

California Department of Transportation

United States Department of
Transportation Federal Highway Administration

RECORD OF DECISION

FOR THE WEST SANTA ANA BRANCH TRANSIT CORRIDOR PROJECT AT VARIOUS
LOCATIONS IN LOS ANGELES COUNTY, CALIFORNIA

LOS ANGELES COUNTY, CALIFORNIA

CALIFORNIA DEPARTMENT OF TRANSPORTATION DISTRICT 7, LOS ANGELES,
CALIFORNIA PROJECT # 0719000138

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 the California Department of Transportation (Caltrans) under its assumption of responsibility pursuant to 23 United States Code (USC) 327.

This Record of Decision (ROD) was developed pursuant to Title 23 of the Code of Federal Regulations (CFR) Part 771 and Title 40 CFR Parts 1500–1508 for the West Santa Ana Branch (WSAB) Transit Corridor Project (Project) encroachment into Caltrans right-of-way (ROW), within Los Angeles County (LA County), California. The Project was renamed the Southeast Gateway Line on January 22, 2024. Although the Project was renamed, this ROD refers to WSAB for consistency with the nomenclature in the Final Environmental Impact Statement (EIS). The Federal Transit Administration (FTA) is the Lead Agency under the National Environmental Policy Act (NEPA), and the Los Angeles County Metropolitan Transportation Authority (Metro) served as the Lead Agency under the California Environmental Quality Act. Caltrans is a cooperating agency for the Project pursuant to NEPA. This ROD is solely for Caltrans approval of the Project's encroachment into Caltrans ROW and references the information in the ROD issued by FTA for the Project. It explains the reasons for the Project and summarizes avoidance, minimization, and mitigation measures based on information contained in the Final Environmental Impact Statement (EIS) prepared by the lead agency and applicable to Caltrans ROW.

The Final EIS for the Project was posted on the project website on March 28, 2024, and published in the Federal Register on March 29, 2024. FTA issued the ROD for the Project on August 23, 2024, as the lead agency.

A. Decision

This ROD reflects the final environmental determination and approval by Caltrans regarding the Project's encroachment into Caltrans ROW. Caltrans approval for the Project encroachment was approved after the following had occurred:

- Public review of the Draft and Final EIS
- Approval of the Project Study Report-Project Report (PSR-PR)
- Full consideration of the technical studies and environmental analysis, public comments, and agency input.

Caltrans considered the Purpose and Need of the Project, along with its environmental effects. This decision is based on the potential impacts identified in the Final EIS. The Project is a light-rail transit (LRT) line that will extend through southeast LA County between a northern terminus in the unincorporated area of Florence-Firestone to a southern terminus in the City of Artesia, traversing densely populated and heavily transit-dependent communities. The preferred alternative is a 14.5-mile alignment from the Slauson/A Line Station in the City of Los Angeles/Florence-Firestone unincorporated area of LA County to a southern terminus at the Pioneer Station in the City of Artesia. The Project will encroach onto Caltrans ROW at four freeways: Interstate (I) 605, State Route (SR) 91, and I-710 via an at-grade configuration, and I-105 via at an aerial configuration.

B. Purpose and Need

This section summarizes the Project's Purpose and Need as described in Chapter 1 of the Final EIS and in the PSR-PR.

Purpose

The Project's overall purpose is to provide high-quality reliable transit service to meet the future mobility needs of residents, employees, and visitors who travel within and through the corridor. This new transit service will increase mobility and connectivity for historically underserved and transit-dependent communities, improve travel times on local and regional transportation networks relative to not making this investment, and accommodate substantial future employment and population growth.

More specifically, the Project's purpose is as follows:

- Establish a reliable transit service that will enhance the connectivity of the existing transit network and reduce transit travel times to local and regional destinations.
- Accommodate future travel demand, including the high number of transit trips made by Study Area residents.
- Improve access for the densely populated neighborhoods, major employment centers, and other key regional destinations where future growth is forecasted to occur within the Study Area.

- Address mobility and access constraints faced by transit-dependent communities and environmental justice communities.

Need

Located in southeastern LA County, the Study Area is approximately 98 square miles and incorporates 20 individual cities—the Cities of Los Angeles, Vernon, Maywood, Huntington Park, Commerce, Bell, Cudahy, Bell Gardens, South Gate, Lynwood, Compton, Downey, Paramount, Bellflower, Long Beach, Lakewood, Norwalk, Artesia, Cerritos, and Hawaiian Gardens—as well as portions of unincorporated LA County.

The Study Area currently contains 1.4 million residents and 618,500 workers; however, projections show the Study Area population increasing to 1.6 million residents and 746,000 workers by 2042. Most of the Study Area is served by buses that operate primarily along a heavily congested freeway and arterial network. As population and employment within the Study Area are predicted to grow substantially over the next 20 years, the congestion of the roadway network is expected to worsen, resulting in further decreased reliability of transit service. Therefore, a more reliable and improved transit access to the area is needed, which would cross Caltrans' facilities at various locations.

C. Alternatives Considered

The Draft EIS considered a No Build Alternative and four Build Alternatives as follows:

- The No Build Alternative provides the background transportation network against which the Build Alternatives were evaluated under NEPA. The No Build Alternative reflects the reasonably foreseeable transportation network in 2042 excluding the Project while including the existing transportation network and planned transportation improvements that have been committed to and identified in the constrained Metro 2009 Long Range Transportation Plan and Southern California Association of Governments 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy, as well as additional projects funded by Measure M, a sales tax initiative approved by voters in November 2016.
- Alternative 1 was assessed as a 19.3-mile alignment with a northern terminus located underground at Los Angeles Union Station (LAUS) in the City of Los Angeles and a southern terminus located at the Pioneer Station in the City of Artesia. The alignment involved six freeway crossings at U.S. 101, I-10, I-710, I-105, SR-91, and I-605. Alternative 1 included two design options. Design Option 1 (LAUS – Metropolitan Water District) located an underground station east of the existing Metropolitan Water District building and below the LAUS passenger concourse. Design Option 2 (Addition of Little Tokyo Station) included an underground Little Tokyo Station between the LAUS and Arts/Industrial District Stations.
- Alternative 2 was assessed as a 19.3-mile alignment with a northern terminus at a new 7th Street/Metro Center Station, located underground at 8th Street between Figueroa Street and Flower Street near the existing 7th Street/Metro Center Station, and a southern

terminus located at the Pioneer Station in the City of Artesia. The alignment involved six freeway crossings at I-110, I-10, I-710, I-105, SR-91, and I-605.

- Alternative 3 was assessed as a 14.8-mile alignment¹ with a northern terminus at the Slauson/A Line Station in the City of Los Angeles/Florence-Firestone community of LA County and a southern terminus at the Pioneer Station in the City of Artesia. The alignment involved four freeway crossings at I-710, I-105, SR-91, and I-605.
- Alternative 4 was assessed as a 6.6-mile alignment with a northern terminus at the I-105/C Line Station in South Gate and a southern terminus at the Pioneer Station in the City of Artesia. The alignment involved three freeway crossings at I-105, SR-91, and I-605.

Each of the four Build Alternatives included consideration of two maintenance and storage facility (MSF) site options, the Paramount MSF site option and Bellflower MSF site option. The No Build Alternative and four Build Alternatives were evaluated with the following primary considerations in determining the Locally Preferred Alternative (LPA): effectiveness in meeting the Purpose and Need; environmental impacts and benefits; the financial capacity to construct, operate, and maintain the Project; and strategies to fund the Project.

In January 2022, the Metro Board of Directors (Board) identified the LPA as Alternative 3 after the Draft EIS/EIR circulation and the review of public and agency comments. The LPA advanced as part of the analysis in the Final EIS/EIR, which was published in the Federal Register on March 29, 2024.

LPA Description

Portions of the LPA in the Final EIS, referred to as Alternative 3 in the Draft EIS/EIR, within Caltrans ROW, are the subject of this ROD and is the NEPA preferred alternative. The LPA is a 14.5-mile alignment with a northern terminus at the Slauson/A Line Station in the City of Los Angeles/Florence-Firestone unincorporated area of LA County and a southern terminus at the Pioneer Station in the City of Artesia. The LPA consists of nine new stations (Slauson/A Line, Pacific/Randolph, Florence/Salt Lake, Firestone, Gardendale, I-105/C Line, Paramount/Rosecrans, Bellflower, and Pioneer Station) and a new infill station on the C Line. The alignment would involve four freeway crossings at I-710, I-105, SR-91, and I-605.

Within Caltrans ROW, the Project proposes to:

- Transect the I-710 freeway through a new box tunnel structure.
- Relocate the existing Union Pacific Railroad Century Boulevard Underpass (UP) and corresponding freight tracks to a new location approximately 26.5 feet to the west, construct a new LRT bridge, and build a new infill station platform along the existing Metro C Line within the median of the I-105. As part of the I-105 ExpressLanes Project,

¹ The length of Alternative 3 in the Draft EIS was incorrectly presented as 14.8 miles; the correct length is 14.5 miles.

the I-105 will be reconfigured to accommodate the new Metro C Line station platforms in the median. Approximately 2,500 feet of existing Metro C Line LRT track will be realigned to accommodate the infill station platform. The infill station will be accessed via stairs and/or escalators and elevators from a pedestrian walkway incorporated into the new LRT bridge structure on the eastern end. Stairs from Façade Avenue on the western end will provide emergency egress from the platform.

- Cross under the SR-91 freeway in the existing Bellflower Overhead.
- Cross under the I-605 freeway in the existing Dairy Valley Overhead toward Studebaker Road.

The primary focus of the Project is the construction of the LRT line. No permanent changes to the configuration and operation of the freeways at the four crossing locations are planned, with an exception at the I-105 freeway crossing, which will reduce the inside shoulder widths in both directions.

D. Section 4(f)

The Project will directly alter a small portion of the Century Freeway-Transitway Historic District and include the following actions: demolition and replacement of one character-defining bridge (the Century Boulevard UP), construction of a new LRT bridge over the freeway, construction of a new infill Metro C Line station and associated vertical circulation elements in the median of I-105 below the existing Façade Avenue Overcrossing, realignment of 2,500 feet of existing Metro C Line LRT track to accommodate the infill station platform, and minimal removal and replacement of landscaping. The Project will require temporary occupancy of the historic site for construction activities, including demolition and reconstruction of the Century Boulevard UP and realignment of a portion of the C Line. The Project will have no adverse effect on the historic district under Section 106. The State Historic Preservation Office concurred with the finding on March 12, 2024.

No other Section 4(f)-protected properties will be affected at or adjacent to the Caltrans facilities. A constructive use does not occur when compliance with the requirements of 36 CFR 800.5 (Assessment of adverse effects) for proximity impacts of the proposed action, on a site listed on or eligible for the National Register, results in an agreement of “no historic properties affected” or “no adverse effect” (23 CFR Section 774.15). Based on the Section 106 no adverse effect determination, FTA has found that the Project will have temporary and permanent *de minimis* impacts on the Century Freeway-Transitway Historic District.

E. Summary of Adverse Impacts and Measures to Minimize Harm

The Project will result in construction and operational impacts related to noise and operational impacts related to vibration to the area adjacent to Caltrans ROW. The EIR provides a detailed discussion of potential impacts resulting from the Project and identifies specific measures to avoid, minimize and mitigate impacts.

Noise Operations – Increase in Noise from the LRT System

The project alignment crosses the I-710, I-105, SR-91, and I-605 freeways. These Caltrans facilities are not sensitive to noise. However, Category 2 clusters (residential) are located adjacent to the Project crossings at the I-710, SR-91, and I-105 Caltrans facilities. No residential land use clusters are within or adjacent to the I-605 crossing. Three residential land use clusters will experience moderate impacts, and three residential land use clusters will experience severe impacts without mitigation. Mitigation Measure NOI-1 (Soundwalls) will reduce the number and severity of operational noise impacts associated with at-grade and aerial LRT operation near the I-710, SR-91, and I-105 Caltrans facilities. However, after implementation of Mitigation Measure NOI-1 (Soundwalls), one moderate noise impact will remain at a residential land use cluster near the SR-91 crossing. As a result, impacts related to the LRT noise adjacent to this Caltrans facility will remain adverse with mitigation.

Noise Operations – Increase in Noise from Freight Rail Relocation

Implementation of the Project will require relocation of the existing freight tracks at and adjacent to the I-105 crossing. Specifically, the freight tracks will be relocated to the west of the current freight alignment within the San Pedro Subdivision ROW by approximately 15 feet from the centerline to maintain existing operations along the ROW with implementation of the Project. No new noise sources will be added, and the frequency of freight trains will not change. Adjacent to the I-105 Caltrans facility crossing, two Category 2 clusters will experience noise levels exceeding the FTA threshold for moderate impacts as a result of the relocated freight tracks. These two clusters will experience moderate impacts without mitigation. With implementation of Mitigation Measure NOI-5 (Freight Track Relocation Soundwalls) in addition to Mitigation Measure NOI-1 (Soundwalls), adverse effects will not occur near the two Category 2 clusters.

Noise Construction – Increase in Noise from Construction Equipment

The Caltrans freeway facilities are not sensitive to noise; however, construction will result in temporary and periodic increases in noise levels adjacent to the Caltrans facilities. Such activities will exceed FTA's criteria and the standards established by the local noise ordinances of the Cities of Bellflower, Cerritos, Paramount, and South Gate, resulting in adverse effects. Mitigation Measure NOI-6 (Noise Control Plan) will be implemented to reduce construction noise levels; however, in some instances, the construction impact criteria may still be exceeded. Therefore, adverse effects will occur related to temporary or periodic increases in ambient noise levels adjacent to the Caltrans facility crossings with mitigation.

Vibration Operation– Increase in Groundborne Vibration from the LRT System

The Caltrans facilities are not areas of frequent human use that are sensitive to operational vibration, and sensitive receptors adjacent to the I-710 and I-605 crossings will not experience impacts from at-grade or aerial LRT pass-by vibration. However, four Vibration Category 2 clusters (residential) located adjacent to the I-105 and SR-91 crossings will experience impacts from at-grade and aerial LRT pass-by vibration before mitigation. Specifically, two clusters adjacent to the I-105 crossing and two clusters adjacent to the SR-91 Caltrans facility crossing

are expected to exceed the FTA vibration impact criteria, resulting in adverse effects. Mitigation Measures VIB-1 (Ballast Mat or Resilient Rail Fasteners) and VIB-2 (Low Impact Frogs) will reduce LRT pass-by vibration impacts. With mitigation, vibration impacts will be reduced to not adverse.

Effects to Other Resources

Although noise effects as a result of Project construction and operation could result in adverse effects, Project effects to visual, biological, hazards, traffic, and tribal and cultural resources were also evaluated. Detailed discussions of these Project effects can be found in the appropriate environmental resources section in Final EIS. Impacts to these resources were not found to be adverse; however, the Project team has incorporated additional measures and project features to avoid and minimize any potential effects to these resources as a result of Project construction and operation within Caltrans ROW. These measures and project features are listed in Table 1 and Table 2 below.

Avoidance, Minimization, and Mitigation Measures and Project Features to Minimize Harm

The LPA incorporates all practicable measures to avoid, minimize, and mitigate environmental harm, which are described in the Final EIS. Table 1 below lists the construction and operational impacts and the measures to avoid, minimize and mitigate the potential impacts identified. Table 2 below lists the project features which are typically related to the Purpose and Need of the Project, improvements included as part of the Project description, required to meet design standards, or required by non-project specific permits (e.g., statewide NPDES permit).

All measures listed are commitments imposed under this ROD for the LPA and are incorporated in the Environmental Commitments Record (ECR). This listing is provided to guide and facilitate project design and construction. This list will also facilitate the monitoring and implementation of the measures and project features. The measures and project features described below will either be incorporated into or implemented in conjunction with the design and/or construction for the LPA. A detailed description of measures and project features can be found in the appropriate environmental resources section in Final EIS.

Table 1 SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES	
Category	Avoidance, Minimization, and Mitigation Measure
Noise and Vibration	<p>NOI-1 Soundwalls: Soundwalls will be placed at-grade or at the edge of aerial structures to reduce noise related to light rail transit vehicles at the identified sensitive receiver locations shown in the following table where moderate and severe impacts have been identified based on design completed to date. Height and length will be verified during final design with the objective to reduce noise from light rail trains to below the FTA moderate impact criteria. Where separate soundwalls are identified in close proximity and gaps are not required for access, they may be linked to form a continuous wall.</p> <p>NOI-1 LRT Soundwall Locations</p>

**Table 1
SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

Category	Avoidance, Minimization, and Mitigation Measure				
	Civil Station	Location	Track Side	Placement	Height
	653+04 to 657+60	Between 55th St and 57th St	Left	Aerial	4 Feet
	698+30 to 702+25	Between Cottage St and Albany St	Right	At-grade	8 Feet
	703+25 to 709+25	Between Albany St and Santa Fe Ave	Right	At-grade	8 Feet
	711+00 to 719+50	Between Santa Fe Ave and Rugby Ave	Left	At-grade	8 Feet
	710+15 to 720+90	Between Santa Fe Ave and Rugby Ave	Right	At-grade	8 Feet
	721+50 to 724+50	Between Rugby Ave and Pacific Blvd	Right	At-grade	8 Feet
	729+50 to 732+50	Between Rita Ave and Seville Ave	Right	At-grade	8 Feet
	733+75 to 743+00	Between Seville Ave and Miles Ave	Left	At-grade	8 Feet
	733+50 to 743+00	Between Seville Ave and Miles Ave	Right	At-grade	8 Feet
	744+00 to 762+80	Between Miles Ave and State St	Right	At-grade	8 Feet
	745+75 to 762+00	Between west of Oak St and State St	Left	At-grade	8 Feet
	764+00 to 769+75	Between State St. and Plaska Ave	Right	At-grade	12 Feet
	769+75 to 779+00	Between Plaska Ave and Hollenbeck St	Right	At-grade	10 Feet
	778+00 to 789+00	Between Hollenbeck St and Benedict Wy	Right	Aerial	6 Feet
	803+00 to 813+69	Between Gage Ave and Bell Ave	Left	At-grade	8 Feet
	815+15 to 829+85	Between Bell Ave and Florence Ave	Left	At-grade	8 Feet
	840+00 to 868+75	Between Live Oak St and Otis Ave	Right	At-grade	8 Feet
	840+40 to 862+50	Between Live Oak St and Olive St	Left	At-grade	8 Feet
	870+50 to 878+00	Between Otis Ave and Santa Ana St	Right	At-grade	8 Feet
	872+50 to 877+50	Between Otis Ave and Santa Ana St	Left	At-grade	8 Feet
	881+20 to 893+50	Between Santa Ana St and Cecilia St	Left	At-grade	8 Feet
	957+50 to 962+50	Between Southern Ave and Duncan Wy	Right	At-grade	8 Feet
	962+50 to 973+00	Between Duncan Wy and center of Los Angeles River channel	Right	Aerial	6 Feet

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SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

Category	Avoidance, Minimization, and Mitigation Measure				
	971+00 to 983+00	Between center of Los Angeles River channel and Frontage Rd		Aerial	8 Feet
	1023+00 to 1029+75	Between Imperial Hwy and south of Garfield Ave		Aerial	8 Feet
	1089+50 to 1096+00	Between I-105 Fwy and Happy St		At-grade	14 Feet
	1096+00 to 1107+75	Between Happy St and Pacific Electric Right-of-Way (PEROW)		At-grade	16 Feet
	1089+50 to 1096+50	Between I-105 Fwy and Pearle St		At-grade	12 Feet
	1096+50 to 1104+00	Between Happy St and south of Howe St		At-grade	16 Feet
	1104+00 to 1108+50	Between south of Howe St and PEROW		At-grade	12 Feet
	1108+50 to 1120+50	Between Union Pacific Right-of-Way and Colorado Ave		At-grade	14 Feet
	1096+50 to 1104+00	Between Happy St and south of Howe St		Aerial	8 Feet
	1096+50 to 1104+00	Between Happy St and south of Howe St		Aerial	8 Feet
	1104+00 to 1124+00	Between south of Howe St and Paramount Blvd		Aerial	6 Feet
	1104+00 to 1108+00	Between south of Howe St and PEROW	Right	Aerial	6 Feet
	1124+00 to 1134+50	Between Paramount Blvd and approximately 350 feet east of 144th St	Left	Aerial	4 Feet
	1141+00 to 1155+50	Between Paramount High School railroad pedestrian crossing and Downey Ave	Left	Aerial	8 Feet
	1140+00 to 1167+00	Between Paramount High School railroad pedestrian crossing and approximately 400 feet west Somerset Blvd	Right	Aerial	8 Feet
	1167+00 to 1171+00	Between approximately 400 feet west of Somerset Blvd and Somerset Blvd	Right	At-grade	8 Feet
	1173+00 to 1184+50	Between Somerset Blvd and Lakewood Blvd	Right	At-grade	12 Feet
	1186+50 to 1216+00	Between Lakewood Blvd and approximately Clark Ave	Right	At-grade	12 Feet
	1200+00 to 1215+70	Between approximately 50 feet west of Virginia Ave and Clark Ave	Left	At-grade	12 Feet

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	1217+00 to 1222+00	Between Clark Ave and Alondra Blvd	Left	At-grade	10 Feet
	1224+00 to 1245+50	Between Alondra Blvd and approximately 200 feet west of Bellflower Blvd	Right	At-grade	8 Feet
	1226+50 to 1241+75	Between approximately 220 feet southeast of Alondra Blvd and Orchard Ave	Left	At-grade	8 Feet
	1248+50 to 1256+50	Between Bellflower Blvd and approximately 120 feet northwest of Civic Center Dr	Left	At-grade	12 Feet
	1250+00 to 1257+50	Between approximately 130 southeast of Bellflower Blvd and Civic Center Dr	Right	At-grade	12 Feet
	1257+50 to 1261+50	Between Civic Center Dr and approximately 200 feet southeast of Civic Center Dr	Right	At-grade	8 Feet
	1261+00 to 1265+50	Between approximately 500 feet northwest of Cornuta Ave and approximately 130 feet northwest of Cornuta Ave	Left	Aerial	8 Feet
	1265+50 to 1275+50	Between approximately 130 feet northwest of Cornuta Ave and Woodruff Ave	Left	Aerial	4 Feet
	1261+00 to 1276+50	Between approximately 200 feet southeast of Civic Center Dr and Woodruff Ave	Right	Aerial	4 Feet
	1275+50 to 1286+80	Between Woodruff Ave and Flora Vista St	Left	Aerial	8 Feet
	1276+50 to 1286+50	Between Woodruff Ave and Flora Vista St	Right	Aerial	10 Feet
	1286+80 to 1300+00	Between Flora Vista St and approximately 300 feet southeast of Ripon Ave	Left	At-grade	10 Feet
	1286+50 to 1303+00	Between California Ave and SR-91 Fwy	Right	At-grade	10 Feet
	1309+00 to 1320+00	Between SR-91 Fwy and approximately 600 feet southeast of San Gabriel River channel	Right	At-grade / Structure	10 Feet

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Category	Avoidance, Minimization, and Mitigation Measure				
	1351+00 to 1360+00	Between approximately 230 feet northwest of Rosewood Park and approximately 450 feet northwest of Harvest Ave	Left	At-grade	12 Feet
	1360+00 to 1372+00	Between approximately 450 feet northwest of Harvest Ave and Harvest Ave	Left	Aerial	12 Feet
	1372+00 to 1389+00	Between Harvest Ave and approximately 300 feet northwest of 186th St	Left	Aerial	10 Feet
	1374+80 to 1389+00	Between Gridley Rd and approximately 300 feet northwest of 186th St	Right	Aerial	10 Feet
	1389+00 to 1392+50	Between approximately 300 feet northwest of 186th St and 186th St	Left	At-grade	10 Feet
	1389+00 to 1392+00	Between approximately 300 feet northwest of 186th St and 186th St	Right	At-grade	10 Feet
	1393+75 to 1397+00	Between 186th St and 187th St	Left	At-grade	10 Feet
	1393+40 to 1397+00	Between 186th St and 187th St	Right	At-grade	10 Feet
	1397+00 to 1405+50	Between Albutis Ave and approximately 200 feet northwest of Pioneer Blvd	Left	At-grade	8 Feet
	1397+00 to 1405+50	Between Albutis Ave and approximately 200 feet northwest of Pioneer Blvd	Right	At-grade	8 Feet
	1409+50 to 1417+87	Between Pioneer Blvd and South St	Left	At-grade	8 Feet
	1409+20 to 1413+60	Between Pioneer Blvd and approximately 350 feet northwest of South St	Right	At-grade	8 Feet

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Noise and Vibration	<p>NOI-5 Freight Track Relocation Soundwalls: Soundwalls will be placed at the edge of the right-of-way at the locations identified in the following table to reduce freight and light rail transit noise related to the freight track relocation. Height and length will be verified during final design with the objective to reduce noise from light rail trains to below the FTA moderate impact criteria.</p> <p>NOI-5 Freight Track Relocation Soundwalls</p> <table border="1" data-bbox="483 814 1365 1467"> <thead> <tr> <th>Civil Station</th> <th>Location</th> <th>Track Side</th> <th>Placement</th> <th>Height</th> </tr> </thead> <tbody> <tr> <td>764+00 to 769+75</td> <td>Between State St. and Plaska Ave</td> <td>Right</td> <td>At-grade</td> <td>12 Feet</td> </tr> <tr> <td>769+75 to 779+00</td> <td>Between Plaska Ave and Hollenbeck St</td> <td>Right</td> <td>At-grade</td> <td>10 Feet</td> </tr> <tr> <td>1089+50 to 1096+00</td> <td>Between I-105 Fwy and Happy St</td> <td>Right</td> <td>At-grade</td> <td>14 Feet</td> </tr> <tr> <td>1096+00 to 1107+75</td> <td>Between Happy St and Pacific Electric Rightof-Way</td> <td>Right</td> <td>At-grade</td> <td>16 Feet</td> </tr> <tr> <td>1089+50 to 1096+50</td> <td>Between I-105 Fwy and Pearle St</td> <td>Left</td> <td>At-grade</td> <td>12 Feet</td> </tr> <tr> <td>1096+50 to 1104+00</td> <td>Between Happy St and south of Howe St</td> <td>Left</td> <td>At-grade</td> <td>16 Feet</td> </tr> <tr> <td>1104+00 to 1108+50</td> <td>Between south of Howe St and Pacific Electric Right-of-Way</td> <td>Left</td> <td>At-grade</td> <td>12 Feet</td> </tr> <tr> <td>1108+50 to 1120+50</td> <td>Between Union Pacific Right-of-Way and Colorado Ave</td> <td>Left</td> <td>At-grade</td> <td>14 Feet</td> </tr> </tbody> </table>	Civil Station	Location	Track Side	Placement	Height	764+00 to 769+75	Between State St. and Plaska Ave	Right	At-grade	12 Feet	769+75 to 779+00	Between Plaska Ave and Hollenbeck St	Right	At-grade	10 Feet	1089+50 to 1096+00	Between I-105 Fwy and Happy St	Right	At-grade	14 Feet	1096+00 to 1107+75	Between Happy St and Pacific Electric Rightof-Way	Right	At-grade	16 Feet	1089+50 to 1096+50	Between I-105 Fwy and Pearle St	Left	At-grade	12 Feet	1096+50 to 1104+00	Between Happy St and south of Howe St	Left	At-grade	16 Feet	1104+00 to 1108+50	Between south of Howe St and Pacific Electric Right-of-Way	Left	At-grade	12 Feet	1108+50 to 1120+50	Between Union Pacific Right-of-Way and Colorado Ave	Left	At-grade	14 Feet
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SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

Category	Avoidance, Minimization, and Mitigation Measure
Noise and Vibration	<p>NOI-6 Noise Control Plan: Metro’s contractor will develop a Noise Control Plan demonstrating how noise criteria will be achieved during construction. The Noise Control Plan will be designed to follow Metro requirements, Construction Noise Control, and will include measurements of existing noise, a list of the major pieces of construction equipment that will be used, and predictions of the noise levels at the closest noise sensitive receivers (residences, hotels, schools, churches, temples, and similar facilities). The Noise Control Plan will be approved by Metro prior to initiating construction. Where the construction cannot be performed in accordance with the FTA 1-hour Leq construction noise standards, the contractor will investigate alternative construction measures that will result in lower sound levels. The FTA 1-hour Leq construction noise standards are as follows: Residential daytime standard of 90 dBA Leq and nighttime standard of 80 dBA Leq, and Commercial and Industrial daytime standard of 100 dBA Leq and nighttime standard of 100 dBA Leq. The contractor will conduct noise monitoring to demonstrate compliance with contract noise limits. In addition, Metro will comply with local noise ordinances when applicable. Noise reducing methods that may be implemented by Metro include:</p> <ul style="list-style-type: none"> • If nighttime construction is planned, a noise variance may be prepared by the contractor, if required by the jurisdiction, that demonstrates the implementation of control measures to maintain noise levels below the applicable FTA standards. • Where construction occurs near noise-sensitive land uses, specialty equipment with enclosed engines, acoustically attenuating shields, and/or high-performance mufflers may be used. • Limit unnecessary idling of equipment. • Install temporary noise barriers or noise control curtains, where feasible and desirable. • Reroute construction-related truck traffic away from local residential streets and/or sensitive receivers. • Limit impact pile driving where feasible and effective. • Use electric instead of diesel-powered equipment and hydraulic instead of pneumatic tools where feasible. • Minimize the use of impact devices such as jackhammers and hoe rams, using concrete crushers and pavement saws instead.
Noise and Vibration	<p>VIB-1 Ballast Mat or Resilient Rail Fasteners: At the locations where exceedance of FTA groundborne vibration impact criteria for frequent events will occur, Metro will isolate trackwork using ballast mats for ballast and tie track and resilient rail fasteners for direct fixation track or other comparable vibration isolation techniques. Locations where mitigation is necessary will be verified during final design, with the objective to reduce vibration levels to below the FTA groundborne vibration impact criteria for frequent events.</p>
Noise and Vibration	<p>VIB-2 Low Impact Frogs: Low impact frogs will be used at the turnout and crossover track locations where exceedance of the FTA impact thresholds has been identified. The locations of low impact frogs required to reduce vibration impacts are identified with Mitigation Measure NOI-2 (Low Impact Frogs). Locations where mitigation is necessary will be verified during final design with the objective to reduce vibration levels to below the FTA groundborne vibration impact criteria for frequent events.</p>

Table 1 SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES	
Category	Avoidance, Minimization, and Mitigation Measure
Visual and Aesthetics	<p>VA-3 Construction Screening: During construction, the perimeter of construction staging areas and laydown areas will be screened to shield construction activities and laydown areas from adjacent visually sensitive land uses, including the following:</p> <ul style="list-style-type: none"> • Residential properties • Salt Lake Park (City of Huntington Park) • Hollydale Community Park (City of South Gate) • Original Bellflower Pacific Electric Station (City of Bellflower) • Artesia Historical Museum (City of Artesia) • Old Station #30 (City of Artesia) <p>The screening will be designed consistent with the Metro requirements and in coordination with cities and may incorporate artwork, Metro-branded design treatments, and/or community-relevant messaging.</p>
Visual and Aesthetics	<p>VA-4 Construction Lighting: During construction, nighttime construction lighting will be directed toward the interior of the construction area and shielded with temporary construction screening approved by Metro to limit light spillover into adjacent areas.</p>
Transportation	<p>TRA-18 Transportation Management Plan(s): TMP(s) will be prepared to address construction impacts on transportation facilities as applicable under the jurisdiction of all involved cities and agencies.</p> <p>The TMP(s) will address potential impacts from construction activities on vehicular, transit, pedestrian, and bicycle access and mobility, including, but not limited to, temporary lane/roadway, sidewalk, bicycle facility, and freeway ramp closures; detours; increases in traffic volumes (including regular traffic and construction traffic, construction equipment, materials delivery vehicles, waste/haul vehicles, and employee commutes); construction parking; and emergency services (e.g., fire, police, ambulances).</p> <p>The development of the TMP will be coordinated with Metro, local jurisdictions (cities and the county), agencies, and other potentially affected parties (e.g., school bus and transit operators and police, fire, and emergency services providers). The TMP(s) will identify specific TMP strategies, the party/parties responsible for implementing those strategies, the agencies and parties the TMP strategies will be coordinated with, and implementation timing.</p> <p>The TMP will include specific strategies to address short term, project-related construction effects on traffic, bicyclists, pedestrians, and area residents and businesses. The following list, which is part of this measure, identifies the types of TMP strategies that will be applicable:</p> <ul style="list-style-type: none"> • Public Information <ul style="list-style-type: none"> ○ Brochures and Mailers ○ Press Releases ○ Paid Advertising ○ Public Meetings/Speakers Bureau ○ Internet ○ Public Meeting Rooms • Motorist Information <ul style="list-style-type: none"> ○ Portable Changeable-Message Signs

**Table 1
SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

Category	Avoidance, Minimization, and Mitigation Measure
	<ul style="list-style-type: none"> ○ Ground-mounted Signs ● Incident Management <ul style="list-style-type: none"> ○ Traffic Management Team ● Construction <ul style="list-style-type: none"> ○ Lane Closure Chart ○ Reduced Speed Zone ○ Incentives and Disincentives (e.g., early completion payments and late re-opening penalties for contractors) ○ Movable Barrier ○ Temporary Pedestrian Walkways and Detour <p>The Resident Engineer will require the Construction Contractor to implement the strategies in the TMP prior to, during, and after construction activities, as required in the TMP.</p> <p>Pedestrian and Bicycle Facility Closures: When sidewalks, crosswalks, and/or bicycle facilities are temporarily closed during construction, pedestrian and bicycle detours will be developed and clearly signed prior to closing those facilities.</p>

**Table 1
SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

Category	Avoidance, Minimization, and Mitigation Measure
Biological Resources	<p>BIO-1 Bats: A Bat Habitat Suitability Assessment will be conducted by a qualified bat biologist prior to initiation of construction near areas with the potential to provide bat habitat to determine the potential presence and document suitable locations for bat species.</p> <p>If project construction occurs within the vicinity of suitable habitat for western mastiff bat, pallid bat, silver-haired bat, and big free-tailed bat, a qualified biologist will complete a maternity colony survey during the bat maternity season (June 1 through October 31) to determine the presence or absence of any maternity roosting of bats. If no active roosts are found, then no further action will be required. Measures BIO-1a, -1b, and -1c will be implemented, as appropriate if active roosts are found.</p> <p>a. If bats are present, project activities disruptive to the roost within 100 feet of an active maternity roost will be delayed, if feasible, until after the maternity season, or until a qualified biologist determines that the roosting site is no longer in use, or as otherwise determined in coordination with the applicable resource agency. This buffer may be reduced at the discretion of a qualified monitoring biologist. A criterion to be used to evaluate the appropriate maternity roosting site buffer includes existing levels of ambient disturbance.</p> <p>b. If active maternity roosts or hibernacula are found within 100 feet of project construction, the qualified bat biologist will survey (through the use of radio telemetry or other California Department of Fish and Wildlife (CDFW)-approved methods) for nearby alternative maternity colony sites. If the biologist determines in consultation with the CDFW that there are alternative roost sites used by the maternity colony and young are not present, then a Bat Relocation Plan will be prepared by the qualified bat biologist for review and approval by CDFW. Eviction procedures as outlined in a CDFW approved Bat Relocation Plan will apply. However, if there are no alternative roost sites that can be used by the maternity colony nearby, Measure BIO-1c (providing substitute maternity roost nearby) will be required.</p> <p>c. If a maternity roost would be affected by the Project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony will be provided in close proximity to the affected maternity roost no less than three months prior to the eviction of the colony. Alternative roost sites will be constructed in accordance with the specific bat's requirements as detailed in the CDFW-approved Bat Relocation Plan. Alternative roost sites will be of comparable size and proximal in location to the affected colony. Alternate roost sites will remain in place following project construction to provide long-term substitute roosting habitat.</p>

**Table 1
SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

Category	Avoidance, Minimization, and Mitigation Measure
Biological Resources	<p>BIO-2 Nesting Birds: If project construction occurs within the peak bird breeding season (February 1 to September 1 for both raptors and passerines) within suitable nesting habitat (e.g., vegetation, bridges, or other structures), a nesting bird and/or raptor preconstruction survey will be conducted by a qualified biologist within the disturbance footprint plus a 300-foot buffer. The survey will occur no more than three days prior to initiation of ground disturbance and/or vegetation removal. If project construction occurs in an area over multiple nesting seasons, a subsequent preconstruction nesting bird and raptor survey may be required prior to the initiation of construction each season. Preconstruction nesting bird and raptor surveys will be conducted during the time of day when birds are active and will be of sufficient duration to reliably conclude the presence or absence of nesting birds and/or raptors on-site and within the designated vicinity. The nesting bird and raptor survey results will be submitted to Metro prior to ground and/or vegetation disturbance activities.</p> <p>If active nests are found, their locations will be flagged. An appropriate avoidance buffer, depending upon the species and the proposed work activity, will be determined by a qualified biologist in consultation with the appropriate regulatory agency. The buffer will be delineated with bright orange construction fencing or other suitable flagging. Active nests will be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. If project activities must occur within the buffer, they will be conducted at the discretion of the qualified biologist. Inactive nests that have been confirmed by a qualified biologist could be removed based on their recommendations.</p>
Biological Resources	<p>BIO-4 Protected Trees: Prior to removal of any protected trees (as specified in applicable local ordinances), an Arborist Study will be completed to plot the location of each protected tree that may be encroached upon (i.e., construction activities within the tree protection zone, as measured 5 feet from the canopy dripline), and identify each protected tree proposed to be removed or retained and impacted. The Arborist Study will be prepared by a Certified Consulting Arborist in compliance with local ordinance guidelines and will be prepared in accordance with the reporting requirements of the applicable local jurisdiction. In addition, as required by applicable local jurisdiction ordinances, a tree protection plan will be prepared that will, at a minimum, include site plans, protective tree barriers, the designated tree protection zone (identifying an area sufficiently large enough to protect the tree and its roots from disturbance), activities prohibited or permitted within the tree protection zone, and encroachment boundaries. The Arborist Study and tree protection plan will be submitted to the appropriate departments of local jurisdictions with applicable tree ordinances for approval prior to the start of any tree-disturbing construction activities.</p>

**Table 1
SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

Category	Avoidance, Minimization, and Mitigation Measure
Hazardous Materials	<p>HAZ-1 Unidentified Oil and Gas Wells: If an unknown oil and gas well is encountered during construction, the contractor will notify Metro, California Division of Occupational Safety and Health, and the California Department of Conservation Geologic Energy Management Division (CalGEM) and proceed in accordance with state requirements. The requirements include written notification to CalGEM, protection of adjacent property, and before commencing any work to abandon any well, obtaining approval by CalGEM. Abandonment work, including sealing off oil and gas bearing units, pressure grouting, etc., must be performed by a state-licensed contractor under the regulatory oversight and approval of CalGEM.</p> <p>Where the Locally Preferred Alternative cannot be adjusted to avoid unidentified abandoned wells, the California Department of Conservation (Department of Oil, Gas, and Geothermal Resources) and a re-abandonment specialty contractor will be contacted to determine the appropriate method of re-abandoning the well. Oil well abandonment must proceed in accordance with California Laws for Conservation of Petroleum and Gas (1997), Division 3. Oil and Gas, Chapter 1. Oil and Gas Conservation, Article 4, Sections 3228, 3229, 3230, and 3232.</p>
Noise and Vibration	<p>VIB-3 Vibration Control Plan: Metro’s contractor will prepare a Vibration Control Plan demonstrating how the FTA building damage risk criteria and the FTA vibration annoyance criteria will be achieved. The Vibration Control Plan will include a list of the major pieces of construction equipment that will be used and predictions of the vibration levels at the closest sensitive receivers (residences, hotels, schools, churches, temples, historic properties, and similar facilities). The Vibration Control Plan must be approved by Metro prior to initiating construction. Where the construction cannot be performed to meet the FTA vibration damage criteria, the contractor will investigate and implement alternative means and methods of construction measures that will result in lower vibration levels.</p> <p>As part of the Vibration Control Plan, the contractor will prepare a Vibration Monitoring Plan that specifies construction activities requiring monitoring, monitoring locations, warning levels and limits at each location, equipment, procedures, schedule of measurements, and reporting methods to be used to ensure that the FTA damage criteria and the criteria specified in Measure VIB-6 (Construction Vibration Limits for Historic Properties/Historical Resources) are not exceeded. Vibration levels will be monitored in real time. If limits are exceeded, the activity causing the exceedance must immediately be halted. Work on that activity will be suspended until such time as alternative construction methods can be used and additional abatement measures can be implemented as specified in the Vibration Control Plan. Vibration monitoring data will be submitted to the Project Engineer weekly.</p>
Noise and Vibration	<p>VIB-4 Minimize the Use of Impact Devices: Metro’s contractor will avoid or minimize the use of impact devices such as jackhammers and hoe rams, using concrete crushers and pavement saws instead.</p>
Noise and Vibration	<p>VIB-5 Drilling for Building Foundations: Where building foundation systems are needed, drilling instead of driven piles will be used.</p>

**Table 1
SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

Category	Avoidance, Minimization, and Mitigation Measure																
Noise and Vibration	<p>VIB-6 Construction Vibration Limits for Historic Properties/Historical Resources: Historic structures will be held to the vibration damage criteria identified in the following table. Where possible, operation of the compactor/ballast tamper will be restricted to no closer than 40 feet, and other equipment, such as, and similar to, vibratory rollers, large bulldozers, caisson drills, and hoe rams no closer than 25 feet to a historic structure. Such equipment will not be used within 25 feet of the Bellflower Pacific Electric Railway Depot or the Los Angeles Department of Water and Power Boulder Dam-Los Angeles 287.5 kV Transmission Line towers or within 40 feet of the Frampton-Dantema House (81644 Alburdis Ave, Artesia).</p> <p>VIB-6 Construction Restrictions near Historic Properties</p> <table border="1" data-bbox="483 653 1390 1255"> <thead> <tr> <th data-bbox="483 653 602 821">APE Map No.</th> <th data-bbox="605 653 889 821">Property Location</th> <th data-bbox="893 653 1052 821">Damage Risk Criteria – in/sec (PPV)</th> <th data-bbox="1055 653 1390 821">Predicted Vibration Level – in/sec (PPV) with Measure VIB-6</th> </tr> </thead> <tbody> <tr> <td data-bbox="483 825 602 1020">17-005</td> <td data-bbox="605 825 889 1020">Los Angeles Department of Water and Power Boulder Dam-Los Angeles 287.5 kV Transmission Line (1936)</td> <td data-bbox="893 825 1052 1020">0.50</td> <td data-bbox="1055 825 1390 1020">0.21 to 0.43 at 25 feet (below damage risk criteria)</td> </tr> <tr> <td data-bbox="483 1024 602 1157">28-008</td> <td data-bbox="605 1024 889 1157">Bellflower Pacific Electric Railway Depot, 16336 Bellflower Boulevard, Bellflower</td> <td data-bbox="893 1024 1052 1157">0.50</td> <td data-bbox="1055 1024 1390 1157">0.21 to 0.43 at 25 feet (below damage risk criteria)</td> </tr> <tr> <td data-bbox="483 1161 602 1251">32-021</td> <td data-bbox="605 1161 889 1251">81644 Alburdis Ave, Artesia</td> <td data-bbox="893 1161 1052 1251">0.20</td> <td data-bbox="1055 1161 1390 1251">0.10 to 0.20 at 40 feet (below damage risk criteria)</td> </tr> </tbody> </table> <p data-bbox="483 1255 1390 1293">Note: in/sec = inches per second; PPV = peak particle velocity</p>	APE Map No.	Property Location	Damage Risk Criteria – in/sec (PPV)	Predicted Vibration Level – in/sec (PPV) with Measure VIB-6	17-005	Los Angeles Department of Water and Power Boulder Dam-Los Angeles 287.5 kV Transmission Line (1936)	0.50	0.21 to 0.43 at 25 feet (below damage risk criteria)	28-008	Bellflower Pacific Electric Railway Depot, 16336 Bellflower Boulevard, Bellflower	0.50	0.21 to 0.43 at 25 feet (below damage risk criteria)	32-021	81644 Alburdis Ave, Artesia	0.20	0.10 to 0.20 at 40 feet (below damage risk criteria)
APE Map No.	Property Location	Damage Risk Criteria – in/sec (PPV)	Predicted Vibration Level – in/sec (PPV) with Measure VIB-6														
17-005	Los Angeles Department of Water and Power Boulder Dam-Los Angeles 287.5 kV Transmission Line (1936)	0.50	0.21 to 0.43 at 25 feet (below damage risk criteria)														
28-008	Bellflower Pacific Electric Railway Depot, 16336 Bellflower Boulevard, Bellflower	0.50	0.21 to 0.43 at 25 feet (below damage risk criteria)														
32-021	81644 Alburdis Ave, Artesia	0.20	0.10 to 0.20 at 40 feet (below damage risk criteria)														
Noise and Vibration	<p>VIB-7 Construction Monitoring for Vibration Near Historic Properties/Historic Resources: The contractor will monitor construction vibration levels within 200 feet of historic buildings and structures to ensure the vibration damage threshold for that building or structure as identified will not be exceeded. A preconstruction and post-construction survey of these buildings will be conducted by a qualified structural engineer. Any damage will be noted. All vibration monitors used for these measurements will be equipped with an “alarm” feature to provide advanced notification that vibration impact criteria have been approached. This measure applies to structures identified as eligible for the National Register of Historic Places and/or California Register of Historical Resources in the West Santa Ana Branch Transit Corridor Project Final Cultural Resources Survey Report – Rev 2 (Metro 2023b) and Section 4.14 of the Historic, Archaeological, and Paleontological Resources Section of the Final EIS.</p>																

**Table 1
SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

Category	Avoidance, Minimization, and Mitigation Measure
Historical, Archaeological, and Paleontological Resources	<p>CR-1 Development of Cultural Resources Monitoring and Discovery Program: Prior to the start of any ground-disturbing activity, an archaeologist that meets the Secretary of Interior’s Professional Qualification Standards in Archaeology will prepare and implement a Cultural Resources Monitoring and Discovery Program (CRMDP) for the Project. The CRMDP will include the requirements of Measures CR-2 through CR-4 and the following:</p> <ul style="list-style-type: none"> • A summary of the results of the West Santa Ana Branch Transit Corridor Project Final Cultural Resources Survey Report—Rev 2 and the West Santa Ana Branch Transit Corridor Project Revised Final Cultural Resources Effects Report. • Procedures for avoidance of unanticipated discoveries where possible. • Procedures for preservation in place of unanticipated discoveries where possible. • Provisions of cultural resources awareness training to construction workers that will be implemented as part of Measure CR-2 (Archaeological Work Environmental Awareness Program). • Provisions for archaeological and Native American monitoring of ground disturbance related to construction of the Project. • Summary of the treatment procedures for unanticipated discoveries, as specified in Measure CR-4 (Treatment of Unanticipated Discoveries). This will include general research questions to be addressed by any studies, field, and laboratory methods for the gathering of data to evaluate sites for the California Register of Historical Resources and/or National Register of Historic Places, and requirements for addressing any sites identified as significant. • Procedures for Native American coordination and input. • Procedures for the treatment of human remains, if applicable, as outlined in existing regulations. These procedures will include, but not be limited to, communication protocol for contacting the coroner and preparation of a human remains treatment plan in consultation with the Most Likely Descendant(s). • Guidelines for the reporting of monitoring and treatment results
Historical, Archaeological, and Paleontological Resources	<p>CR-2 Archaeological Worker Environmental Awareness Program: A Secretary of the Interior qualified archaeologist will be retained to prepare a Worker’s Environmental Awareness Program training for archaeological sensitivity. This training will be provided to all construction personnel prior to the commencement of any ground-disturbing activities. Archaeological sensitivity training will include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find.</p>
Historical, Archaeological, and Paleontological Resources	<p>CR-3 Archaeological Monitoring: Monitoring pursuant to the Cultural Resources Monitoring and Discovery Program will be supervised by the qualified archaeologist who meets the Secretary of Interior Standards. The duration and timing of the monitoring will be determined by the qualified archaeologist. The archaeological monitor under the direction of a Secretary of the Interior qualified archaeologist will be present during ground-disturbing activities that have the potential to uncover previously known and unknown archaeological resources (i.e., ground-disturbing activities that will extend beyond the limits of prior disturbances). These activities will</p>

**Table 1
SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

Category	Avoidance, Minimization, and Mitigation Measure
	<p>include, but will not be limited to, pavement removal, grading, and trenching. Activities such as drilling that do not allow for soil visibility during excavation will be spot-checked but will not require a full-time monitor. Monitoring and spot checking will be required up to a depth of 20 feet. If the qualified archaeologist determines that full-time monitoring is no longer warranted, he or she may recommend reducing monitoring to periodic spot checking or cease entirely. Monitoring will be reinstated if any new or unforeseen deeper ground disturbances are required and reduction or suspension of the monitoring will need to be reconsidered by the qualified archaeologist. In the event that an archaeological resource is discovered, the monitor will have the authority to temporarily divert construction equipment around the find with a 50-foot buffer, or other buffer as determined by the archaeologist, to protect the resource until it is assessed for significance and treatment (e.g., avoidance, testing, data recovery), if necessary, is determined by the FTA in consultation with the State Historic Preservation Officer and consulting parties and executed.</p> <p>At the conclusion of archaeological monitoring, a final report will be prepared by the Secretary of the Interior qualified archaeologist, or his or her designee, describing the results of the archaeological monitoring efforts associated with the Project. If previously unidentified cultural resources are discovered during construction monitoring, a report will be prepared following the State Historic Preservation Office’s Archaeological Resource Management Report Guidelines that document the findings of the field and laboratory analysis and interpret the data within appropriate research context.</p>
<p>Historical, Archaeological, and Paleontological Resources</p>	<p>CR-4 Treatment of Unanticipated Discoveries: The contractor or archaeological monitor will notify Metro immediately if potentially significant archaeological resources are exposed during ground-disturbing activities. Archaeological monitors will have the authority to divert or temporarily halt ground-disturbing operations at the discovery. The area will be fenced or flagged as soon as possible following the discovery. Until the boundaries of the resource can be established with testing procedures, a 50- foot buffer zone around the identified deposit will be fenced or flagged off. Subsequent to the identification of site boundaries, the fenced or flagged buffer surrounding the resource could be reduced to a 10- to 15-foot buffer zone at the discretion of the qualified archaeologist. All fencing or flagging of archaeological deposits will be monitored by a qualified archaeologist. Temporary fencing or flagging will remain in place until the resource has been released by the qualified archaeological monitor, in consultation with Metro and FTA. Construction activities may continue in areas beyond the buffer zones. The discovery will be evaluated by the qualified archaeologist in accordance with the methods identified in the Cultural Resources Monitoring and Discovery Program (Measure CR-1) to determine if the archaeological resource is eligible for listing on the National Register of Historic Places (NRHP) and/or California Register of Historic Resources (CRHR). If the archaeological resource is determined eligible for the NRHP and/or CRHR, a treatment plan, will be prepared in accordance with 36 Code of Federal Regulations § 800.13(a)(2) in consultation with the State Historic Preservation Officer.</p>

**Table 1
SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

Category	Avoidance, Minimization, and Mitigation Measure
<p>Historical, Archaeological, and Paleontological Resources; Geotechnical / Subsurface and Seismic</p>	<p>PR-1(a) Paleontological Resources Mitigation and Monitoring Program: Prior to the commencement of ground-disturbing activities for the Locally Preferred Alternative (LPA), Metro will retain a qualified professional paleontologist to prepare and implement a Paleontological Resources Mitigation and Monitoring Program (PRMMP) for the LPA. The qualified paleontologist (principal paleontologist) must have at least a Master’s degree or equivalent work experience in paleontology, will have experience with local paleontology, and will be familiar with paleontological procedures and techniques. The PRMMP will describe mitigation requirements to be consistent with the Society of Vertebrate Paleontology (SVP) standards for paleontological resources mitigation (SVP 2010). The PRMMP will include at a minimum the following:</p> <ol style="list-style-type: none"> 1) Geologic setting, including paleontological sensitivity of the LPA site 2) Description of the LPA, outlining the type and extent of ground disturbance 3) Specifications for what ground-disturbing activity requires paleontological monitoring 4) Paleontological monitoring procedures: <ol style="list-style-type: none"> a. qualifications of paleontological monitors b. timing and duration of monitoring c. required data collection procedures d. daily monitoring log content 5) Communication protocols to be followed in the event that an unanticipated fossil discovery is made during development of the LPA 6) Construction diversion and resource recovery protocols: <ol style="list-style-type: none"> a. authority for ceasing construction. b. aerial extent of avoidance (construction exclusion) for any discovery c. timing to evaluate and recover the fossil 7) Fossil collection and preparation standards (field and museum) 8) Curation standards including appropriate institutions, curation agreements, and deadlines for materials to be accessioned 9) Post-recovery reporting requirements
<p>Historical, Archaeological, and Paleontological Resources; Geotechnical / Subsurface and Seismic</p>	<p>PR-1(b) Paleontological Worker Environmental Awareness Program: Prior to the start of construction, the qualified paleontologist or his or her designee will conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The Paleontological Worker Environmental Awareness Program will be fulfilled at the time of a preconstruction meeting. In the event of a fossil discovery by construction personnel, all ground-disturbing activities within 50 feet of the find will be halted, a 50-foot exclusion zone around the find will be established, and the qualified paleontologist and/or designee will be contacted to evaluate the find before restarting work in the exclusion zone. If the qualified paleontologist determines that the fossil(s) is (are) scientifically significant, the qualified paleontologist will</p>

Table 1 SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES	
Category	Avoidance, Minimization, and Mitigation Measure
	complete the conditions outlined in Measure PR 1(c) and PR 1(d) to mitigate impacts to significant fossil resources.
Historical, Archaeological, and Paleontological Resources; Geotechnical / Subsurface and Seismic	<p>PR-1(c) Construction Monitoring: Ground-disturbing construction activities (including grading, excavation, and trenching) that have the potential to impact previously undisturbed (i.e., native) sediments or geologic units of high paleontological sensitivity below 5 feet below ground surface will be monitored on a full-time basis by a qualified paleontological monitor during initial ground disturbance. Monitoring pursuant to the Paleontological Mitigation and Monitoring Program will be supervised by the qualified paleontologist and will be conducted by a monitor who meets or exceeds the Society of Vertebrate Paleontology(2010) requirements for a qualified paleontological monitor, including at least a Bachelor’s degree in geology, paleontology, or related field, and experience with collection and salvage of paleontological resources. If geological evidence indicates that sediments are younger alluvium or previously disturbed sediments and have a low potential to yield paleontological resources, or if older sediments are determined not to be fossiliferous based on results of monitoring at this location, the qualified paleontologist may determine that full-time monitoring is no longer warranted and may recommend reducing monitoring to periodic spot checking or cease entirely. Monitoring will be reinstated if any new or unforeseen deeper ground disturbances are required and reduction or suspension of the monitoring will need to be reconsidered by the qualified paleontologist. Ground-disturbing activity that reaches a depth of less than 5 feet below ground surface will not require paleontological monitoring.</p> <p>In the event that a paleontological resource is discovered, the monitor will have the authority to temporarily divert the construction equipment around the find until it is assessed for scientific significance and collected. Typically, fossils can be safely recorded and, if significant, potentially collected quickly by a single paleontologist without disrupting construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) may require more extensive excavation and longer recovery periods. In such a case, the monitor, under the supervision of the principal paleontologist, will have the authority to temporarily direct, divert, or halt construction activity so that the fossil(s) can be removed in a safe and timely manner.</p>
Historical, Archaeological, and Paleontological Resources; Geotechnical / Subsurface and Seismic	<p>PR-1(d) Preparation and Curation of Recovered Fossils: Once recovered, significant fossils will be identified to the lowest possible taxonomic level, prepared to a curation ready condition, and curated at a scientific institution with a permanent paleontological collection (such as the Natural History Museum of Los Angeles County) along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the qualified paleontologist. The cost of curation is assessed by the repository and will be the responsibility of Metro.</p> <p>At the conclusion of all required monitoring, laboratory work, and museum curation, the qualified paleontologist will prepare a final report describing the results of the paleontological mitigation monitoring efforts associated with the Locally Preferred Alternative. The report will include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. If the monitoring efforts produced fossils, then a copy of the report will also be submitted to the designated museum repository and to Metro.</p>

**Table 1
SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

Category	Avoidance, Minimization, and Mitigation Measure
Tribal Cultural Resources	<p>TCR-1 Native American Monitoring: Because of the potential to encounter previously undocumented Traditional Cultural Properties and/or Tribal Cultural Resources, a Native American monitor will be retained by the Los Angeles County Metropolitan Transportation Authority to monitor project-related, ground disturbing construction activities (e.g., grading, excavation, drilling, trenching) that occur within areas that are identified as having a moderate-to-high potential for containing prehistoric Native American remains, as specified in the Cultural Resources Monitoring and Discovery Plan (CRMDP), as described in Measure CR-1 (Development of Cultural Resources Monitoring and Discovery Program). The appropriate Native American monitors will be selected based on the tribal consultation under Assembly Bill 52 and Section 106. Monitoring staff will be identified in the CRMDP. Monitoring procedures and the role and responsibilities of the Native American monitor will be outlined in the CRMDP. In the event that the Native American monitor identifies a cultural resource of Native American origin during construction, the monitor will be given the authority to temporarily halt ground-disturbing activities (if safe) within 50 feet (15 meters) of the discovery to investigate the find and contact the Project Archaeologist and Metro. The Native American monitor and consulting tribe(s) will be provided an opportunity to participate in the documentation and evaluation of the find and development of treatment, as necessary.</p>
Tribal Cultural Resources	<p>TCR-2 Unanticipated Discovery of Traditional Cultural Properties/Tribal Cultural Resources: In the event that cultural resources of Native American origin are identified during construction, all earth-disturbing work within a 50-foot radius of the find will be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and an appropriate Native American representative, based on the nature of the find, is consulted. The specific procedures to be followed in the event of an unanticipated discovery of cultural resources of Native American origin will be identified in the Cultural Resources Monitoring and Discovery Program, as described in Measure CR-1 (Development of Cultural Resources Monitoring and Discovery Program). If Metro determines that the resource is a Traditional Cultural Property and/or Tribal Cultural Resource and is found significant under CEQA/Section 106, a treatment plan will be prepared and implemented in accordance with state guidelines and in consultation with Native American groups as described below.</p> <p>The treatment plan will be developed by a Secretary of the Interior qualified archaeologist in consultation with the State Historic Preservation Officer (SHPO) and with Native American contacts, as applicable. Metro will be responsible for ensuring that the treatment plan is developed and consultation with stakeholders (e.g., tribes, SHPO) is completed. The treatment plan will be developed to ensure treatment of archaeological historic properties/historical resources meets the Secretary of the Interior’s Standards and Guidelines for Archaeological Documentation, the California Office of Historic Preservation’s Archaeological Resources Management Report, Recommended Contents and Formats (1989), the Guidelines for Archaeological Research Design (1991), the Advisory Council on Historic Preservation’s publication Treatment of Archaeological Properties: A Handbook, and the Department of the Interior’s Guidelines for Federal Agency Responsibility under Section 106 of the National Historic Preservation Act.</p> <p>The treatment plan will include the following: procedures required should archaeological historic properties/historical resources be determined to no longer be</p>

**Table 1
SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES**

Category	Avoidance, Minimization, and Mitigation Measure
	<p>extant, methods for avoidance should avoidance be determined feasible upon discovery, and Phase III data recovery methods in the event that avoidance is infeasible. Phase III data recovery methods within the treatment plan would include, but not be limited to, research questions to be addressed by the study of each site, a description of methods including excavation methods, data analysis, reporting requirements, and final disposition of recovered materials. Phase III data recovery methods will also identify the thresholds at which point data redundancy is achieved. Phase III data recovery will ensure each site is adequately documented in accordance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties. The treatment plan will be implemented when a determination is made that a property/resource cannot be avoided and will be adversely affected/significantly impacted by the Project.</p>
<p>Land Use; Parklands and Community Facilities; Economic and Fiscal Impacts</p>	<p>COM-1 Construction Management Plan: Metro will develop a Construction Outreach Plan as part of Metro’s Construction Relation & Mitigation Programs in Community Relations in coordination with affected communities, community facilities, and businesses that will be implemented by Metro and its contractors during construction of the Project. The Construction Outreach Plan will include, but not be limited to, the following elements:</p> <ul style="list-style-type: none"> • Maintain access to community assets (including, but not limited to, schools and bike trails) and neighborhoods during construction as practicable • Maintain access to businesses during the operating hours of the businesses as practicable • Provide signage to direct pedestrians and motorists around construction areas; around sidewalk, street, and lane closures; to entrances of businesses and community assets; to maintain the flow of traffic around the construction area; and to notify pedestrians and motorists of any permanent closed streets prior to the closure of such streets • Provide appropriate signage, barriers, and fencing for pedestrian and bicycle detour routes to prevent pedestrians and bicyclists from entering the construction zones • Provide signage alerting potential customers that businesses are open during construction and clearly mark detours as appropriate • Provide the public with updates, alerts, and schedules during construction and prior to the start of revenue service through informational meetings, the project website, and other forms of communication such as, but not limited to, mailings and flyers to businesses and residences with 0.25-mile of the construction zone • Develop a mitigation plan to support businesses affected by construction to help reduce impacts to businesses during construction • Coordinate construction activities with other capital improvement projects being carried out nearby to minimize construction impacts and competing needs for detour routes

Table 1 SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES	
Category	Avoidance, Minimization, and Mitigation Measure
Safety and Security	SAF-3 Construction Site Measures: Metro’s contractor will provide safety and security measures at the construction sites and staging areas. Security measures will include barriers for excavations, installation of temporary barriers around perimeters, security patrols, and appropriate signage and lighting. The contractor will provide a safety and security plan to Metro for review prior to the start of construction.

Table 2 SUMMARY OF PROJECT FEATURES																	
Category	Task and Brief Description																
Visual and Aesthetics	VA PM-7 Lighting: Operational lighting would be consistent with MRDC or equivalent. Lighting would be directed away from surrounding properties.																
Air Quality	AQ PM-1 Metro Green Construction Policy: LPA construction activities will be conducted in compliance with the Metro Green Construction Policy and will implement Best Management Practices contained therein as practicable.																
Noise and Vibration	<p>NOI PM-1 Crossing Signal Bells: Crossing signal bell noise will not exceed 75 dBA Lmax sound exposure level at 10 feet at all protected at-grade crossings. Crossing signal bells at the locations identified in the following table, will be equipped with shrouds to direct bell noise away from residential sensitive receivers. This measure has been coordinated with CPUC but remains subject to its final approval.</p> <p>NOI PM-1 Crossing Signal Bells Shroud Locations</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="2" style="text-align: center;">Grade Crossing Locations</th> </tr> </thead> <tbody> <tr> <td>Albany St</td> <td>Century Blvd</td> </tr> <tr> <td>Santa Fe Ave</td> <td>Somerset Blvd</td> </tr> <tr> <td>Rugby Ave</td> <td>Clark Ave</td> </tr> <tr> <td>Seville Ave</td> <td>Alondra Blvd</td> </tr> <tr> <td>Miles Ave</td> <td>186th St</td> </tr> <tr> <td>Bell Ave</td> <td>Pioneer Blvd</td> </tr> <tr> <td>Otis Ave</td> <td>–</td> </tr> </tbody> </table>	Grade Crossing Locations		Albany St	Century Blvd	Santa Fe Ave	Somerset Blvd	Rugby Ave	Clark Ave	Seville Ave	Alondra Blvd	Miles Ave	186th St	Bell Ave	Pioneer Blvd	Otis Ave	–
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**Table 2
SUMMARY OF PROJECT FEATURES**

Category	Task and Brief Description																
Noise and Vibration	<p>NOI PM-2 Gate-Down-Bell-Stop Variance:</p> <p>Metro will apply for a gate-down-bell-stop variance at the locations identified in the following table to reduce the duration of bell ringing and therefore reduce impacts at residential sensitive receivers. Crossing signal noise will not exceed 30 seconds in duration. This measure has been coordinated with CPUC but remains subject to its approval.</p> <p>NOI PM-2 Gate-Down-Bell Stop Variance Locations</p> <table border="1" data-bbox="467 579 1377 961"> <thead> <tr> <th colspan="2" data-bbox="467 579 1377 625">Grade Crossing Locations</th> </tr> </thead> <tbody> <tr> <td data-bbox="467 625 935 667">Albany St</td> <td data-bbox="935 625 1377 667">Century Blvd</td> </tr> <tr> <td data-bbox="467 667 935 709">Santa Fe Ave</td> <td data-bbox="935 667 1377 709">Somerset Blvd</td> </tr> <tr> <td data-bbox="467 709 935 751">Rugby Ave</td> <td data-bbox="935 709 1377 751">Clark Ave</td> </tr> <tr> <td data-bbox="467 751 935 793">Seville Ave</td> <td data-bbox="935 751 1377 793">Alondra Blvd</td> </tr> <tr> <td data-bbox="467 793 935 835">Miles Ave</td> <td data-bbox="935 793 1377 835">186th St</td> </tr> <tr> <td data-bbox="467 835 935 877">Bell Ave</td> <td data-bbox="935 835 1377 877">Pioneer Blvd</td> </tr> <tr> <td data-bbox="467 877 935 919">Otis Ave</td> <td data-bbox="935 877 1377 919">–</td> </tr> </tbody> </table>	Grade Crossing Locations		Albany St	Century Blvd	Santa Fe Ave	Somerset Blvd	Rugby Ave	Clark Ave	Seville Ave	Alondra Blvd	Miles Ave	186th St	Bell Ave	Pioneer Blvd	Otis Ave	–
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Geotechnical, Subsurface, and Seismic	<p>GEO PM-1 Geotechnical Design (Operation): A number of geotechnical design reports are required for the Project, as detailed in the MRDC, Section 5.6, Geotechnical Investigations, Analysis and Design. Section 5.6 of the MRDC provides detailed requirements for planning and conducting a geotechnical investigation, geotechnical design methodologies, and reporting. In addition, and as referenced in the MRDC, Caltrans and the County of Los Angeles Building Code have their own design requirements for bridges and aerial structures (Caltrans) and building structures (County of Los Angeles) that are required.</p> <p>In accordance with the MRDC, geotechnical report recommendations will be incorporated into the project plans and specifications. These recommendations will be a product of the LPA design process and will address the subsurface hazards identified in this report. Without these report recommendations, the project plans and specifications will not be approved, and the LPA will not be allowed to advance into the final design stage or ultimately into construction. As a part of the Project, Metro has developed a comprehensive geotechnical field investigation and laboratory testing program (Metro 2020c) and is in the process of implementing the program. Findings from that program will be used to verify the information presented in the Final EIS.</p>																
Geotechnical, Subsurface, and Seismic	<p>GEO PM-2 Geotechnical Design (Construction): A number of geotechnical design reports are required for the LPA, as detailed in the MRDC, Section 5.6, Geotechnical Investigations, Analysis, and Design. Section 5.6 of the MRDC provides detailed requirements for planning and conducting a geotechnical investigation, geotechnical design methodologies, and reporting. In addition, and as referenced in the MRDC, Caltrans and the County of Los Angeles Building Code have their own design requirements for bridges and aerial structures (Caltrans) and building structures (County of Los Angeles) that are also required.</p>																

**Table 2
SUMMARY OF PROJECT FEATURES**

Category	Task and Brief Description
	<p>In accordance with the MRDC, geotechnical report recommendations will be incorporated into the LPA plans and specifications. These recommendations will be a product of the LPA design process and will address the subsurface hazards identified in this report. The design reports will also provide recommendations to be implemented during construction. The construction recommendations will address temporary excavations and ground settlement, and oil and gas hazards, and will include construction monitoring plans specific to the LPA. Implementation of the recommendations and monitoring plans will be required, as applicable, for both on-site and off-site properties and existing improvements that could be affected by an excavation.</p> <p>Without these construction recommendations, the LPA plans and specifications will not be approved and the LPA will not be allowed to advance into the final design stage nor ultimately into construction. As a part of the LPA, Metro has developed a comprehensive geotechnical field investigation and laboratory testing program and is in the process of implementing the program. Findings from that program will be used to verify the information presented in the Final EIS.</p>
<p>Hazards and Hazardous Materials</p>	<p>HAZ PM-1 Handling, Storage, and Transport of Hazardous Materials or Wastes (Operation): During operation of the LPA, hazardous materials may be temporarily stored, handled, or transported along the alignment, including at the MSF.</p> <p>As required by Metro, the operator will provide an industrial waste management plan and/or waste and hazardous materials management plan, such as a plan defined in Title 19 California Code of Regulations or a Spill Prevention, Control, and Countermeasure Plan prior to the start of revenue service. This plan will identify the responsible parties and outline procedures for hazardous waste and hazardous materials handling, storage, and transport during operation of the LPA. The plan will be prepared to Metro’s contractor specifications, submitted to Metro prior to operation, and will be implemented during operation. The plan will:</p> <ul style="list-style-type: none"> • Comply with prescribed BMPs to prevent hazardous material releases and cleanup of any hazardous material releases that occur • Comply with the SWRCB Construction CWA Section 402 General Permit conditions and requirements for transport, labeling, containment, cover, and other BMPs for storage of hazardous materials (SWRCB 2017) <p>Ground-disturbing activities could occur along the LPA if trenches or other soil-disturbing activities are needed to maintain or replace the rails or underground rail features or utilities. If ground-disturbing activities occur during operation and undocumented hazardous materials are identified, the operator will comply with the plan identified above for known contaminant sources and applicable federal and state regulations, such as RCRA, CERCLA, the Hazardous Materials Release Response Plans and Inventory Law, and the Hazardous Waste Control Act.</p>
<p>Hazards and Hazardous Materials</p>	<p>HAZ PM-2 Disposal of Groundwater (Operation): If disposal of contaminated groundwater is required during operation of the LPA, (decontamination water, purge water, dewatering, etc.), the LARWQCB will be consulted and Metro will comply with permits as required by the LARWQCB. LARWQCB may require that an individual National Pollutant Discharge Elimination System (NPDES) permit and/or waste</p>

**Table 2
SUMMARY OF PROJECT FEATURES**

Category	Task and Brief Description
	<p>discharge requirements (WDR) be obtained for dewatering and discharge activities. Additionally, the following agencies will be contacted as needed:</p> <ul style="list-style-type: none"> • City of Los Angeles Sanitation will be notified if contaminated groundwater will be discharged to the sewer system. • City of Vernon Health and Environmental Control Department will be contacted if contaminated groundwater will be discharged to the stormwater system. • County of Los Angeles Department of Public Health will be contacted if contaminated groundwater is encountered during dewatering within the boundaries of the following cities: Huntington Park, Bell, Cudahy, South Gate, Downey, Paramount, Bellflower, Cerritos, Artesia, and the unincorporated community of Florence-Firestone. <p>The groundwater discharge and disposal requirements vary by agency, location, concentration, and contaminants of concern and are therefore developed in consultation with the agency and the project proponent.</p>
<p>Hazards and Hazardous Materials</p>	<p>HAZ PM-4 Handling, Storage, and Transport of Hazardous Materials or Wastes: Prior to the start of construction, the contractor will provide Metro with an industrial waste management plan and/or a waste and hazardous materials management plan, such as a plan defined in Title 19 CCR or a Spill Prevention, Control, and Countermeasure Plan. These plans will be completed to Metro contractor specifications and will identify the responsible parties and outline procedures for hazardous waste and hazardous materials handling, storage, and transport during construction. The plan will specify how the contractor will handle and manage wastes on-site, including the following:</p> <ul style="list-style-type: none"> • Prescribe BMPs to follow to prevent hazardous material releases and cleanup of any hazardous material releases that may occur • Comply with the SWRCB Construction CWA Section 402 General Permit conditions and requirements for transport, labeling, containment, cover, and other BMPs for storage of hazardous materials during construction (SWRCB 2017) <p>During construction, the contractor will comply with applicable federal and state regulations that consider hazardous material handling and storage practices, such as the Resource Conservation and Recovery Act, the Comprehensive Environmental Response and Compensation Liability Act, the Hazardous Materials Release Response Plans and Inventory Law, and the Hazardous Waste Control Act.</p>
<p>Hazards and Hazardous Materials</p>	<p>HAZ PM-5 Property Assessment – Phase I and II ESAs: Consistent with Metro’s standard practice, prior to the start of construction, the contractor must provide Phase I ESAs in accordance with standard ASTM methodologies to assess the land use history of each parcel that will be acquired/utilized for the LPA, including the railroad corridor properties. The determination of parcels that require a Phase II ESA (i.e., soil, groundwater, soil vapor subsurface investigations) will be evaluated after the Phase I ESAs have been completed and will be based on the results of the Phase I ESAs. Specifically, if the Phase I ESAs identify suspected contamination in the soil, soil vapor, or groundwater, a Phase II ESA will be conducted to determine whether the suspect contamination resulted in soil, groundwater, or soil vapor contamination exceeding regulatory action levels.</p>

**Table 2
SUMMARY OF PROJECT FEATURES**

Category	Task and Brief Description
	<p>If the Phase II ESA concludes that the site is contaminated, remediation or corrective action (e.g., removal of contamination, in-situ treatment, capping, venting, monitoring, alarm, and system activation measures) would be conducted prior to or during construction under the oversight of federal, state, and/or local agencies (e.g., USEPA, DTSC, RWQCB, Los Angeles County) and in full compliance with current and applicable federal and state laws and regulations. Additionally, Voluntary Cleanup Agreements may be used for parcels where remediation or long-term monitoring is necessary.</p>
<p>Hazards and Hazardous Materials</p>	<p>HAZ PM-6 Demolition Plans: The contractor will prepare demolition plans for the safe dismantling and removal of building components and debris prior to construction. The demolition plans will be completed to Metro’s contractor specifications and will include the following:</p> <ul style="list-style-type: none"> • LBP testing and abatement procedures • Proper procedures for handling and disposal of lead and chromium in roadway paint striping • ACM testing and abatement procedures • PCB testing and abatement procedures <p>The demolition plans will be submitted to Metro for verification that appropriate demolition practices will be followed, consistent with federal and state handling and disposal regulations regarding ACM, lead, LBP, and PCBs.</p>
<p>Hazards and Hazardous Materials</p>	<p>HAZ PM-7 Disposal of Groundwater: If disposal of contaminated groundwater (decontamination water, purge water, dewatering, or underground structures [groundwater leakage into the final structure]) is generated during construction, the LARWQCB will be consulted and the Project will comply with permits as required by the LARWQCB. The LARWQCB may require that an individual NPDES permit and/or waste discharge requirements be obtained for dewatering activities. Additionally, the following agencies will be contacted as needed:</p> <ul style="list-style-type: none"> • City of Los Angeles Sanitation will be notified if contaminated groundwater will be discharged to the sewer system. • City of Vernon Health and Environmental Control Department will be contacted if contaminated groundwater will be discharged to the stormwater system. • County of Los Angeles Department of Public Health will be contacted if contaminated groundwater is encountered during dewatering within the boundaries of the following cities: Huntington Park, Bell, Cudahy, South Gate, Downey, Paramount, Bellflower, Cerritos, and Artesia, and the unincorporated community of Florence-Firestone. <p>The groundwater discharge and disposal requirements vary by agency, location, concentration, and contaminant of concern and, therefore, are developed in consultation with the appropriate agency and the project proponent.</p>
<p>Hazards and Hazardous Materials</p>	<p>HAZ PM-9 Contaminated Soil, Soil Vapor, and Groundwater: Prior to the start of construction, the contractor must retain a qualified environmental consultant to prepare a Soil Management Plan; Soil Reuse Management Plan; Groundwater Management Plan; Landfill Gas Accumulation Management Plan; and/or Soil, Soil Vapor, and Groundwater Management Plan. These plans must be completed to Metro’s contractor</p>

**Table 2
SUMMARY OF PROJECT FEATURES**

Category	Task and Brief Description
	<p>specifications and submitted to Metro prior to any ground-disturbing activities for the LPA. Alternatively, Soil, Soil Vapor, and/or Groundwater Plans may be prepared separately or together as a Soil, Soil Vapor, and Groundwater Management Plan.</p> <p>The Soil and Soil Vapor Plans (and/or Landfill Gas Accumulation Management Plan) must establish provisions per Metro’s contractor specifications for the disturbance of contaminated materials (known and undocumented). Proper management and disposition of contaminated soils gases will be determined in consultation with appropriate regulatory agencies and in accordance with applicable federal and/or state guidance (USEPA, DTSC, RWQCB, and other local agencies).</p> <p>The Soil Reuse Management Plan must establish provisions per Metro’s contractor specifications for the reuse of contaminated known or undocumented soils. Proper management and disposition of contaminated soils will be determined in consultation with appropriate regulatory agencies and in accordance with applicable federal and/or state guidance (USEPA, DTSC, RWQCB, and other local agencies).</p> <p>The Groundwater Management Plan, which must be prepared prior to construction activities, will establish provisions per Metro’s contractor specifications for encountering and managing contaminated groundwater (known and undocumented). Proper disposal of contaminated groundwater will be determined in consultation with appropriate regulatory agencies and in accordance with applicable federal and/or state guidance (USEPA, DTSC, RWQCB, and other local agencies).</p> <p>Where open or closed regulatory release cases are already managed by a regulatory agency (USEPA, DTSC, RWQCB, etc.) and Metro plans to alter the use of the site and/or disturb contaminated soil and/or groundwater on-site, Metro will notify the regulatory agency of the planned land use changes prior to ground-disturbing activities at the location of the open or closed regulatory release site. The regulatory agency will determine the level of investigation and/or remediation (performance standards) necessary on a case-by-case basis. A closure or no further action determination letter from the regulatory agency will be obtained when investigation and/or remediation is complete.</p>
<p>Historic, Archaeological, and Paleontological Resources</p>	<p>CR PM-1 SOI Standards Design Review: As the Project progresses through the design phase, associated designs will be reviewed and approved by a professional who meets the Secretary of the Interior’s Professional Qualification Standards in architectural history, history, or architecture (36 CFR 61). The goal of the review will be to confirm that designs remain consistent with the fundamental principles of the Secretary of the Interior’s Standards for the Treatment of Historic Properties and guidelines for Rehabilitation (36 CFR 68).</p>
<p>Safety and Security</p>	<p>SAF PM-1 Emergency Access: Metro will coordinate access for emergency responders, locations of fire hydrants, and security features with the applicable fire and police departments in addressing fire, life, safety, and security for the LPA, parking facilities, and station areas within their respective jurisdictions.</p>

F. Monitoring or Enforcement Program

The ECR provides a process for Caltrans to track and document the implementation of the avoidance, minimization, and mitigation measures and project features during the design, construction, and operation of the Project LPA. The ECR ensures that the environmental commitments are met by: 1) recording each environmental mitigation, compensation, and enhancement commitment made for an individual project; 2) specifying how each commitment will be met; and 3) documenting the completion of each commitment.

The identified responsible party in the ECR will be implementing and reporting the status of the measures to Caltrans. Monitoring forms are required and will be completed by those party/parties responsible for implementing each measure in the ECR. Completed monitoring forms will be retained by Caltrans. The Caltrans will be ensuring that avoidance, minimization, and mitigation measures in the ECR are fully implemented by designated qualified personnel.

G. Response to Comments on the Final EIS

The Final EIS was posted on the Project website on March 28, 2024, and published in the Federal Register on March 29, 2024, for a 30-day public review period. Nineteen emails and letters were received from individuals, organizations, and public agencies on the Final EIS. No comments received pertained to work within or adjacent to the Caltrans facilities. The following public agencies submitted comment letters:

- U.S. Environmental Protection Agency
- California Public Utilities Commission
- Los Angeles Department of Water and Power
- Los Angeles Unified School District
- City of Artesia
- City of Bellflower
- City of Downey
- City of Huntington Park

H. References

California Department of Transportation (Caltrans). 2024. Project Study Report-Project Report for Project Approval for West Santa Ana Branch Transit Corridor.

Los Angeles County Metropolitan Transportation Authority (Metro). 2024. West Santa Ana Branch Transit Corridor - Final Environmental Impact Statement/Environmental Impact Report. <https://ceqanet.opr.ca.gov/2017061007/5>.

2024. Record of Decision for West Santa Ana Branch Transit Corridor Project (Southeast Gateway Line). <https://www.federalregister.gov/documents/2024/09/20/2024-21582/limitation-on-claims-against-proposed-public-transportation-project-west-santa-ana-branch-transit>.

I. Record of Decision of Approval

It is the decision of Caltrans, as a cooperating agency for this undertaking, to approve the portions of Project LPA alignment within Caltrans ROW at the freeway crossings. These portions would be consistent with the Purpose and Need of the Project. This decision is based on the evaluation of the Final EIS, and all the supporting technical studies prepared for the Project. All practicable measures to avoid, minimize or mitigate impacts have been adopted and will be incorporated into this decision.

This ROD for the WSAB Transit Corridor Project is hereby approved.



06/17/2025

GLORIA ROBERTS

Date

District Director

California Department of Transportation, District 7