ATTACHMENT B

Los Angeles County
Metropolitan Transportation Authority

West Santa Ana Branch Transit Corridor

Draft Mitigation Monitoring and Reporting Program

Task No. 84.03a

Metro

WEST SANTA ANA BRANCH TRANSIT CORRIDOR ENVIRONMENTAL STUDY

Contract No. AE5999300

Draft Mitigation Monitoring and Reporting Program

Task No. 84.03a

Review Copy		
	Date	Initials
Originator	1/19/2024	BF
Revised by	1/19/2024	AD
Technical Checker	1/24/2024	KC
Back Checker	1/31/2024	KC
Format Checker	2/1/2024	SH
QA/QC Manager	2/1/2024	JL
Approved by	2/1/2024	VM

Prepared for:

Metro

Los Angeles County
Metropolitan Transportation Authority

February 1, 2024

TABLE OF CONTENTS

1 MITIGATION MONITORING AND REPORTING PROGRAM 1-1
1.1 Introduction 1-1
1.2 Purpose 1-1

List of Tables

Table 1. Mitigation Monitoring and Reporting Program 1-2

ACRONYMS AND ABBREVIATIONS

Acronyms	Definition
CalGEM	California Department of Conservation Geologic Energy Management Division
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CRHR	California Register of Historic Resources
CRMDP	Cultural Resources Monitoring and Discovery Program
EIS/EIR	environmental impact statement/environmental impact report
FTA	Federal Transit Authority
HVAC	heating, ventilation, and air conditioning
LPA	Locally Preferred Alternative
NRHP	National Register of Historic Places
Metro	Los Angeles County Metropolitan Transportation Authority
MMRP	Mitigation Monitoring and Reporting Program
NEPA	National Environmental Protection Act
PEROW	Pacific Electric Right-of-Way
PRMMP	Paleontological Resources Mitigation and Monitoring Program
SVP	Society of Vertebrate Paleontology
TMP	Transportation Management Plan(s)
TPSS	traction power substation
WSAB	West Santa Ana Branch

1 MITIGATION MONITORING AND REPORTING PROGRAM

1.1 Introduction

This Mitigation Monitoring and Reporting Program (MMRP) is for the West Santa Branch (WSAB) Transit Corridor Project[1]. The MMRP has been prepared in compliance with state and federal law and reflects the mitigation measures identified in the WSAB Transit Corridor Project Final Environmental Impact Statement and Environmental Impact Report (EIS/EIR). Mitigation measures are actions designed to avoid, minimize, or compensate for adverse or significant impacts.

The California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) regulations require an enforceable mitigation and monitoring program for projects. Section 21081.6 of the California Public Resources Code requires a Lead Agency to adopt a "reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment" (Section 15097 of the CEQA Guidelines provides additional direction on mitigation monitoring or reporting). Under the NEPA regulations, a monitoring and enforcement program shall be adopted and summarized where applicable to any mitigation (40 Code of Federal Regulations 1505.2(c) and 23 Code of Federal Regulations 771.27A). The Federal Transit Administration is the Lead Agency under NEPA and the Los Angeles County Metropolitan Transportation Authority (Metro) is the Lead Agency under CEQA.

Metro shall be responsible for administering and ensuring full compliance with the provisions of the MMRP.

1.2 Purpose

The primary purpose of the MMRP is to ensure that the mitigation measures identified in the Final EIS/EIR are implemented, effectively minimizing the identified environmental effects. Table 1 includes all mitigation measures identified in the Final EIS/EIR that would lessen or avoid potentially significant adverse environmental impacts resulting from implementation of the Project. Each mitigation measure is categorized by environmental topic and corresponding ID, with identification of:

- Monitoring Action/Procedure: A description of how compliance with the mitigation measures will be monitored or reviewed.
- Responsible Party for Implementation: The entity accountable for implementing the mitigation measures.
- Monitoring Responsibility and Implementation Phase: The agency responsible for overseeing the implementation of mitigation and the project phase or milestone when the measure is implemented.
- Outside Agency/Organization Coordination: The agencies or organizations that Metro will coordinate with for implementation of the measure, where applicable.

[1] As a result of a renaming campaign, the Southeast Gateway Line was unveiled as the new project name on January 22, 2024, to be used as the Project advances.

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
TRANSPORTATION				
TRA-1: Florence Avenue/California Avenue (East). Extend the northbound left-turn lane to 300 feet. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Huntington Park
TRA-2: Bell Avenue/Bissell Street. Add a westbound left-turn lane. Convert westbound left-through-right lane into a through-right lane. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Bell).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Bell
TRA-3: Gage Avenue/Salt Lake Avenue (West). Add eastbound right-turn lane with a 250-foot turn bay. Extend westbound left-turn lane with a 225-foot turn bay. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Bell).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Bell
TRA-4: Gage Avenue/California Avenue. Extend eastbound left-turn lane with a 150-foot turn bay. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Bell).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Bell
TRA-5: Randolph Street/State Street. Add a westbound left-turn lane with a 150-foot turn bay. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Huntington Park
TRA-6: Randolph Street/Miles Avenue. Extend northbound left-turn lane to 150-foot turn bay. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Huntington Park
TRA-7: Randolph Street/Seville Avenue. Add northbound and southbound left-turn lane with 150-foot left-turn bays. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Huntington Park

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
TRA-8: Randolph Street/Pacific Boulevard. Extend southbound left-turn lane to 150-foot turn bay. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Pre-revenue Operation	City of Huntington Park
TRA-9: Randolph Street/Rugby Avenue. Add northbound and southbound left-turn lane with 100-foot turn bays. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Huntington Park
TRA-10: Randolph Street/Albany Street. Add northbound and southbound left-turn lane with 100-foot turn bays. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Huntington Park
TRA-11: Randolph Street/Alameda Street (West). Add northbound left-turn lane with 150-foot turn bay. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Huntington Park
TRA-12: Gardendale Street/Center Street. Convert the two-way stop-controlled intersection to a signalized intersection. Add a westbound through lane. Metro will implement this measure subject to approval of the applicable jurisdiction (City of South Gate and City of Downey).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of South Gate, City of Downey
TRA-13: Gardendale Street/ Industrial Avenue. Convert the two-way stop-controlled intersection to a signalized intersection. Add a westbound through lane, the length of which will continue through the grade crossing. Metro will implement this measure subject to approval of the applicable jurisdiction (City of South Gate and City of Downey).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of South Gate, City of Downey
TRA-14: Flora Vista Street/Clark Avenue. Convert the two-way stop-controlled intersection to a signalized intersection. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Bellflower).	Review design plans for compliance; verify in the field.	Construction Contractor; Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Bellflower
TRA-15: Alondra Boulevard/Clark Avenue. Extend eastbound left-turn lane to 150 feet. Extend westbound left-turn lane to 200 feet. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Bellflower).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Bellflower

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
TRA-16: Artesia Boulevard/Dumont Avenue. Add westbound through lane. Metro will implement this measure is subject to approval of the applicable jurisdiction (City of Cerritos).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Cerritos
TRA 17: Business Circle/ Studebaker Road. Convert the two-way stop-controlled intersection to a signalized intersection. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Cerritos).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Cerritos
TRA-18 Transportation Management Plan(s) (TMP): TMP(s) will be prepared to address construction impacts on transportation facilities as applicable under the jurisdiction of all involved cities and agencies. 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). 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. 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 mitigation measure, identifies the types of TMP strategies that will be applicable: • Public Information	Review and verify preparation of TMP(s) and submission to Metro. Verify in the field that TMP measures have been implemented.	Construction Contractor/ Metro	1. Metro 2. Final Design/Prior to Construction, During Construction, After Construction	City of Los Angeles, City of Vernon, City of Huntington Park, City of Bell, City of Cudahy, City of South Gate, City of Downey, City of Paramount, City of Bellflower, City of Cerritos, City of Artesia, Los Angeles County, local transportation agencies, California Department of Transportation, local emergency services providers, school districts, and local business owners

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
– Brochures and Mailers – Press Releases – Paid Advertising – Public Meetings/Speakers Bureau – Internet – Public Meeting Rooms • Motorist Information – Portable Changeable-Message Signs – Ground-mounted Signs • Incident Management – Traffic Management Team • Construction – 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 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. 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.				
TRA-19 Parking Monitoring and Community Outreach: • Within the one-half-mile area surrounding each WSAB station, an assessment would be conducted to monitor on-street and off-street parking activity resulting from project operation. The assessment would compare parking availability prior to the opening of service to the availability six months following the opening of service.	Develop and implement survey to monitor on-street and off-street parking activity and report conditions. Verify coordination efforts with local jurisdictions on development of parking	Metro	1. Metro 2. Prior to Operation and 6 months Post-revenue Operation	City of Los Angeles, Los Angeles County, City of Huntington Park, City of Vernon, City of Bell, City of Cudahy, City of South Gate, City of

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
Surveys would be conducted at each station area to identify where WSAB parking demand is at least 20 percent greater than the demand before opening of service (i.e., the new transit service has increased parking demand by 20 percent or more). • Metro will work with the appropriate local jurisdiction, business owners, and affected communities for that station area to assess the need for an appropriate on- and off-street parking management program, considering the nearby community's and each proposed station's parking needs. • Specific parking management strategies could include restriping, modifying parking restrictions, and adjusting the time limits for on-street parking. For off-street parking, signing and enforcement services could be included. • Another element could include implementing or enhancing a residential permit parking program for the affected neighborhoods. Metro would coordinate with and support jurisdictions in outreach meetings within the affected communities to gauge the interest of residents participating in a residential permit parking program (prior to the opening of the new light rail service), regardless of whether parking shortages have been identified. • Metro may implement a parking fee at the transit parking facilities, consistent with the Supportive Transit Parking Program Master Plan.	management strategies where applicable.			Downey, City of Paramount, City of Bellflower, City of Artesia, City of Cerritos; local business owners

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
TRA-20 Parking Mitigation Program (Permanent): Metro will coordinate with local jurisdictions to address the physical loss of public parking spaces resulting from implementation of the Locally Preferred Alternative. This could include, but not be limited to, restriping the existing street to allow for diagonal parking, reducing the number of restricted parking areas, utilizing remnants of parcels acquired for the Project as off-street parking, and adjusting the time limits for on-street parking.	Verify coordination efforts with local jurisdictions where parking is physically removed. Verify development of parking management strategies. Verify in the field.	Metro	1. Metro 2. Final Design, Construction/Prior to Operation	City of Los Angeles, City of Vernon, City of Huntington Park, City of Bell, City of Cudahy, City of South Gate, City of Downey, City of Paramount, City of Bellflower, City of Cerritos, and City of Artesia, Los Angeles County
TRA-21 Loss of Parking (Construction): Metro will coordinate with local jurisdictions to address the loss of public parking spaces during construction. This could include, but not be limited to, restriping the existing street to allow for diagonal parking, reducing the number of restricted parking areas, phasing construction activities in a way that minimizes parking disruption, and adjusting the time limits for on-street parking.	Verify coordination efforts with local jurisdictions where parking is physically removed temporarily during construction. Verify development and implementation of parking management strategies. Verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction	City of Los Angeles, City of Vernon, City of Huntington Park, City of Bell, City of Cudahy, City of South Gate, City of Downey, City of Paramount, City of Bellflower, City of Cerritos, and City of Artesia, Los Angeles County

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
LAND USE				
LU-1 Consistency with Bike Plans: During the planning process and prior to construction, Metro will prepare amended language for each affected bicycle plan demonstrating that existing, planned, and modified bicycle facilities will be connected during project operation. This language will be subject to the approval of the Cities of Huntington Park, South Gate, Bell, Paramount, and Bellflower, as applicable. Metro will modify the following bike trail segments into a Class II bikeway: ▪ Within the San Pedro Subdivision Right-of-Way between Ardmore Avenue to Century Boulevard (City of South Gate) ▪ Along Salt Lake Avenue from Gage Avenue to Florence Avenue (City of Bell) Metro will relocate the following bike trail segments: ▪ Paramount Bike Trail segments from Paramount Boulevard to Somerset Boulevard within the Metro-owned Pacific Electric Right-of-Way (PEROW) (City of Paramount) ▪ Bellflower Bike and Trail segment from Lakewood Boulevard to the maximum extent of Clark Avenue within the Metro-owned PEROW (City of Paramount and City of Bellflower)	Bike Plans: Review and verify preparation of amended language for each affected bicycle plan. Relocated Segments: Review design plans for relocated segments. Verify in field.	Bike Plans: Metro Relocated Segments: Construction Contractor/ Metro	1. Metro 2. Bike Plans: Prior to Pre-revenue Operations Relocated Segments: Final Design, Construction, Prior to Operations	City of Huntington Park, City of South Gate, City of Bell, City of Paramount, City of Bellflower
TRA-19 and **TRA-20**	Refer to TRA-19 and TRA-20	Refer to TRA-19 and TRA-20	Refer to TRA-19 and TRA-20	Refer to TRA-19 and TRA-20
COM-1 Construction Outreach Plan	Refer to COM-1	Refer to COM-1	Refer to COM-1	Refer to COM-1
NOI-6 Noise Control Plan	Refer to NOI-6	Refer to NOI-6	Refer to NOI-6	Refer to NOI-6
VIB-3 through **VIB-7**	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
COMMUNITIES AND NEIGHBORHOODS				
COM-1 Construction Outreach 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: ▪ 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	Verify development and implementation of Construction Outreach Plan. Verify coordination efforts with applicable parties.	Construction Contractor/ Metro	1. Metro 2. Final Design, Prior to Construction, During Construction	City of Los Angeles, City of Vernon, City of Huntington Park, City of Bell, City of Cudahy, City of South Gate, City of Downey, City of Paramount, City of Bellflower, City of Cerritos, City of Artesia, and Los Angeles County; local agencies and organizations; local business owners

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
▪ 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				
TRA-1 through **TRA-17**	Refer to TRA-1 and TRA-17	Refer to TRA-1 and TRA-17	Refer to TRA-1 and TRA-17	Refer to TRA-1 and TRA-17
VA-1 through **VA-3**	Refer to VA-1 and VA-3	Refer to VA-1 and VA-3	Refer to VA-1 and VA-3	Refer to VA-1 and VA-3
NOI-1 through **NOI-6**	Refer to NOI-1 through NOI-6	Refer to NOI-1 through NOI-6	Refer to NOI-1 through NOI-6	Refer to NOI-1 through NOI-6
VIB-3 through **VIB-7**	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7
VISUAL AND AESTHETICS				
VA-1 Screening at Somerset Boulevard: The existing World Energy landscaping and decorative wall north of Somerset Boulevard and east of the light rail transit tracks will remain in place with the exception of a segment parallel to the storage tracks. If segments of the existing decorative screening wall and/or landscaping directly south of the World Energy storage tracks and east of the light rail transit tracks are removed, these screening elements will be replaced with a new screening wall and/or landscaping that are at least as decorative in terms of design, materials, and screening height as the existing wall and landscaping. A decorative screening wall and/or landscaping will be placed within the Pacific Electric Right-of-Way between the light rail transit tracks and storage tracks at a length and height capable of screening the refinery storage track from views on Somerset Boulevard.	Review design plans for compliance. Field verify.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction	Not Applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
VA-2 Relocation of "Belle": Metro will provide relocation site alternatives to determine the best possible location to relocate the public art statue, "Belle," in its existing condition, subject to a condition assessment detailing the current physical condition of the artwork. The site will be subject to approval by the City of Bellflower.	Verify condition assessment. Verify identification of relocation site alternatives. Field verify relocation for the public art statue, "Belle."	Construction Contractor/ Metro	1. Metro 2. Final Design, Prior to Construction at the location of the statue	City of Bellflower
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: ▪ 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) 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.	Review construction plan for compliance. Verify in the field. Verify coordination efforts with local jurisdiction.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction; Construction	City of Huntington Park, City of South Gate, City of Bellflower, City of Artesia
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.	Review construction plan for compliance. Verify in the field.	Construction Contractor/ Metro	1. Metro 2. Construction	Not Applicable.
NOI-1 through **NOI-6**	Refer to NOI-1 through NOI-6	Refer to NOI-1 through NOI-6	Refer to NOI-1 through NOI-6	Refer to NOI-1 through NOI-6

<table>
<tr><th>Mitigation Measures</th><th>Monitoring Action/Procedure</th><th>Responsible Party for Implementation</th><th>1. Monitoring Responsibility
2. Implementation Phase</th><th>Outside Agency/ Organization Coordination</th></tr>
<tr><td colspan="5">NOISE AND VIBRATION</td></tr>
<tr><td>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.

NOI-1 LRT Soundwall Locations
<table>
<tr><th>Civil Station</th><th>Location</th><th>Track Side</th><th>Placement</th><th>Height</th></tr>
<tr><td>653+04 to 657+60</td><td>Between 55th St and 57th St</td><td>Left</td><td>Aerial</td><td>4 Feet</td></tr>
<tr><td>698+30 to 702+25</td><td>Between Cottage St and Albany St</td><td>Right</td><td>At-grade</td><td>8 Feet</td></tr>
<tr><td>703+25 to 709+25</td><td>Between Albany St and Santa Fe Ave</td><td>Right</td><td>At-grade</td><td>8 Feet</td></tr>
<tr><td>711+00 to 719+50</td><td>Between Santa Fe Ave and Rugby Ave</td><td>Left</td><td>At-grade</td><td>8 Feet</td></tr>
<tr><td>710+15 to 720+90</td><td>Between Santa Fe Ave and Rugby Ave</td><td>Right</td><td>At-grade</td><td>8 Feet</td></tr>
<tr><td>721+50 to 724+50</td><td>Between Rugby Ave and Pacific Blvd</td><td>Right</td><td>At-grade</td><td>8 Feet</td></tr>
</table>
</td><td>Review design plans for compliance. Verify in the field.</td><td>Construction Contractor/ Metro</td><td>1. Metro
2. Final Design, Construction, Prior to Operations</td><td>Not Applicable.</td></tr>
</table>

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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				

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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				
971+00 to 983+00	Between center of Los Angeles River channel and Frontage Rd	Left	Aerial	8 feet				
1023+00 to 1029+75	Between Imperial Hwy and south of Garfield Ave	Left	Aerial	8 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 Right-of-Way (PEROW)	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				

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
1104+00 to 1108+50	Between south of Howe St and PEROW	Left	At-grade	12 feet				
1108+50 to 1120+50	Between Union Pacific Right-of-Way and Colorado Ave	Left	At-grade	14 feet				
1096+50 to 1104+00	Between Happy St and south of Howe St	Left	Aerial	8 feet				
1096+50 to 1104+00	Between Happy St and south of Howe St	Right	Aerial	8 feet				
1104+00 to 1124+00	Between south of Howe St and Paramount Blvd	Left	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				

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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				
1217+00 to 1222+00	Between Clark Ave and Alondra Blvd	Left	At-grade	10 feet				

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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				

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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				

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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				
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				

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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 Alburtis Ave and approximately 200 feet northwest of Pioneer Blvd	Left	At-grade	8 feet				

<table>
<tr><th colspan="5">Mitigation Measures</th><th>Monitoring Action/Procedure</th><th>Responsible Party for Implementation</th><th>1. Monitoring Responsibility
2. Implementation Phase</th><th>Outside Agency/ Organization Coordination</th></tr>
<tr><td>1397+00 to 1405+50</td><td>Between Alburtis Ave and approximately 200 feet northwest of Pioneer Blvd</td><td>Right</td><td>At-grade</td><td>8 feet</td><td rowspan="4"></td><td rowspan="4"></td><td rowspan="4"></td><td rowspan="4"></td></tr>
<tr><td>1409+50 to 1417+87</td><td>Between Pioneer Blvd and South St</td><td>Left</td><td>At-grade</td><td>8 feet</td></tr>
<tr><td>1409+20 to 1413+60</td><td>Between Pioneer Blvd and approximately 350 feet northwest of South St</td><td>Right</td><td>At-grade</td><td>8 feet</td></tr>
<tr><td colspan="5">NOI-2 Low Impact Frogs:
Low impact frogs (crossing point of two rails) will be installed at the identified locations shown in the following table to reduce crossover impact noise where necessary to reduce noise from light rail trains to below the FTA moderate impact criteria. Locations will be verified during final design with the objective to reduce noise from light rail trains to below the FTA moderate impact criteria.

NOI-2 Low Impact Frog Locations
<table><tr><th>Civil Station</th><th>Location</th><th>Noise Clusters</th><th>Vibration Clusters</th></tr><tr><td>657+14 to 662+34</td><td>Between 55th St and Slauson Ave</td><td>N40, N41, N42, N43, N44, N45, N46, N48, N49</td><td>V43</td></tr><tr><td>739+92 to 741+32</td><td>Between Templeton St and Miles Ave</td><td>N74, N75, N76, N77, N78, N79, N80, N81, N349</td><td>V63</td></tr></table></td><td>Review design plans for compliance. Verify in the field.</td><td>Construction Contractor/ Metro</td><td>1. Metro
2. Final Design, Construction, Prior to Operation</td><td>Not Applicable</td></tr>
</table>

Mitigation Measures				Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
807+41 to 808+82	Between Gage Ave and Nevada St	N108, N109, N110, N11, N112, N113	V81				
873+15 to 874+56	Between Otis Ave and Santa Ana St	N162, N163, N164	V115 and V116				
1004+06 to 1005+47	Between Lincoln Ave and Florence Ave	N187	V153, V154, and V155				
1178+55 to 1179+96	Between Castana Ave and Olivia Ave	N227, N228, N229, N230	V172, V173, V174, and V175				
1188+00	Maintenance and storage facility access track switch east of Lakewood Boulevard	none	V234				
1228+76 to 1230+17	Between Alondra Blvd and Harvard St	N254, N255	V192, V193, and V194				
1289+49 to 1291+03 and 1294+09 to 1295+37	Between Flora Vista St and Park St	N285, N289, N290, N291, N293, N294, N295, N296, N360	V195, V196, V197, and V198				

<table>
<tr><th colspan="4">Mitigation Measures</th><th>Monitoring Action/Procedure</th><th>Responsible Party for Implementation</th><th>1. Monitoring Responsibility
2. Implementation Phase</th><th>Outside Agency/ Organization Coordination</th></tr>
<tr><td>1394+72 to 1399+92</td><td>Between 186th St and 187th St</td><td>N328, N330, N331, N332, N334, N336, N337, N338, N339, N340, N341, N342, N343</td><td>V217, V218, V221, V222, and V223</td><td></td><td></td><td></td><td></td></tr>
<tr><td>1409+62 to 1414+81</td><td>Between Pioneer Blvd and South Ave</td><td>N344, N345, N346</td><td>V230, V231 and V232</td><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="4">NOI-3 Wheel Squeal Noise Monitoring:
Metro will conduct wheel squeal noise monitoring prior to the start of revenue operations to determine if excessive wheel squeal is occurring at the curves identified in the following table. If wheel squeal occurs, Metro will use wayside rail lubrication to lubricate rail surfaces as necessary with the objectives of minimizing wheel squeal and reducing noise from light rail trains to below the FTA moderate impact criteria.

NOI-3 Wheel Squeal Wayside Friction Applicator Locations
<table><tr><th>Civil Station</th><th>Curve</th></tr><tr><td>670+00</td><td>Curve from Randolph St to Long Beach Ave</td></tr><tr><td>788+00</td><td>Curve from San Pedro Subdivision Right-of-Way to Randolph St</td></tr><tr><td>1109+00</td><td>Curve from Pacific Electric Right-of-Way to San Pedro Subdivision Right-of-Way following Arthur Ave</td></tr></table></td><td>Verify wheel squeal noise monitoring is conducted at locations specified.

Confirm whether wheel squeal is excessive, and if so, verify implementation of wayside rail lubrication.</td><td>Construction Contractor/ Metro</td><td>1. Metro
2. Prior to Operation</td><td>Not Applicable</td></tr>
</table>

<table>
<tr><th>Mitigation Measures</th><th>Monitoring Action/Procedure</th><th>Responsible Party for Implementation</th><th>1. Monitoring Responsibility
2. Implementation Phase</th><th>Outside Agency/ Organization Coordination</th></tr>
<tr><td>

NOI-4 TPSS Noise Reduction:

At the traction power substations (TPSS) locations identified in the following table, Metro will implement measures to reduce TPSS noise below the performance criteria shown in the table below. FTA impact criteria shown in the table are based on existing noise levels per FTA guidance. Measures to reduce TPSS noise may include, but are not limited to:

- Orient cooling fans and heating, ventilation, and air conditioning (HVAC) equipment away from sensitive receivers
- Utilize quieter cooling fans or HVAC equipment
- Provide a surrounding enclosure around the TPSS unit and HVAC equipment
- Install baffles on the exterior of the cooling fan
- Sound insulation of TPSS unit enclosure or mounting of sound isolation materials to minimize transformer hum

NOI-4 TPSS Locations

Civil Station	TPSS	Location	FTA Impact Criteria (dBA, Ldn)
737+75	15(e)	East of Stafford Ave and north of Randolph St within private property	59
1110+50	7(e2)	South of Rose Street and just west of Arthur Ave within Metro-owned property	59
1195+50	5(e)	North of Hegel St and south of the Bellflower Bike Trail within private property	54

Notes: dBA = A-weighted decibel; FTA = Federal Transit Administration; L_{dn} = day-night noise level; TPSS = traction power substation

</td><td>Review design plans for compliance.
Verify implementation of identified measures.</td><td>Construction Contractor/ Metro</td><td>1. Metro
2. Final Design, Construction, Prior to Operation</td><td>Not Applicable</td></tr>
</table>

<table>
<tr><th>Mitigation Measures</th><th>Monitoring Action/Procedure</th><th>Responsible Party for Implementation</th><th>1. Monitoring Responsibility
2. Implementation Phase</th><th>Outside Agency/ Organization Coordination</th></tr>
<tr><td>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.

NOI-5 Freight Track Relocation Soundwalls
<table>
<tr><th>Civil Station</th><th>Location</th><th>Track Side</th><th>Placement</th><th>Height</th></tr>
<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 Right-of-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>
</table></td><td>Review design plans for compliance.
Verify implementation of identified measures.</td><td>Construction Contractor/ Metro</td><td>1. Metro
2. Final Design, Construction, Prior to Operations</td><td>Not Applicable</td></tr>
</table>

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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: ▪ 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.	Verify development and implementation of Noise Control Plan.	Construction Contractor/ Metro	1. Metro 2. Final Design, Prior to Construction, During Construction	Not Applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
▪ 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.				
VIB-1 Ballast Mat or Resilient Rail Fasteners: At the locations where vibration impacts 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.	Review design plans for compliance. Verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	Not Applicable
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.	Review design plans for compliance. Verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	Not Applicable
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,	Verify development and implementation of Vibration Control Plan, inclusive of Vibration Monitoring Plan.	Construction Contractor/ Metro	1. Metro 2. Final Design, Prior to Construction, During Construction	Not Applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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. 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 Mitigation 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.				
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.	Confirm in construction specifications. Verify in the field.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	Not Applicable
VIB-5 Drilling for Building Foundations: Where building foundation systems are needed, drilling instead of driven piles will be used.	Confirm construction specifications. Verify in the field.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	Not Applicable
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	Verify and review construction restrictions in construction plan and/or Vibration Control Plan	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	Not Applicable

<table>
<tr><th>Mitigation Measures</th><th>Monitoring Action/Procedure</th><th>Responsible Party for Implementation</th><th>1. Monitoring Responsibility
2. Implementation Phase</th><th>Outside Agency/ Organization Coordination</th></tr>
<tr><td>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 Alburtis Ave, Artesia).

VIB-6 Construction Restrictions near Historic Properties
<table><tr><th>APE Map No.</th><th>Property Location</th><th>Damage Risk Criteria - in/sec (PPV)</th><th>Predicted Vibration Level – in/sec (PPV) with Mitigation Measure VIB-6</th></tr><tr><td>17-005</td><td>Los Angeles Department of Water and Power Boulder Dam-Los Angeles 287.5 kV Transmission Line (1936)</td><td>0.50</td><td>0.21 to 0.43 at 25 feet (below damage risk criteria)</td></tr><tr><td>28-008</td><td>Bellflower Pacific Electric Railway Depot, 16336 Bellflower Boulevard, Bellflower</td><td>0.50</td><td>0.21 to 0.43 at 25 feet (below damage risk criteria)</td></tr><tr><td>32-021</td><td>81644 Alburtis Ave, Artesia</td><td>0.20</td><td>0.10 to 0.20 at 40 feet (below damage risk criteria)</td></tr></table>Note: in/sec = inches per second; PPV = peak particle velocity</td><td>(Mitigation Measure VIB-3). Verify in field.</td><td></td><td></td><td></td></tr>
</table>

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
VIB-7 Construction Monitoring for Vibration Near Historic Properties/Historical 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/EIR.	Verify construction vibration monitoring activities are conducted.	Construction Contractor/ Metro	1. Metro 2. Construction	Not Applicable
ECOSYSTEMS/BIOLOGICAL RESOURCES				
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. 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. Mitigation Measures BIO-1a, -1b, and -1c will be implemented, as appropriate if active roosts are found. a. If bats are present, project activities disruptive to the roost within 100 feet of an active maternity roost will be	Verify completion of Bat Habitat Suitability Assessment. Verify completion of maternity colony survey if construction occurs within the vicinity of suitable habitat for western mastiff bat, pallid bat, silver-haired bat, and big free-tailed bat. Verify implementation of identified measures, including preparation of a Bat Relocation Plan, and coordination with CDFW if active roosts are found.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	CDFW

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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. 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, Mitigation Measure BIO-1c (providing substitute maternity roost nearby) will be required. 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.				

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
BIO-2 Nesting Birds: If project construction occurs within the peak bird breeding season (February 1 through May 31 for raptors, and March 1 through August 31 for 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. 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.	Verify completion of nesting bird and/or raptor preconstruction survey if project construction occurs within the peak bird breeding season. Verify implementation of measures, including coordination with applicable resource agencies, if active nests are found.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife, depending on species

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
BIO-3 Jurisdictional Resources: Impacts associated with permanently disturbed areas within regulated waters will be mitigated in-kind at a minimum ratio of 1:1. Mitigation can be completed by providing adequate funding to a third-party organization, conservation bank, or in-lieu fee program for the in-kind creation or restoration. If mitigation is implemented offsite, mitigation lands should be located in the vicinity of the Affected Area or within the Los Angeles River Watershed. The Affected Area falls within the service area for the Land Veritas Soquel Canyon mitigation bank, which is approved to provide mitigation for permitted impacts under U.S. Army Corps of Engineers 404 permits, Los Angeles Regional Water Quality Control Board 401 Certifications, and California Department of Fish and Wildlife 1600 agreements. Note: the final mitigation ratios required by regulatory agencies during the permitting process may differ from those identified above.	Verify coordination with regulatory agencies. Verify identification and implementation of applicable measure(s) for permanent impacts.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction	U.S. Army Corps of Engineers, Los Angeles Regional Water Quality Control Board, and/or California Department of Fish and Wildlife
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	Verify development and implementation of Arborist Study and tree protection plan. Verify submittal of study and plan to applicable local jurisdiction.	Construction Contractor/ Metro	1. Metro 2. Final Design, Prior to Construction	City of Los Angeles, City of Huntington, Park, City of Bell, City of South Gate, Cit of Downey, City of Cerritos, as applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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.				
HAZARDS AND HAZARDOUS MATERIALS				
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. 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.	Maintain log of construction surveys prior to and during construction. Verify implementation of any identified measures and coordination.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	California Division of Occupational Safety and Health, CalGEM, California Department of Conservation (Department of Oil, Gas, and Geothermal Resources), if applicable
HISTORIC, ARCHAEOLOGICAL, AND PALEONTOLOGICAL RESOURCES				
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	Verify development and implementation of CRMDP. Verify inclusion of the requirements of Mitigation	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	Not applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
prepare and implement a Cultural Resources Monitoring and Discovery Program (CRMDP) for the Project. The CRMDP will include the requirements of Mitigation Measures CR-2 through CR-4 and the following: • 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 Mitigation 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 Mitigation 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).	Measures CR-2 through CR-4.			

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
• Guidelines for the reporting of monitoring and treatment results.				
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.	Verify preparation and implementation of Worker's Environmental Awareness Program training for archaeological sensitivity.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	Not applicable
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 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	Verify a qualified archaeological monitor has been retained prior to construction. Verify monitoring activities pursuant to the Cultural Resources Monitoring and Discovery Program. Verify consultation with State Historic Preservation Officer and consulting parties, if applicable. Verify development and review of final report that summarizes the results of the archaeological monitoring efforts.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction, Post Construction	Federal Transit Administration, State Historic Preservation Officer

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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. 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.				
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	Verify in the field that a qualified archaeologist is monitoring the site during ground-disturbing activities. Verify notification and implementation of methods identified in the Cultural Resource Monitoring and Discovery Plan. Verify development and implementation of treatment plan, inclusive of consultation, if an archaeological resource is eligible for the NRHP and/or CRHP.	Construction Contractor/ Metro	1. Metro 2. Construction	FTA, State Historic Preservation Officer

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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 (Mitigation 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.				
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: 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: a. qualifications of paleontological monitors	Verify a qualified paleontologist has been retained. Verify preparation and implementation of PRMMP.	Construction Contractor/ Metro	1. Metro 2. Prior to ground-disturbing construction activities, Construction	Not Applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
b. timing and duration of monitoring c. required data collection procedures d. 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: 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				
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 complete the conditions outlined in Mitigation Measure PR 1(c) and PR 1(d) to mitigate impacts to significant fossil resources.	Verify the development and implementation of a Paleontological Worker Environmental Awareness Program. Verify implementation of Mitigation Measure PR 1(c) and PR 1(d).	Construction Contractor/ Metro	1. Metro 2. Prior to ground-disturbing construction activities	Not Applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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. 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	Verify monitoring activities pursuant to the Paleontological Mitigation and Monitoring Program.	Construction Contractor/ Metro	1. Metro 2. Construction	Not Applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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.				
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. 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.	Verify the preparation and curation of recovered fossils is completed if significant fossils are recovered. Verify development and review of final report that summarizes the results of the paleontological mitigation monitoring efforts.	Construction Contractor/ Metro	1. Metro 2. Construction, Post construction	Scientific institution, if applicable
TRIBAL CULTURAL RESOURCES				
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	Verify a Native American monitor has been retained. Verify in the field that a Native American monitor is monitoring the site during ground-disturbing activities per the CRMDP.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	Consulting tribes, if applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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 Mitigation 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.				
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 Mitigation 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	Verify notification and implementation of methods identified in the Cultural Resources Monitoring and Discovery Plan. Verify development and implementation of a treatment plan, if applicable.	Construction Contractor/ Metro	1. Metro 2. Construction	SHPO, FTA, Native American groups, as applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
prepared and implemented in accordance with state guidelines and in consultation with Native American groups as described below. 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. The treatment plan will include the following: procedures required should archaeological historic properties/historical resources be determined to no longer be 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				

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
determination is made that a property/resource cannot be avoided and will be adversely affected/significantly impacted by the Project.				
PARKLANDS AND COMMUNITY FACILITIES				
LU-1	Refer to LU-1	Refer to LU-1	Refer to LU-1	Refer to LU-1
COM-1	Refer to COM-1	Refer to COM-1	Refer to COM-1	Refer to COM-1
NOI-6	Refer to NOI-6	Refer to NOI-6	Refer to NOI-6	Refer to NOI-6
VIB-3 through **VIB-7**	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7
SAFETY AND SECURITY				
SAF-1 Encroachment Detection: Subject to coordination with the applicable stakeholders, the Locally Preferred Alternative will incorporate a means of encroachment detection along the portion of the corridor that shares right-of-way with freight operations. The encroachment detection system will detect unauthorized entry into Metro right-of-way, such as a freight train derailment. Prior to the start of service, Metro will develop a plan that outlines procedures should the encroachment detection system be triggered. In the event the intrusion detection system detects a possible derailment, all parties operating in the shared right-of-way corridor will be notified and train traffic (freight and light rail transit) will not be permitted to enter the area until the detection is investigated and the intrusion, if any, addressed to avoid possible derailments.	Verify coordination with applicable stakeholders (i.e., freight operators) to identify encroachment detection. Verify incorporation of encroachment detection system along the portion of the corridor that shares right-of-way with freight operations, including verifying on design plans. Verify development of a plan that outlines procedures if the encroachment detection system is triggered.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	Applicable freight operators
SAF-2 School District Coordination: Metro will coordinate with and notify the school districts and individual school administrators to maintain or modify safe and convenient pedestrian, bicycle, and bus routes to schools as necessary during and after construction. This also includes the publication and distribution of alternative pedestrian and bicycle route maps.	Verify coordination with and notification of school districts and individual school administrators.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction, After Construction	Local school districts and school administrators

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
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.	Verify development and implementation of safety and security measures at construction sites and staging areas. Verify in field. Verify development and implementation of a safety and security plan.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	Not Applicable

Source: TAHA and WSP 2024