the potential to be found in the project area:

- western mastiff bat *(Eumops perotis)*
- pocketed free-tailed bat *(Nyctinomops femorosaccus)*
- big free-tailed bat *(Nyctinomops macrotis)*

S 2-7

With the proximity of the Project site to the Los Angeles River, there is potential for multiple sensitive bat species to be found on site or adjacent to the Project site. A 9 quad review of California Natural Diversity Database (CNDDB) indicates historic observations of two additional bat species, the silver haired bat *(Lasionycteris noctivagens)* and big free-tailed bat *(Nyctinomops macrotis),* an SSC, found in the adjacent open space less than a half-mile southeast of the Project site.

**Specific impact:** The removal or trimming of suitable roost trees on the project site during project construction may result in direct impacts to roosting bats. S 2-8

**Why impact would occur:** Project-related tree clearing could lead to direct and indirect effects of loss of roosting habitat, foraging habitat, loss of breeding habitat, direct mortality, and navigational disruptions during migration. S 2-9

**Evidence impacts would be significant:** Project impacts may result in substantial adverse effects, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or U.S. Fish and Wildlife Service. Adverse impacts to bats may occur because the measures provided do not condition the Project to implement take avoidance surveys prior to operations, including, but not limited to, ground and vegetation disturbing activities. Take of special status bat species could require a mandatory finding of significance by the Lead Agency (CEQA Guidelines,§ 15065). In addition, bats are considered non-game mammals and are afforded protection by state law from take and/or harassment (Fish and Game Code § 4150, Cal. Code Regs, tit. 14, § 251.1). S 2-10

**Recommended and Potentially Feasible Mitigation Measure(s):**

**Recommendation:** The CEQA document should provide a thorough discussion of potential impacts to bats from construction and operation of the Project to adequately disclose potential impacts and to identify appropriate avoidance and mitigation measures. S 2-11

**Mitigation Measure #1:** Measures to mitigate for impacts to bats should include pre-construction surveys to detect species, use of bat roost installations, and preparation of a bat protection and relocation plan to be submitted to CDFW for approval prior to commencement of project activities.

**Mitigation Measure #2:** CDFW recommends the Project avoid removal of trees that may be used by bats or avoid buildings or other occupied habitat for any species of bat. If bats cannot be avoided by Project activities and a bat specialist determines that roosting bats may be present at any time of year, it is preferable to push any tree down using heavy machinery rather than felling the tree with a chainsaw. To ensure the optimum warning for any roosting bats that may still be present, the tree should be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree should then be pushed to the ground slowly. The bat specialist should determine the optimal time to disturb occupied bat habitat to maximize bats escaping during low light levels. Downed trees should remain in place until they are inspected by a bat specialist. Trees that are known to be bat roosts should not be sawn-up or mulched immediately. A period of at least 24 hours (preferably 48 hours) should elapse prior to such operations to allow bats to escape. Bats should be allowed to escape prior to demolition of buildings. This may be accomplished by placing one-way exclusionary devices into areas where bats are entering a building that allow bats to exit but not enter the building. In addition, CDFW recommends that the Project include measures to ensure that bat habitat remains available for evicted bats or loss of bat habitat resulting from the Project, including information on the availability of other potential roosts that could be used by bats within protected open space on or near the project site. S 2-12

**Comment #4: Impacts to Vegetation**

1. Revegetation/Restoration Plan: Plans for restoration and re-vegetation should be prepared by persons with expertise in southern California ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and U) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought. S 2-13

    a. CDFW recommends that local on-site propagules from the Project area and nearby vicinity be collected and used for restoration purposes. On-site seed collection should be initiated in the near future to accumulate sufficient propagule material for subsequent use in future years. On-site vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various Project components as appropriate. S 2-14

    b. The following best management practices "identify key steps that State Departments of Transportation (DOTs) can take to improve the quality of roadside habitat for pollinators including: 1) adjusting roadside vegetation management techniques to accommodate pollinator resource needs, and 2) enhance and restoring native roadside vegetation to include plant materials that improve pollinator habitat." (Hopwood et al. 2015). S 2-15

    c. Restoration objectives should include providing special habitat elements where feasible to benefit key wildlife species. These physical and biological features can include (for example) retention of woody material, logs, snags, rocks and brush piles (Mayer and Laudenslayer, 1988). S 2-16

**Comment #4: Cable Stay Bridge Alternative (Impact to Birds)**

The new Shoemaker Bridge includes an Alternative for a cable-stayed (single pylon) bridge. Exact specifications of the bridge were not given in the DEIR, but a cable stayed bridge does not seem appropriate in this area due to the large number of shorebirds in the vicinity of this section of the Los Angeles River that is a significant migration and stop over habitat for large numbers of avian species . S 2-17

**Evidence impacts would be significant:** The Southern Pacific Shorebird Conservation Plan (see https://www.shorebridplan.org/wp-content/uploads/2013/01/SoPacificRev04.pdf, page #116) mentions the fact that the corridor typically holds 14,000 + shorebirds per day during the peak of shorebird migration (mid-August to mid-September) with a maximum of 17,000 in the fall. The S 2-18

cables can be a major source of bird mortality and this type of bridge could endanger the shorebirds and their migration route. If this Alternative is chosen, the cable-stayed bridge would require additional studies, analysis, and monitoring to determine measures to minimize mortality to avian species during the design phase, and implement monitoring to document impacts post construction. S 2-18

**Recommended and Potentially Feasible Mitigation Measure(s):** S 2-19

**Mitigation Measure #1:** To mitigate for significant impacts to avian species, the DEIR should propose compensatory mitigation for the significant impacts to avian species as a result of the project.

**Filing Fees**

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & Game Code, § 711.4; Pub. Resources Code,§ 21089). S 2-20

**CONCLUSION**

CDFW appreciates the opportunity to comment on the DEIR for the Shoemaker Bridge Replacement Project. If you have any questions or comments regarding this letter, please contact Steve Slack, Environmental Scientist (Specialist), at (562) 342-2103 or by email at Steven.Slack@wildlife.ca.gov. S 2-21

Sincerely,

Erinn Wilson
Environmental Program Manager I

ec: CDFW
Victoria Tang - Los Alamitos
Andrew Valand - Los Alamitos
Kelly Schmoker - Glendora
Audrey Kelly - Los Alamitos
Dolores Duarte - San Diego

Scott Morgan (State Clearinghouse)

REFERENCES

California Department of Fish and Wildlife [CDFW]. November 24, 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (see http://www.dfg.ca.gov/habcon/plant/).

Cowardin, Lewis M., et al. 1970. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service.

Hickey, C., W.D. Shuford, G.W. Page, and S. Warnock. 2003. Version 1.1. The Southern Pacific Shorebird Conservation Plan: A strategy for supporting California's Central Valley and coastal shorebird populations. PRBO Conservation Science, Stinson Beach, CA. (see https://www.shorebirdplan.org/wp-content/uploads/2013/01/SoPacificRev04.pdf, page #116)

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Mayer, K. E. and W. F. Laudenslayer, Jr. 1988. Editors: A guide to wildlife habitats of California. State of California, The Resources Agency, Department of Forestry and Fire Protection, Sacramento, CA.

Sawyer, J. 0 ., Keeler-Wolf, T., and Evens J.M. 2008. A manual of California Vegetation, 2nd ed. ISBN 978-0-943460-49-9.

### K.1.2.2 S 2. California Department of Fish and Wildlife

**S 2-1**

The comment is an introduction from the California Department of Fish and Wildlife. The comment does not directly relate to specifics within the Draft EIR/EA and no further response is required. The comment has been documented as part of the public record.

**S 2-2**

The comment recommends that the measures or revisions suggested in CDFW's comments on the Draft EIR/EA be included in a science-based monitoring program containing adaptive management strategies as part of the CEQA mitigation, monitoring, and reporting program for the Project. Section 2.16, Natural Communities in the EIR/EA includes avoidance minimization, and/or mitigation measures in subsection 2.16.4. Specifically, Measure NC-4, which requires that a Habitat Mitigation and Monitoring Plan (HMMP) be developed in coordination with CDFW and would comply with all terms and conditions set forth in the permit and opinions issued by the CDFW. The HMMP would include science-based monitoring with adaptive management strategies.

**S 2-3**

The comment recommends that a California Fish and Game Code Section 1602 Lake or Streambed Alteration Agreement (Agreement) be obtained from CDFW for the Project, that the EIR/EA identify project impacts to the Los Angeles River (stream) or riparian resources, and that the EIR/EA provide measures and commitments for issuance of the Agreement. Section 2.17, Wetlands in the EIR/EA, specifically subsection 2.17.3.3, Agency Coordination states that a Streambed Alteration Notification from CDFW is expected to be required for the Project and that a Streambed Alteration Agreement from CDFW will be obtained. Table 4-2 of the EIR/EA states that an Agreement (i.e. permit) would be obtained after certification of the environmental document and prior to construction of the Project. Section 2.17, Wetlands of the EIR/EA identifies impacts to the Los Angeles River; which, as described in subsection 2.17.2, is the only drainage feature located in the Project limits. Subsection 2.17.4 explains that the Measures NC-1 through NC-5 provided in Section 2.16, Natural Communities and referenced again in in Section 2.17, Wetlands and Other Waters identify appropriate maintenance and monitoring procedures would be discussed and agreed upon with the resource agencies via the permit process.

**S 2-4**

The comment recommends a Jurisdictional Delineation (JD) of aquatic and riparian resources be conducted within the project limits and that the results be reported in the EIR/EA. The results of the JD conducted in support of the Project are provided in Section 2.17, Wetlands and Other Waters in the EIR/EA. The areas under CDFW jurisdiction, as shown in Figure 2.17-1, extends outside of the United States Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) jurisdiction to the top of the banks of the Los Angeles River. Subsection 2.17.2.2 explains that there is no riparian or wetland habitat that extends beyond the banks of the river within the Project limits and that the river banks were used to determine the limits of CDFW jurisdiction.

**S 2-5**

The comment recommends effective setbacks to be established adjacent to adjoining ephemeral drainages. As identified in Section 2.17, Wetlands and Other Waters in the EIR/EA (specifically in subsection 2.17.2) the Los Angeles River is the only drainage feature located in the Project limits

and it is a perennial stream with tidal influence that is classified as a Traditional Navigable Water (TNW). Therefore, there are no ephemeral drainages within the Project limits.

**S 2-6**

The comment recommends that the EIR/EA include and evaluate project-related changes in drainage patterns, runoff, and sedimentation. Sections 2.8 Hydrology and Floodplains and 2.9 Water Quality and Storm Water Runoff evaluate Project-related changes in drainage patterns, runoff, and sedimentation. Subsections 2.8.3 and 2.9.3 list project features, which include Best Management Practices (BMPs), and subsections 2.8.4 and 2.9.4 refer to avoidance and minimization measures to address Project impacts on water quality.

**S 2-7**

The comment recommends adding silver-haired bat and big free-tailed bat to the list of special-status species analyzed in the EIR/EA. Big free-tailed bat is included Table 2.19-1 of the EIR/EA, because it is a species of special concern (SSC). The silver-haired bat, however, was not included in Table 2.19-1 because it is not a state- or federally-listed species and is not an SSC. The last California Natural Diversity Database (CNDDB) record of silver-haired bat occurrence in Long Beach is from November of 1986. Although the species has a low potential to occur in the project area, it may roost and forage, though not breed, in the project area. Since the western mastiff bat may also roost in trees, the general habitat description for western mastiff bat in Table 2.19-1 has been modified to reflect additional roosting habitat for the species. Additionally, Measures AN-1 through AN-3 in Section 2.19, Animal Species (subsection 2.19.4), have been modified to include tree-roosting bat protections, which would protect both western mastiff bat and silver-haired bat should they roost in any trees affected by the Project. Modifications to EIR/EA Measures AN-1 through AN-3 do not change the conclusions or adequacy of analysis contained in the Draft EIR/EA.

**S 2-8**

The comment states that tree removal or trimming may result in direct impacts to tree-roosting bats. Although the potential for tree-roosting bats to be present in the project area is low. Measures AN-1 through AN-3 in Section 2.19, Animal Species (subsection 2.19.4) in the EIR/EA, have been modified to minimize the potential for direct impacts to tree-roosting bats. Modifications to Measures AN-1 through AN-3 do not change the conclusions or adequacy of analysis contained in the Draft EIR/EA.

**S 2-9**

The comment states that tree clearing may result in impacts to tree-roosting bats. Although the potential for tree-roosting bats to be present in the Project area is low, Measures AN-1 through AN-3 in Section 2.19, Animal Species (subsection 2.19.4) of the EIR/EA, have been modified to minimize the potential for impacts to tree-roosting bats, as detailed in the response to Comment S 2-8. Modifications to Measures AN-1 through AN-3 do not change the conclusions or adequacy of analysis contained in the Draft EIR/EA.

**S 2-10**

The comment states that ground and vegetation disturbing activities may result in impacts to bats, which may require a mandatory finding of significance by the Lead Agency according to CEQA guidelines. The comment also notes that bats are afforded protections under Fish and Game Code. Although the potential for tree-roosting bats to be present in the project area is low, Measures AN-1

through AN-3 in Section 2.19, Animal Species (subsection 2.19.4) of the EIR/EA, have been modified to minimize the potential for impacts to tree-roosting bats, as detailed in the response to comment S 2-8.

Modifications to Draft EIR/EA Measures AN-1 through AN-3 do not change the conclusions or adequacy of analysis contained in the Draft EIR/EA.

**S 2-11**

The comment recommends that the CEQA document discuss potential impacts to bats and identify appropriate avoidance and mitigation measures for bats. As described in the response to comment S 2-8, Section 2.19, Animal Species, Measures AN-1 through AN-3 in subsection 2.19.4 have been modified to include measures for tree-roosting bat species. Modifications to Draft EIR/EA Measures AN-1 through AN-3 do not change the conclusions or adequacy of analysis contained in the Draft EIR/EA.

**S 2-12**

The comment recommends additional mitigation measures for bats, including a bat protection and relocation plan to be submitted to CDFW and methods for tree removal to minimize impacts on tree-roosting bats. Although the potential for tree-roosting bats to be present in the project area is low, Measures AN-1 through AN-3 in Section 2.19, Animal Species (subsection 2.19.4) have been modified to minimize the potential for impacts to tree-roosting bats, as detailed in the response to Comment S 2-8. Modifications to Measures AN-1 through AN-3 do not change the conclusions or adequacy of analysis contained in the Draft EIR/EA.

**S 2-13**

The comment recommends that a Revegetation/Restoration Plan (Plan) be prepared by a person familiar with local ecosystems and native plant restoration techniques and the comment provides a list of items that the Plan should include. Section 2.16, Natural Communities of the EIR/EA includes Measure NC-4, which states that a HMMP will be developed in coordination with CDFW and will comply with all terms and conditions set forth in the permit and opinions issued by the CDFW. The specific items listed in this comment will be incorporated in the HMMP, where/if appropriate.

**S 2-14**

The comment recommends using locally-sourced/on-site seeds and vegetation in habitat restoration for the Project. Please refer to response to Comment S 2-13, above.

**S 2-15**

The comment recommends improving roadside habitat for pollinators. Please refer to response to Comment S 2-13, above.

**S 2-16**

The comment recommends including habitat elements in restoration efforts to benefit key wildlife species. Please refer to response to Comment S 2-13, above.

**S 2-17**

The comment suggests that a cable-stayed bridge may have an effect on migrating birds. Specifications for a cable-stayed bridge design have not been determined at this point in the Project planning process, as it is only the Project Approval/Environmental phase. Bridge type selection,

which would include specifications for a specific bridge design would occur during the PS&E phase. Should a cable-stayed bridge type be selected during the PS&E phase, additional environmental studies to analyze the potential effects on migratory birds would be conducted, and formal consultation between with USFWS would be initiated by Caltrans and the City.

**S 2-18**

The comment provides information regarding shorebird migration through the Project area and suggests that a cable-stayed bridge would require additional studies to analyze potential effects on migratory shorebirds. Should a cable-stayed bridge type be selected during the PS&E phase, additional studies to analyze the potential effects on migratory shorebirds would be conducted.

**S 2-19**

The comment recommends compensatory mitigation for impacts to avian species. Section 2.20, Threatened and Endangered Species (subsections 2.20.3 and 2.20.4) of the EIR/EA, include project features as well as measures to avoid or minimize impacts on listed birds during and after construction. The measures were developed in coordination with USFWS and with implementation of these measures, the Project is not expected to result in temporary or permanent impacts on birds, including listed bird species. Therefore, compensatory mitigation is not proposed at this time.

**S 2-20**

The comment notes that a filing fee is necessary for impacts on fish and/or wildlife. A filing fee will be paid to CDFW upon filing of the Notice of Determination.

**S 2-21**

The comment is a closing statement from the CDFW. The comment does not directly relate to specifics within the Draft EIR/EA and no further response is required. The comment has been documented as part of the public record.

## K.1.3 Comments from Local Agencies

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L 1

**From:** Truong, Cassie <TruongC@metro.net>
**Sent:** Friday, November 08, 2019 10:45 AM
**To:** info@shoemakerprojectlb.com
**Subject:** DevReview: Shoemaker Bridge Replacement Project

Greetings,

Thank you for the opportunity to comment on the Shoemaker Bridge Replacement Project located in the City of Long Beach. Attached are Metro's comments. Please kindly reply to confirm receipt.

Please contact Shine Ling at 213.922.2671 or lings@metro.net if you have any questions.

L 1-1

Best,

**Cassie Truong**
LA Metro
Transportation Associate I
Transit Oriented Communities
213.418.3489
metro.net | facebook.com/losangelesmetro | @metrolosangeles
**Metro's mission is to provide world-class transportation for all.**

Los Angeles County
Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

213.922.2000 Tel
metro.net

Metro

November 12, 2019

Kelly Ewing-Toledo
Caltrans District 7, Division of Environmental Planning
100 South Main Street, MS-16A
Los Angeles, CA 90012
Sent by Email: info@shoemakerprojectlb.com

RE: Shoemaker Bridge Replacement Project – Draft Environmental Impact Report (DEIR)
SCH#: 2016041007

Dear Ms. Toledo:

Thank you for coordinating with the Los Angeles County Metropolitan Transportation Authority (Metro) regarding the proposed Shoemaker Bridge Replacement Project (Project) located in the City of Long Beach (City). Metro is committed to working with local municipalities, developers, and other stakeholders across Los Angeles County on transit-supportive developments to grow ridership, reduce driving, and promote walkable neighborhoods. Transit Oriented Communities (TOCs) are places (such as corridors or neighborhoods) that, by their design, allow people to drive less and access transit more. TOCs maximize equitable access to a multi-modal transit network as a key organizing principle of land use planning and holistic community development.

The purpose of this letter is to outline recommendations from Metro concerning issues that are germane to our agency's statutory responsibility in relation to the Metro Blue Line and bus facilities and services, which may be affected by the proposed Project. In addition to the specific comments outlined below, Metro would like to provide the Project Sponsor with two resources: 1) the Metro Adjacent Development Handbook (attached), which provides an overview of common concerns for development adjacent to Metro-owned right-of-way (ROW) and 2) the Adjacent Construction Manual with technical information (also attached). These documents and additional resources are available at www.metro.net/projects/devreview/.

Project Description
The Project is adjacent to Metro bus and rail services and includes the reconstruction of the Shoemaker Bridge and also provide improvements along associated roadway connectors to downtown Long Beach, West Shoreline Drive from I-710, and portions of 3rd, 6th, and 7th Streets, and West Broadway from Cesar E. Chavez Park to Magnolia Avenue. The proposed improvements may include additional street lighting, restriping, turn lanes, bicycle, pedestrian, and streetscape improvements. The Project is needed to improve safety,

operations, and connectivity between downtown Long Beach and regional transportation facilities.

Comments

*Bus Service Adjacency*

1. Service: Metro Bus Line 232 operates on Anaheim Street, adjacent to the Project. Other transit operators may provide service in this area and should be consulted. L 1-2
2. Impact Analysis: With an anticipated increase in traffic during and after construction, Metro encourages any impact analysis to include potential effects on the Metro Bus Line. Potential impacts could include construction traffic, operation of and shipment/deliveries to the completed Project, and temporary or permanent bus service rerouting. L 1-3
3. Bus Operations Contacts: Please contact Metro Bus Operations Control Special Events Coordinator at 213-922-4632 and Metro's Stops and Zones Department at 213-922-5190 with any questions and at least 30 days in advance of initiating construction activities. Other municipal bus services may also be impacted and should be included in construction outreach efforts. L 1-4

*Light Rail Adjacency*

1. Rail Operations: The Metro Blue Line currently operates weekday peak service as often as every six minutes in both directions. Trains may operate in and out of revenue service, 24 hours a day, seven days a week, in the ROW adjacent to the Project. L 1-5
2. At-Grade Crossings: There are five at-grade rail crossings in close proximity to the Project at the following intersections:
    1. Pacific Avenue and 6th Street;
    2. Pacific Avenue and 7th Street;
    3. Long Beach Boulevard and 7th Street;
    4. Long Beach Boulevard and 6th Street; and
    5. Long Beach Boulevard and Anaheim Street.

    The Project is likely to increase traffic volumes across these at-grade crossings, which could potentially impact the safety of the crossings. As such, these traffic and safety impacts should be analyzed. These rail crossings are regulated by the California Public Utilities Commission (CPUC) and maintained by Metro. CPUC may have additional comments and requirements regarding this Project and should be contacted in outreach efforts. L 1-6
3. Overhead Catenary System (OCS) Setback: Overhead catenary wires and support structures adjacent to the Project power Metro trains. It is imperative that the OCS is protected during and after construction. OCS wires should be treated like any high L 1-7

voltage electrical utility wires. Proper signage should be posted for equipment working around the OCS wires.

4. Technical Review: Metro needs to review engineering drawings and calculations, as well as construction plans and methods, including any crane placement and radius, to evaluate any impacts to Metro's structures in relationship to the proposed Project. Please refer to the Adjacent Construction Design Manual for more details regarding submitting drawings and calculations to Metro. Note that Metro requires an Engineering Review Fee for staff review time. L 1-8

5. Construction Safety: The construction of the proposed Project must not disrupt Metro operations, maintenance activities, or the structural and systems integrity of Metro's facilities. The Project Sponsor should notify Metro of any changes to construction that may impact the use of the ROW. Construction and/or excavation work in proximity to Metro ROW with potential to damage the tracks and related infrastructure may be subject to additional OSHA safety requirements. The Project Sponsor must work in close coordination with Metro to ensure that Station access, visibility, and structural integrity are not compromised by construction activities or permanent build conditions. Not less than one month before start of construction, Metro Real Estate, Construction Management and Safety will require a meeting with the Project Sponsor to coordinate all construction activities. Please contact Derek Hull, Principal Real Estate Officer, to set up a meeting at hulld@metro.net. L 1-9

6. Construction Monitoring: Metro staff shall be permitted to monitor construction activities to ascertain any impact to the ROW. The Project Sponsor should be advised that Metro may request reimbursement for costs incurred as a result of Project construction/operation issues that cause delay or harm to Metro service delivery or infrastructure. L 1-10

7. Track Allocation Process: For temporary or ongoing construction or maintenance activities within ten feet of the Overhead Catenary System, the Project Sponsor must go complete Metro's Track Allocation process and ROW Safety Training. Approval for single tracking or a power shutdown, while possible, is highly discouraged and must be obtained at least two months prior to the start of construction. Approval for special operations, including the use of a pile driver or any other equipment that could come in close proximity into close proximity to the OCS or support structures must be obtained at least one month prior to the start of construction. The Project Sponsor would bear all costs associated with any closures. Please contact Derek Hull, Principal Real Estate Officer, for additional information at hulld@metro.net. L 1-11

Transit Orientation
Considering the Project's proximity to the Anaheim and 5th Street Station, Metro would like to identify the potential synergies associated with connecting Downtown Long Beach to these stations: L 1-12

Shoemaker Bridge Replacement Project
DEIR/EA – Metro Comments
November 12, 2019

1. Transit Connections: Given the Project's proximity to the Anaheim and 5th Street Stations, the Project should consider and accommodate transfer activity between bus and bus, and bus and rail line that will occur along Anaheim, 6th, and 7th Streets. Metro recently completed the Metro Transfers Design Guide, a best practice document on transit improvements. This can be accessed online at https://www.metro.net/projects/systemwidedesign. L 1-13

2. Walkability: Metro strongly encourages the installation of wide sidewalks, pedestrian lighting, a continuous canopy of shade trees, enhanced crosswalks with ADA-compliant curb ramps, and other amenities along Anaheim, 6th, and 7th Streets to improve pedestrian safety and comfort to access the nearby bus stops and rail stations. L 1-14

3. Access: The Project should address first-last mile connections to transit, encouraging development that is transit accessible with bicycle and pedestrian-oriented street design connecting transportation with housing and employment centers. For reference, please view the First Last Mile Strategic Plan, authored by Metro and the Southern California Association of Governments (SCAG), available on-line at: http://media.metro.net/docs/sustainability_path_design_guidelines.pdf. L 1-15

4. Wayfinding: Any temporary or permanent wayfinding signage with content referencing Metro services or featuring the Metro brand and/or associated graphics (such as bus or rail pictograms) requires review and approval by Metro Art & Design. Please contact Lance Glover, Senior Manager for Signage and Environmental Graphic Design, at 213-922-2360 or GloverL@metro.net. L 1-16

If you have any questions regarding this response, please contact me by phone at 213-922-2671, by email at LingS@metro.net, or by mail at the following address:

Metro Development Review
One Gateway Plaza MS 99-22-1
Los Angeles, CA 90012-2952

Sincerely,

Shine Ling, AICP
Manager, Transit Oriented Communities

Attachments and links:
- Adjacent Construction Design Manual
- Adjacent Development Handbook: https://www.metro.net/projects/devreview/

Page 4 of 4

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### K.1.3.1 L 1. LA Metro

**L 1-1**

The comment is an introduction for the comment letter from LA Metro. The comment does not directly relate to specifics within the Draft EIR/EA; thus, no further response is required for this comment. The comment has been documented as part of the public record.

**L 1-2**

As discussed in Section 2.5, Traffic and Transportation of the EIR/EA, on average, the peak hour traffic volumes along Anaheim Street are forecasted to increase around 20 percent due to traffic redistribution from the closure of 9th and 10th Street connection to the existing Shoemaker Bridge. However, the roadway conditions are expected to operate at acceptable LOS E or better and all the six study intersections evaluated as part of the Traffic Operations Assessment Report (TOAR) along Anaheim Street are expected to operate at LOS D or better with the build-out of the Project. The bus service along Anaheim Street is not expected to be impacted by the Project.

If it is determined that any of the bus operations along Anaheim Street may be impacted during the construction during the PS&E phase, the associated impacts would be addressed in the Transportation Management Plan (TMP) required for the Project, as identified in PF-3. Service to existing bus operations will not be interrupted as a result of the Project.

**L 1-3**

The commenter encourages the discussion of potential impacts to the existing Metro Bus Line. The increase of the traffic volumes along some local streets within the downtown area are due to traffic shifting from the other local streets as a result of the street reconfiguration. The Project does cause some redistribution of traffic, but it is not anticipated to increase total volumes after the construction. As identified in Section 2.5, Traffic and Transportation of the EIR/EA, under the future build conditions, the majority of roadways are forecasted to operate at acceptable LOS E or better. The bus operations are taken into account in the roadway analysis and not expected to have significant impacts.

If it is determined that any of the bus operations along Anaheim Street may be impacted during the construction during the PS&E phase, the associated impacts would be addressed in the TMP required for the Project, as identified in PF-3.

The aforementioned traffic analysis has been incorporated to clarify that even with the redistribution of traffic flow, bus operations during Project operation would not be adversely impacted under future build conditions.

**L 1-4**

The commenter requests that Metro Bus Operations Control Special Event Coordinator be contacted prior to construction activities associated with the Project. Metro Bus Operations Control Special Events Coordinator, Metro’s Stops and Zones Department, and other associated bus services will be contacted and informed of potential construction activity during the PS&E phase of the Project. As identified in Section 2.5, Traffic and Transportation of the EIR/EA, PF-3 requires the preparation of a TMP which would include construction coordination with affected stakeholders prior to the start of construction activities.

**L 1-5**

The commenter provides information related to the LA Metro Blue Line that operates in the right-of-way (ROW) adjacent to the Project. This comment is informational in nature and does not provide input on the adequacy of the analysis contained in the Draft EIR/EA. This comment has been documented as part of the public record.

**L 1-6**

The commenter states that there are five at-grade crossings in close proximity to the Project that could be potentially impacted from an increase in traffic volumes. The commenter requests that these potential impacts be analyzed. As identified in Section 2.5, Traffic and Transportation of the EIR/EA, between Shoreline Drive and Atlantic Avenue, 7th Street will be reconfigured from westbound one-way to two-way traffic with two lanes in each direction. Increased traffic volumes along 7th Street are mainly due to the reconfiguration of local streets.

Correspondingly, 6th Street would be converted from eastbound one-way to two-way traffic between Golden Avenue and Atlantic Avenue. But the roadway segment of 6th Street from southbound West Shoreline Drive to Golden Avenue would not provide connectivity to West Shoreline Drive. Therefore, majority of the current West Shoreline Drive traffic volumes traveling along eastbound 6th Street are expected to be reduced dramatically and use eastbound 7th Street as an alternative route. The peak hour volumes along Anaheim Street are expected to increase less than 10 percent at Long Beach Boulevard with the implementation of the Project. Additionally, the increase of the traffic volumes along some local streets are due to traffic shifting from other local streets. The project is not expected to increase total traffic volumes.

The intersections at Pacific Avenue/7th Street and Pacific Avenue/6th Street are expected to operate at LOS D or better under future build conditions. With the railroad preemption signaling system and traveler's expectation of the train crossing, the Project is not expected to impact the safety of the crossings. During the PS&E phase, design improvements at these intersections and the presence of at-grade crossings will be taken into consideration and coordinated with LA Metro.

**L 1-7**

The commenter states that Project construction must not disrupt LA Metro's Overhead Catenary System (OCS) wires and support structures and that proper signage should be posted for equipment working around the OCS wires. As identified in Section 2.5, Traffic and Transportation of the EIR/EA, PF-3 requires the preparation of a TMP. As part of the TMP, the City would notify and coordinate with affected stakeholders in the area regarding major construction activities. In addition, as identified in Section 2.4, Utilities and Emergency Services, PF-1 requires the City to coordinate the movement of utility lines, pipes, and cables prior to the start of construction activities. The City will coordinate with the LA Metro Real Estate and Construction Management and Safety Department during the PS&E phase of the Project to ensure that LA Metro operations or LA Metro facilities are not affected by Project construction. The comment does not change the analysis or conclusions contained in the Draft EIR/EA and the comment has been documented as part of the public record.

**L 1-8**

The commenter states that LA Metro needs to review engineering drawings and calculations in addition to construction plans and methods for the Project. Caltrans and the City will coordinate with the LA Metro Real Estate and Construction Management and Safety Department during the PS&E phase of the Project to ensure that LA Metro operations or LA Metro facilities are not affected by

Project construction. The comment does not change the analysis or conclusions contained in the Draft EIR/EA and this comment has been documented as part of the public record.

**L 1-9**

The commenter states that Project construction must not disrupt LA Metro operations or facilities and that Metro should be notified of construction activities that may impact the use of Metro ROW. As identified in Section 2.5, Traffic and Transportation, PF-3 requires the preparation of a TMP. As part of the TMP, the City would notify and coordinate with affected stakeholders in the area regarding major construction activities. Caltrans and the City will coordinate with the LA Metro Real Estate and Construction Management and Safety Department during the PS&E phase of the Project to ensure that LA Metro operations or facilities are not affected by Project construction. The comment does not change the analysis or conclusions contained in the Draft EIR/EA and this comment has been documented as part of the public record.

**L 1-10**

The City will coordinate with LA Metro prior to the construction phase of the Project to allow LA Metro staff to observe construction activities within LA Metro ROW.

**L 1-11**

The Project Development Team (PDT) appreciates Metro's comment and does not anticipate single tracking or power shutdown at this time. This will be further evaluated during the PS&E phase. The City and Caltrans will continue coordination efforts with Metro during PS&E and construction.

**L 1-12**

The comment is an introduction from LA Metro stating that they would like to identify the potential synergies for comments L 1-13 through L 1-16. The PDT appreciates LA Metro's request for coordination. During the PS&E phase, the City and Caltrans will coordinate with LA Metro's Transit Department to identify potential synergies associated with connecting downtown Long Beach to LA Metro transit stations.

**L 1-13**

The commenter suggests that the Project consider transfer activity between bus and rail lines along Anaheim Street, 6th Street, and 7th Street. As identified in Chapter 1, Project Description of the EIR/EA, the purpose of the Project is to improve connectivity from the downtown Long Beach area to surrounding communities and adjacent recreational use areas, as well as improving safety and operations for all modes of transportation. During the PS&E phase, the PDT will evaluate elements suggested in the commenter that can be incorporated as a part of the Project to further improve connectivity for all modes of transportation.

**L 1-14**

Please see response L 1-13 above. The PDT acknowledges LA Metro's comment and will continue to evaluate design options as well as landscaping suggestions throughout the PS&E phase. Currently, as discussed in Chapter 1, Project Description, of the Draft EIR/EA, the improvements along Anaheim Street, 6th Street, and 7th Street is limited to restriping only. No improvements to sidewalks or curbs are anticipated at this time, as wide sidewalks and reconstruction of curb ramps would impact existing ROW and are not included as part of the Project.

**L 1-15**

The commenter states that the Project should address first-last mile connections to transit and to encourage development that is transit accessible to housing and employment centers. As discussed in Section 2.1, Land Use, Table 2.1-3 (Consistency with State, Regional, and Local Plans and Programs), the Project is consistent with the goals identified in the SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), the Los Angeles River Master Plan (LARMP), Long Beach Bicycle Master Plan 2040, City General Plan Land Use and Mobility Elements, as well as other applicable land use planning documents. Specifically, the Project would replace the existing Shoemaker Bridge and provide new bikeways that would connect residents and users within the Project limits to Drake Park, Cesar E. Chavez Park, and the Los Angeles River/Rio Hondo (LARIO) Trail. The Project is not a transportation improvement project and does encourage bicycle and pedestrian-oriented street design, where feasible.

**L 1-16**

The commenter states that any wayfinding signage with LA Metro content requires review and approval by LA Metro Art & Design. As identified in Section 2.5, Traffic and Transportation of the EIR/EA, PF-3 requires the preparation of a TMP. As part of the TMP, appropriate signage will be developed and displayed to direct both pedestrian, bicycle, and vehicular traffic to alternative routes. In the event that proposed signage referencing LA Metro services or featuring the LA Metro branding is required, Caltrans and the City will coordinate with the Metro Art & Design Department, as requested. The comment does not change the analysis or conclusions contained in the Draft EIR/EA and this comment has been documented as part of the public record.

SANITATION DISTRICTS OF LOS ANGELES COUNTY

*Converting Waste Into Resources*

**Robert C. Ferrante**
*Chief Engineer and General Manager*
1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
(562) 699-7411 • www.lacsd.org

November 12, 2019

Ref. DOC 5320401

L 2

Mr. Ron Kosinski, Deputy District Director
Division of Environmental Planning
Caltrans District 7
100 South Main Street, Suite 100
Los Angeles, CA 90012

Dear Mr. Kosinski:

**EIR/EA Response for the Shoemaker Bridge Replacement Project**

The Sanitation Districts of Los Angeles County (Districts) received a Draft Environmental Impact Report/Environmental Assessment (EIR/EA) for the subject project on September 30, 2019. The proposed project is located within the jurisdictional boundaries of District No. 3. Previous comments submitted by the Districts in correspondence dated April 26, 2016 (copy enclosed), to Ms. Traci Gleason of the City of Long Beach, still apply to the subject project with the following comments: L 2-1

1. Table S-1. Additional Project Features, *page S-26*, item PF-46 – To determine if a Districts' permit for Industrial Wastewater Discharge is required, the project contractor or engineer should contact the Districts' Industrial Waste Section at (562) 908-4288, extension 2900. If this permit is necessary, project developers will be required to forward copies of final plans and supporting information for the proposed project to the Districts for review and approval before beginning project construction. If an Industrial Wastewater Discharge Permit is required, the proposed project may be subject to connection fee charges, which will be determined by the Industrial Waste Section. L 2-2

2. 1.4.2.7 Utilities, page 1-31, first paragraph under Utilities – The information states "all other major utilities would be protected in place as part of the Project". As indicated in the enclosed copy, various Districts' facilities may be impacted, and the Districts should review project plans and specification that incorporate Districts' facilities. When project plans that incorporate the Districts' facilities have been prepared, please submit copies of the same to the Engineering Counter for our review and comment. L 2-3

All other information concerning Districts' facilities and sewerage service contained in the document is current. If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar
Enclosure
cc: A. Howard
R. Paracuelles

DOC 5389338.D03

Printed on Recycled Paper

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

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www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

April 26, 2016

Ref File No.: 3674510

Ms. Traci Gleason
City of Long Beach
333 West Ocean Boulevard, 9th Floor
Long Beach, CA 90802

Dear Ms. Gleason:

**Comment Letter for the Shoemaker Bridge Replacement Project**

The County Sanitation Districts of Los Angeles County (Districts) received a Notice of Preparation of a Draft Environmental Impact Report for the Shoemaker Bridge Replacement Project (proposed project) on April 4, 2016. The proposed project is located within the jurisdictional boundaries of District No. 3. We offer the following comments:

1. The proposed project may impact existing and/or proposed Districts' trunk sewers located within the proposed project limits. Existing and proposed Districts' trunk sewers are located directly under and/or cross directly beneath the proposed project limits. The Districts cannot issue a detailed response to or permit construction of the proposed project until project plans and specifications that incorporate Districts' sewer lines are submitted for review. In order to prepare these plans, you will need to submit a detailed map of the proposed project limits, when available, to the attention of Mr. Michael Tatalovich of the Districts' Sewer Design Section at the address shown above. The Districts will then provide you with the plans for all Districts' facilities that will be impacted by the proposed project. Then, when revised plans that incorporate the Districts' sewers have been prepared, please submit copies of the same for Districts' review and comment. L 2-4

2. The Districts maintain sewerage facilities within the project area that may be affected by the proposed project. Approval to construct improvements within a Districts' sewer easement and/or over or near a Districts' sewer is required before construction may begin. For a copy of the Districts' buildover procedures and requirements go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and click on the Buildover Procedures and Requirements link. For more specific information regarding the buildover procedure, please contact Mr. Ed Stewart at (562) 908-4288, extension 2766. L 2-5

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

DOC: #3707855.D03

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### K.1.3.2 L 2. County Sanitation Districts of Los Angeles County

**L 2-1**

The comment is an introduction from the Sanitation Districts of Los Angeles County and states that the Project is located within Sanitation District No. 3. The commenter also states that additional comments were submitted to the City previously. The comment does not directly relate to specifics within the Draft EIR/EA and no further response is required. The comment has been documented as part of the public record.

**L 2-2**

The commenter states that an Industrial Wastewater Discharge Permit may be required for the Project and for final plans to be submitted to the Districts' Industrial Waste Section for review. Caltrans and the City will coordinate with the Sanitation Districts of Los Angeles County during the PS&E phase of the project to determine if an Industrial Wastewater Discharge Permit is required. The comment does not change the analysis or conclusions contained in the Draft EIR/EA and has been documented as part of the public record.

**L 2-3**

The commenter states that Project implementation may impact Districts' facilities and that the Districts should review project plans prior to construction. As identified in Draft EIR/EA Section 2.5 Traffic and Transportation, PF-3 requires the preparation of a Transportation Management Plan (TMP). As part of the TMP, the City would notify and coordinate with affected stakeholders in the area regarding major construction activities. Caltrans and the City will coordinate with the Sanitation Districts of Los Angeles County during the PS&E phase of the project to ensure that Districts' operations or facilities are not affected by Project construction. The comment does not change the analysis or conclusions contained in the Draft EIR/EA and has been documented as part of the public record.

**L 2-4**

The comment is identified as part of the comments originally submitted as part of the Notice of Preparation period for the Project. The commenter states that there are existing and proposed Districts' trunk sewers located directly under and/or cross directly beneath the proposed Project limits. The commenter states that project plans and specifications need to be submitted to the Districts' Sewer Design Section for review and comment. As identified in Draft EIR/EA Section 2.5 Traffic and Transportation, PF-3 requires the preparation of a Transportation Management Plan (TMP). As part of the TMP, the City would notify and coordinate with affected stakeholders in the area regarding major construction activities. Caltrans and the City will coordinate with the Sanitation Districts of Los Angeles County during the PS&E phase of the project to ensure that Districts' operations or facilities are not affected by Project construction. The comment does not change the analysis or conclusions contained in the Draft EIR/EA and has been documented as part of the public record.

**L 2-5**

The commenter states approval to construct improvements within a District's sewer easement and/or over or near a Districts' sewer facilities is required before construction activities commence. The comment provides a link to a website containing the Sanitation Districts of Los Angeles County's Buildover Procedures and Requirements. Caltrans and the City will coordinate with the Sanitation

Districts of Los Angeles County during the PS&E phase of the project to determine the extent of the Districts' sewer easement in relation to the project and associated approvals needed to construct the project. The comment does not change the analysis or conclusions contained in the Draft EIR/EA and has been documented as part of the public record.

## K.1.4 Comments from the Public (Public Comments)

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**PC 1**

**From:** Harold Hartwell
**To:** info@shoemakerprojectlb.com
**Subject:** Bridge
**Date:** Wednesday, October 02, 2019 3:22:28 PM

Why replace a bridge that has nothing wrong with it while streets around the city are falling apart. Some streets sound like one is driving on cobblestone.
Many streets between Cedar and Chestnut flood when it rains. Some curbs are higher than car doors.
Fox what's already there. Don't build anything else. Enough condominiums are being built.
Provide free public parking.
Thank you, Harold Hartwell

PC 1-1

### K.1.4.1 PC 1. Harold Hartwell

**PC 1-1**

The commenter's response has been documented as a part of the public record and decision making process. As stated in Section 1.2.2, Need for the Project, the existing Shoemaker Bridge is structurally deficient, has non-standard geometric features, and cannot be upgraded to meet current state highway standards. Under the Build Alternatives (Design Options A and B), the Project will also provide improvements along associated roadway connectors to downtown Long Beach, West Shoreline Drive from SR-710, and portions of 3rd Street, 6th Street, 7th Street, and West Broadway from Cesar E. Chavez Park to Magnolia Avenue. Local roadway improvements as a part of the Project are discussed further in Section 1.4.2.1, Local Streets of the EIR/EA.

## Shoemaker Bridge Replacement Project EIR comments

PC 2

cherylperry351@gmail.com

Sun 11/3/2019 2:02 PM

**To:** Shoemaker Project <info@shoemakerprojectlb.com>

Moving Shoreline Drive in order to access the area of Chavez Park that is currently inaccessible is something the community has desired for years and very much supports. PC 2-1

Exiting the 710 at 7th Street could impact the drop-off area at Edison Elementary School. Hopefully the School District will be consulted soon – before any changes to the school are made regarding single point of entry.

Perhaps drop-off and entry could be moved to 6th Street if it becomes a cul-de-sac as a result of the new bridge project. PC 2-2

Thank you.

Cheryl Perry
351 Magnolia Ave.
Long Beach, CA 90802
(562) 715-0804

### K.1.4.2 PC 2. Cheryl Perry

**PC 2-1**

The commenter's support for the Project due to additional accessible park space has been documented as part of the public record and considered in the decision making process.

**PC 2-2**

Coordination is ongoing with Long Beach Unified School District (LBUSD) and will continue throughout the PS&E phase addressing any potential access changes or student drop-off locations. The PDT appreciates the commenter's suggestion for drop-off and entry locations. The PDT will take these into consideration when coordinating with the LBUSD through the PS&E phase.

## K.1.5 Comments from Comment Cards

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**CC 1**

CITY OF LONG BEACH

**SHOEMAKER BRIDGE REPLACEMENT PROJECT**

Caltrans

**DATE/*FECHA*:**

## SPEAKER CARD/*TARJETA DEL PRESENTADOR*

Name/*Nombre*: TRISH STACY

Street/*Calle*: 535 MAINE AVE

City, State, Zip:
*Ciudad, Estado, Código Postal*: 90802 LBC

Phone/*Teléfono*: _____ Email/*Correo Electrónico*: TRISTAH@hotmail.com

CC 1-1 Subject/*Asunto*: WE ARE VERY SUPPORTIVE OF THIS PROJECT. OPTION 2

**Purpose of the Card:**
- Provide proper spelling of speaker's name
- Contact information for follow-up

**Speaking Rules:**
- Speakers will be called upon by the name listed on their submitted speaker card in the order they are received
- Speaker will have 2 minutes to address the subject

***Propósito de la Tarjeta:***
- *Deletree correctamente el nombre del presentador*
- *Información de contacto para seguimiento*

***Reglas para el uso de la palabra:***
- *Los presentadores serán llamados por el nombre que hayan puesto en su tarjeta de presentador y en el orden en que se haya recibido*
- *El presentador tendrá 2 minutos para abordar el tema*

### K.1.5.1 CC 1. Trish Stacy

**CC 1-1**

The commenter's support and preference for Alternative 2 has been documented as part of the public record and considered in the decision making process. The PDT selected Alternative 3 (Design Option A) as the preferred alternative and design option. This discussion can be found in Section 1.6 of the Final ED. It is noted that the comment does not provide input on the adequacy of the information contained in the Draft EIR/EA.

## K.1.6 Comments from the Public Hearing

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as Jason had mentioned, those comments in the draft environmental document are responded to. There is a response to comments section of the environmental document.

So that's one opportunity, but tonight you have the opportunity to actually speak and have your comments recorded by a court reporter, as well.

So we have microphones for you if you're interested. If you're not, it's not a problem at all. We have a lot of really wonderful scientific experts for you tonight at each of the stations, so if you have any additional questions that you might have on any of the project features or the engineer or anything that has to do with the project, they're here to answer your questions.

So at this time what I would like to ask is is there anyone here who would like to speak or have a speaker card?

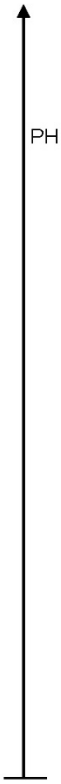
Okay. Just a minute. We need her to fill out a form. So we're going to ask you to just fill that out and just make sure -- or you can go ahead and speak, and we can get it later. That's fine.

PH 1

So I'm sorry. Forgive me. I just need to have you give your first and last name.

PH 1-1

MS. STACY: Trish Stacy.




MS. McCORMACK: Thanks, Trish.

MS. STACY: We live a few blocks from here, and we just wanted to voice our support of the project of option two --

MS. McCORMACK: Okay.

MS. STACY: -- of closing down that freeway exit that comes down onto 6th and Daisy.

We love the park idea. I think we are kind of sketchy about the roundabout. I think the light probably feels a little safer, but we love the park idea, close down that exit because all the toxins come right into our window. All the noise, all the toxins, it's pretty horrible.

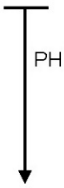
But we're very much in support of the project, so go team. Yay. Keep going.

MS. McCORMACK: Thank you. Yes, Trish, if you wouldn't mind just filling out the speaker card so we have your name for our records, that would be great. Thank you.

PH 2

Anyone else like to speak this evening?

Yes, sir.




MR. VILLA: My name is Ernie Villa.

MS. McCORMACK: Hi, Ernie.

MR. VILLA: I'm part of the Willmore City Heritage Association. We've been working with many people to get

### K.1.6.1 PH 1. Trish Stacey

**PH 1-1**

The commenter's support for the Project is noted and was considered in the selection of the preferred alternative by the PDT. The PDT selected Alternative 3 (Design Option A) as the preferred alternative and design option. This discussion can be found in Section 1.6 of the Final ED.

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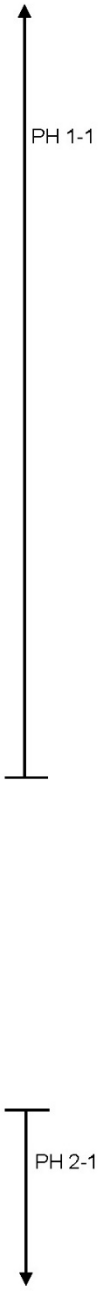


MS. McCORMACK: Thanks, Trish.

MS. STACY: We live a few blocks from here, and we just wanted to voice our support of the project of option two --

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MS. STACY: -- of closing down that freeway exit that comes down onto 6th and Daisy.

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But we're very much in support of the project, so go team. Yay. Keep going.

MS. McCORMACK: Thank you. Yes, Trish, if you wouldn't mind just filling out the speaker card so we have your name for our records, that would be great. Thank you.

PH 2 Anyone else like to speak this evening?

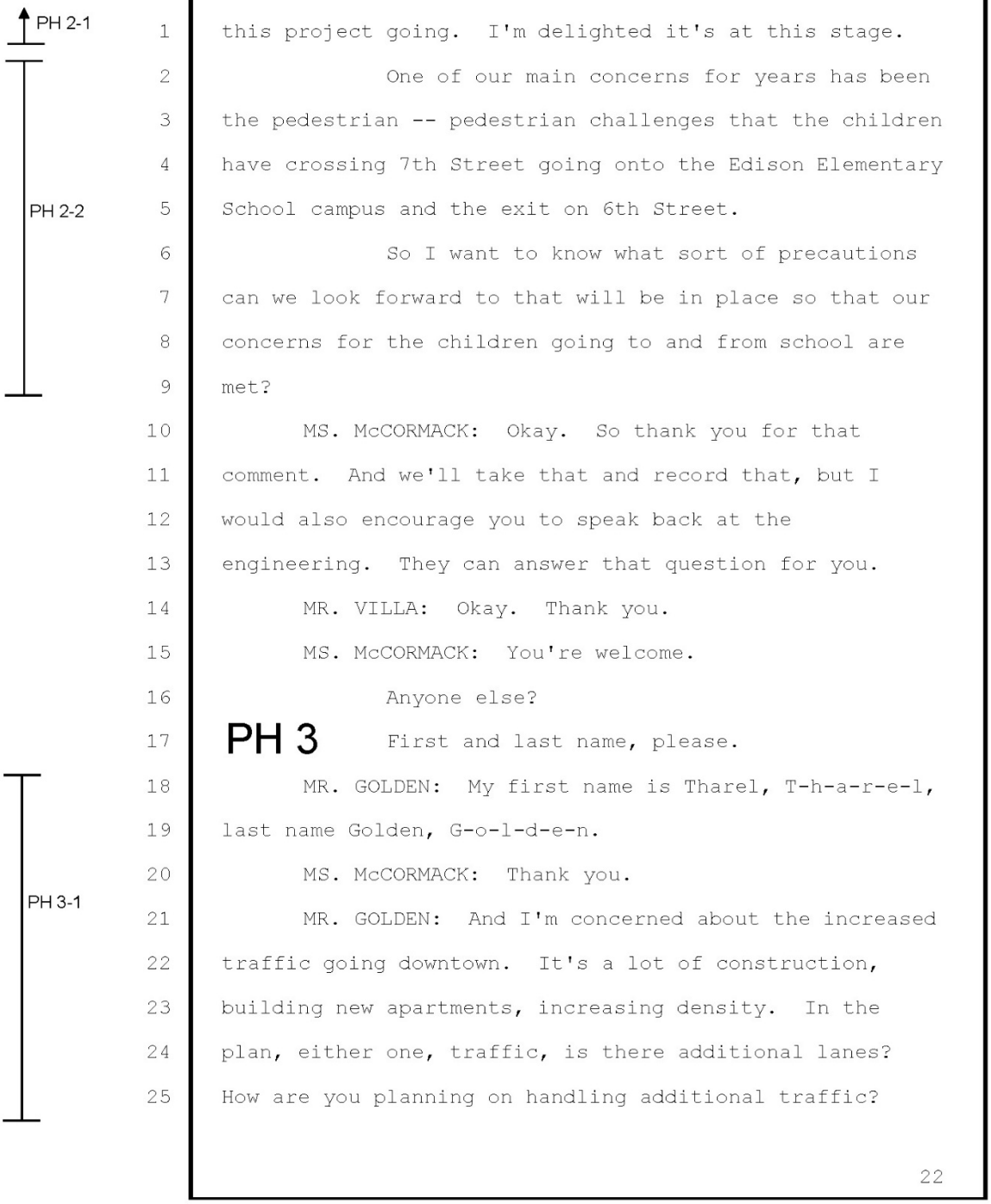
Yes, sir.




MR. VILLA: My name is Ernie Villa.

MS. McCORMACK: Hi, Ernie.

MR. VILLA: I'm part of the Willmore City Heritage Association. We've been working with many people to get




this project going. I'm delighted it's at this stage.

One of our main concerns for years has been the pedestrian -- pedestrian challenges that the children have crossing 7th Street going onto the Edison Elementary School campus and the exit on 6th Street.

So I want to know what sort of precautions can we look forward to that will be in place so that our concerns for the children going to and from school are met?

MS. McCORMACK: Okay. So thank you for that comment. And we'll take that and record that, but I would also encourage you to speak back at the engineering. They can answer that question for you.

MR. VILLA: Okay. Thank you.

MS. McCORMACK: You're welcome.

Anyone else?

First and last name, please.

MR. GOLDEN: My first name is Tharel, T-h-a-r-e-l, last name Golden, G-o-l-d-e-n.

MS. McCORMACK: Thank you.

MR. GOLDEN: And I'm concerned about the increased traffic going downtown. It's a lot of construction, building new apartments, increasing density. In the plan, either one, traffic, is there additional lanes? How are you planning on handling additional traffic?

PH 4-1

PH 2

PH 2-3

So we really -- all the residents can see all the different things that are happening here because all these things are really affecting each other. And I appreciate that.

MS. McCORMACK: Great. Thank you.

I do know, David, that -- I do know that there are City representatives here this evening, so we can make sure you have access to them.

MR. LECHER: Great. Thank you.

MS. McCORMACK: Yes, sir.

MR. VILLA: My name is Ernest Villa.

I'm starting to get a little frustrated because these are very pertinent questions that not just an individual wants to know.

MS. McCORMACK: Sure.

MR. VILLA: I think some of us would love to know the answers.

MS. McCORMACK: Okay.

MR. VILLA: Or possible conversations. Like my question about children, I'm sure I'm not the only one here that's concerned about the safety of the kids.

In regards to David, I would like to know what's going on. That's why I'm here.

MS. McCORMACK: Okay. So the format -- so here's one of the issues. First of all, I can't answer that

PH 2-3

because I'm not the engineer. So I would love to answer that for you, but I'm not in a position to do that.

But what we can do -- and the format for this is it's a draft environmental document release, so your comments are very, very important, and we want to make sure that your comments, if you write it down, actually goes in and it's responded to and it's open to all of the public for response.

So everybody gets to see it, and it all comes out in the document. So you won't be the only one. Everyone gets to see your question.

MR. VILLA: That's better.

MS. McCORMACK: And then we'll answer it in the formal portion of the document.

MR. VILLA: Okay.

MS. McCORMACK: But even in addition to that, tonight you can also get even more information tonight from the different stations.

MR. VILLA: And my question would be addressed to whom?

MS. McCORMACK: Over here in the project features. Right here, right behind you here.

MR. VILLA: Okay. All right.

MS. McCORMACK: Thank you.

MR. VILLA: Thank you.

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PANTERA COURT REPORTERS

### K.1.6.2 PH 2. Ernie Villa

**PH 2-1**

The commenter states that he is part of the Willmore City Heritage Association and that the association has been working with many people to move the Project forward. The commenter does not make a specific comment on the Draft EIR/EA, but this comment has been documented as a part of the public record.

**PH 2-2**

The commenter is concerned about pedestrian challenges associated with children crossing 7th Street and 6th Street to enter and exit the Edison Elementary School campus. As discussed in Chapter 4.0, Comments and Coordination, the PDT has coordinated with LBUSD throughout the preparation of the EIR/EA. Based on these coordination efforts, LBUSD representatives have expressed that the planned change in traffic circulation along 3rd Street, 6th Street, and 7th Street, as well as the proposed linkages within Cesar E. Chavez Park would be beneficial to the students. Ongoing coordination with LBUSD will occur throughout the PS&E phase with the emphasis of meeting the intended purpose and need of the Project identified in Chapter 1 of the EIR/EA, which is to improve safety for all modes of transportation, including pedestrians.

**PH 2-3**

The commenter's comment is noted and has been documented as a part of the public record. The purpose of the public hearing is to obtain comments from the public and respond formally as a part of the Final ED. Additionally, the public hearing allows for one-on-one discussion of questions or concerns; however, all comments are suggested to be formally submitted to they may receive an official response. The commenter's comment does not make a specific comment on the adequacy of the Draft EIR/EA, but this comment has been documented as part of the public record.

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this project going. I'm delighted it's at this stage.

One of our main concerns for years has been the pedestrian -- pedestrian challenges that the children have crossing 7th Street going onto the Edison Elementary School campus and the exit on 6th Street.

So I want to know what sort of precautions can we look forward to that will be in place so that our concerns for the children going to and from school are met?

MS. McCORMACK: Okay. So thank you for that comment. And we'll take that and record that, but I would also encourage you to speak back at the engineering. They can answer that question for you.

MR. VILLA: Okay. Thank you.

MS. McCORMACK: You're welcome.

Anyone else?

PH 3

First and last name, please.

MR. GOLDEN: My first name is Tharel, T-h-a-r-e-l, last name Golden, G-o-l-d-e-n.

MS. McCORMACK: Thank you.

MR. GOLDEN: And I'm concerned about the increased traffic going downtown. It's a lot of construction, building new apartments, increasing density. In the plan, either one, traffic, is there additional lanes? How are you planning on handling additional traffic?

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### K.1.6.3 PH 3. Tharel Golden

**PH 3-1**

As stated in Chapter 1 of the EIR/EA, the Project is not a capacity increasing project, nor will it induce vehicular traffic within the Project limits. Section 2.5, Traffic and Transportation, of the Draft EIR/EA, evaluates the projected future traffic under the Build Alternatives. Table 2.5-12 and 2.5-13 show the anticipated local roads improvements and operations under the Build Alternatives. Roadway conditions are expected to operate at acceptable LOS E or better and not adversely impact the local traffic within the Project limits.

PH 4

PH 4-1

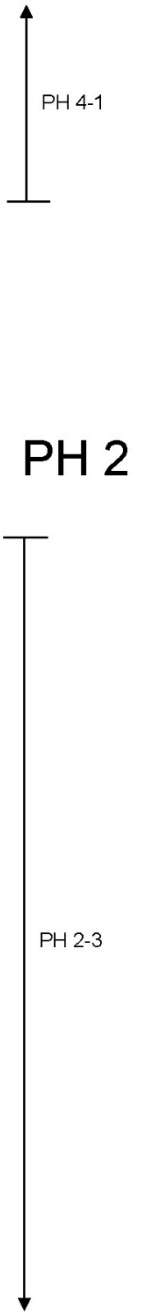
MS. McCORMACK: Great. Thank you for that question. We actually have someone here this evening who can answer that traffic question, and my recommendation is to just meet back at the engineering. He can answer your question for you.

Is there anyone else who would like to speak? Yes.

MR. LECHER: Good evening. My name is David Lecher, and just along with this project, there are several other projects that are happening all within the same area and that same map zone that you guys have blown up here.

It would be really great as residents, because I think maybe not everyone is -- they might not be knowledgeable all the projects that are happening, and these are kind of completely overlapping each other. They're all happening in the same time frame, and as a City of Long Beach resident, it would be great to have a place to see how all these projects are coming together.

I know that's not necessarily the responsibility of this tonight, but I assume that there's many people on this project that are working in unison with other people in the city to compile those in some kind of rendering similar to what we're seeing here tonight.




So we really -- all the residents can see all the different things that are happening here because all these things are really affecting each other. And I appreciate that.

MS. McCORMACK: Great. Thank you.

I do know, David, that -- I do know that there are City representatives here this evening, so we can make sure you have access to them.

MR. LECHER: Great. Thank you.

MS. McCORMACK: Yes, sir.

MR. VILLA: My name is Ernest Villa.

I'm starting to get a little frustrated because these are very pertinent questions that not just an individual wants to know.

MS. McCORMACK: Sure.

MR. VILLA: I think some of us would love to know the answers.

MS. McCORMACK: Okay.

MR. VILLA: Or possible conversations. Like my question about children, I'm sure I'm not the only one here that's concerned about the safety of the kids.

In regards to David, I would like to know what's going on. That's why I'm here.

MS. McCORMACK: Okay. So the format -- so here's one of the issues. First of all, I can't answer that

### K.1.6.4 PH 4. David Ledger

**PH 4-1**

The commenter's comment has been noted and included as a part of the public record. As documented in Section 2.23, Cumulative Impacts, the EIR/EA analyzes impacts to the environment from past, present and reasonably foreseeable future projects, as well as the impacts of the Shoemaker Bridge Project. Additionally, Figure 2.23-1 in Section 2.23, Cumulative Impacts, shows the current and foreseeable reasonable projects within 0.5 miles of the Project's project limits.

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PH 5

PH 5-1

PH 5-2

MS. McCORMACK: Absolutely.

Anybody else? Oh, here's a lady right here. Yes. And we do have a translator.

MS. HARO: My question is for 6th Street, could it be just a one-way street so that we could have more parking spaces available like we do here on 6th? Because they should have -- here at Cesar Chavez, as well as at Edison, is that we don't have enough parking spaces when we drop off our children.

Also here on this side of this street, we don't have a safe area so we can cross the street when we have the children. It's also very concerning because there is no safe space where we can cross -- a place where we can cross the street here in this street on this school, as well as the one in Edison. There's a space on 6th Street, but not on 7th Street.

MS. McCORMACK: Thank you. Muchas gracias.

Would you let her know that all of those comments need to be written down and they will be responded to because all of those questions are good questions. They just need to be written down. That's the best way to do it.

MS. HARO: My name is Erlinda Haro, H-a-r-o.

MS. McCORMACK: Thank you so much. That's great.

Anybody else? Well, thank you so much.

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### K.1.6.5 PH 5. Erlinda Haro

**PH 5-1**

The PDT appreciates the idea of keeping 6th Street a one-way street. The PDT will evaluate this suggested design suggestion during the PS&E phase. Coordination between City, Caltrans, and the LBUSD will continue throughout the PS&E phase to determine if additional project design improvements would be necessary to address pedestrian access and safety within the area.

**PH 5-2**

The commenter is concerned about pedestrian challenges associated with children crossing 7th Street and 6th Street. Please refer to response to Comment PH 2-2. The Project under the Build Alternatives would incorporate local street improvements which will provide improved pedestrian facilities, including cross-walks.

## K.1.7 Comments Not Applicable to the DED

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**N/A-1**

**From:** james hughes
**To:** info@shoemakerprojectlb.com
**Subject:** Project Status
**Date:** Wednesday, September 25, 2019 2:42:58 PM

Hi Folks,
I supply equipment for bridges and I would like to know the status of the Shoemaker Bridge Replacement project.
Thanks,
Jim

JH3 Heavy Civil Equipment LLC

Bridgebuilding and Underground Construction Gear

James H J Hughes III, PE
President
C: 201-259-6614
jhughes@JH3gear.com
95 West Main Street, Suite 5-151
Chester, NJ 07930

### K.1.7.1 N/A-1. James H J Hughes III

**N/A-1**

This comment was received prior to the release of the Draft EIR/EA for public review, which started on September 27, 2019. The commenter supplies equipment for bridges and requests information on the status of the Project. The comment does not directly relate to specifics within the Draft EIR/EA. As such, no further response has been provided, and this comment has been documented as a part of the public record.

**N/A-2**

**From:** Kaitlin Orr
**To:** info@shoemakerprojectlb.com; brian@lbpost.com
**Subject:** Article typo?
**Date:** Sunday, October 27, 2019 4:51:22 PM

Hey! I just wanted to let you know I think there is a typo in this article - the same sentence is repeated three times:

"It was an ambitious but doable project. Ulaszewski's project was ambitious but doable. This is ambitious but doable."

Interesting read - thanks for sharing!
--
Best,
Kaitlin Orr
@Carnivorr
Website
YouTube

### K.1.7.2 N/A-2. Kaitlin Orr

**N/A-2**

The commenter provides an observation on grammar contained in an opinion piece published in the Long Beach Post (October 24, 2019 - Opinion: Why turning the Shoemaker Bridge into park space is so important for West Long Beach, by: Brian Addison). The comment does not provide input on the adequacy of the Draft EIR/EA. As such, no further response has been provided, and this comment has been documented as a part of the public record.

# List of Technical Studies

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The technical studies prepared to support the analysis and conclusions in this EIR/EA are listed below. These studies have been bound separately. Hardcopies and electronic copies on USB were made available for public review from September 27, 2019, to November 12, 2019, at the following locations:

- Caltrans District 7, 100 South Main Street, Los Angeles, CA 90012
- City of Long Beach Public Works Department, 411 West Ocean Boulevard, Long Beach, CA 90802

Electronic copies of these technical studies were also made available on USB for public review from September 27, 2019, to November 12, 2019, at the following locations:

- City of Long Beach, Billie Jean King Main Library, 200 West Broadway, Long Beach, CA 90802
- City of Long Beach, Mark Twain Neighborhood Library, 1401 East Anaheim Street, Long Beach, CA 90813

*Air Quality Analysis Report.* Prepared by HDR Engineering, Inc. (August 2019)

*Biological Assessment.* Prepared by HDR Engineering, Inc. (September 2019)

*CEQA Historical Technical Memorandum.* Prepared by GPA Consulting (June 2017)

*Community Impact Assessment.* Prepared by HDR Engineering, Inc. (December 2019)

*Energy Analysis Technical Memorandum*. Prepared by HDR Engineering, Inc. (August 2019)

*Finding of No Adverse Effect With Standard Conditions.* Prepared by GPA Consulting (October 2019)

*Historic Property Survey Report.* Prepared by Duke CRM (June 2019)

*Historical Resource Evaluation Report.* Prepared by GPA Consulting (September 2018)

*Initial Site Assessment.* Prepared by Leighton Consulting (June 2018)

*Jurisdictional Delineation Report.* Prepared by HDR Engineering, Inc. (December 2018)

*Location Hydrologic Study.* Prepared by HDR Engineering, Inc. (August 2019)

*Natural Environmental Study.* Prepared by HDR Engineering, Inc. (September 2019)

*Noise Study Report.* Prepared by HDR Engineering, Inc. (June 2019)

*Paleontological Impact Report/Paleontological Evaluation Report.* Prepared by Duke CRM (April 2019)

*Relocation Impact Memorandum.* Shoemaker Bridge Replacement Project. Prepared by HDR Engineering, Inc. (September 2019)

*Traffic Operational Analysis Report.* Prepared by HDR Engineering, Inc. (August 2019)

*Visual Impact Assessment.* Prepared by HDR Engineering, Inc. (April 2018)

*Water Quality Assessment Report.* Prepared by GPA Consulting (April 2018)

# References

The following references were used in the preparation of this environmental document.

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# References

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——— 2018a. Highway Design Manual https://dot.ca.gov/-/media/dot-media/programs/design/documents/hdm-complete-14dec2018.pdf

——— 2018b. *Draft Project Report.* Shoemaker Bridge Replacement Project. Prepared by HDR Engineering, Inc.

——— 2018c. *Draft Community Impact Assessment Report.* Shoemaker Bridge Replacement Project.Prepared by HDR Engineering, Inc.

——— 2018d. *Relocation Impact Memorandum.* Shoemaker Bridge Replacement Project. Prepared by HDR Engineering, Inc.

——— 2018e. *Visual Impact Assessment.* Shoemaker Bridge Replacement Project. Prepared by HDR Engineering, Inc.

——— 2018f. *Historical Resource Evaluation Report.* Shoemaker Bridge Replacement Project. Prepared by GPA Consulting.

——— 2018h. *Location Hydrologic Study.* Shoemaker Bridge Replacement Project. Prepared by HDR Engineering, Inc.

——— 2018i. *Water Quality Assessment Report.* Shoemaker Bridge Replacement Project. Prepared by GPA Consulting.

——— 2018j. *Stormwater Data Report.* Shoemaker Bridge Replacement Project. Prepared by HDR Engineering, Inc.

——— 2018k. *Initial Site Assessment.* Shoemaker Bridge Replacement Project. Prepared by Leighton Consulting.

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