Los Angeles County
Metropolitan Transportation Authority

FINAL - Environmental Impact Report

State Clearinghouse No. 2020109001

November 2021

ANTELOPE VALLEY LINE CAPACITY AND SERVICE IMPROVEMENTS PROGRAM

Metro®

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ANSI-ASA	American National Standards Institute-American Standards Association
ASTM	American Society for Testing and Materials
ATC	Acton Town Council
AVL	Antelope Valley Line
AVTA	Antelope Valley Transit Authority
BAT	Best Available Technologies
BCI	Bat Conservation International
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGP	Construction General Permit
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
COVID-19	Coronavirus Disease
CPUC	California Public Utilities Commission
CRMP	Cultural Resources Monitoring Plan
DTSC	Department of Toxic Substance Control
EIR	Environmental Impact Report
ESA	Environmentally Sensitve Area
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
LID	Low Impact Design
LSA	Lake and Streambed Alteration Agreement

Metro	Los Angeles County Metropolitan Transportation Authority
MMRP	Mitigation Monitoring and Reporting Program
NAHC	Native American Heritage Commission
NCTC	North Los Angeles County Transportation Coalition JPA
NHMLA	Natural History Museum of Los Angeles County
NML	Nest Monitoring Log
NOA	Notice of Availability
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
PDT	Project Development Team
PRC	Public Resources Code
PRIMP	Paleontological Resources Impact Mitigation Program
RailPAC	Rail Passenger Association of California and Nevada
ROW	Right-of-Way
RWQCB	Regional Water Quality Control Board
SCCIC	South Central Coastal Information Center
SLF	Sacred Lands File
SR	State Route
SSC	Species of Special Concern
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCR	Tribal Cultural Resource
TMP	Traffic Management Plan
UPRR	Union Pacific Railroad
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish & Wildlife Services
VOC	Volatile Organic Compounds
WEAP	Worker Environmental Awareness Protection
WL	Watch List

ES. Executive Summary

This Executive Summary provides a concise summary of the Los Angeles County Metropolitan Transportation Authority (Metro) Antelope Valley Line (AVL) Capacity and Service Improvements Program (Proposed Project or Project) and its potential environmental effects. It contains 1) the purpose of the Final Environmental Impact Report (EIR), 2) a summary of the environmental review process, 3) project objectives, 4) the project history, 5) a description of the Proposed Project (including construction, operations and cost), 6) a summary of environmental impacts and mitigation measures, and 7) a comparison of the Proposed Project to alternatives.

The Proposed Project involves the construction of three capital improvements which would provide the capacity required to allow commuter rail service to increase along the AVL to 30-minute bi-directional headways between Los Angeles Union Station (LAUS) and the Santa Clarita Valley and up to 60-minute bi-directional headways between the Santa Clarita Valley and the Lancaster Terminal by the year 2028. The three capital improvements include the Balboa Double Track Extension located in the City of Los Angeles, the Canyon Siding Extension located in the City of Santa Clarita, and the Lancaster Terminal Improvements located in the City of Lancaster. **Figure ES-1** shows the regional context of the Project corridor as well as the three capital improvement locations.

ES.1 PURPOSE OF THIS FINAL ENVIRONMENTAL IMPACT REPORT

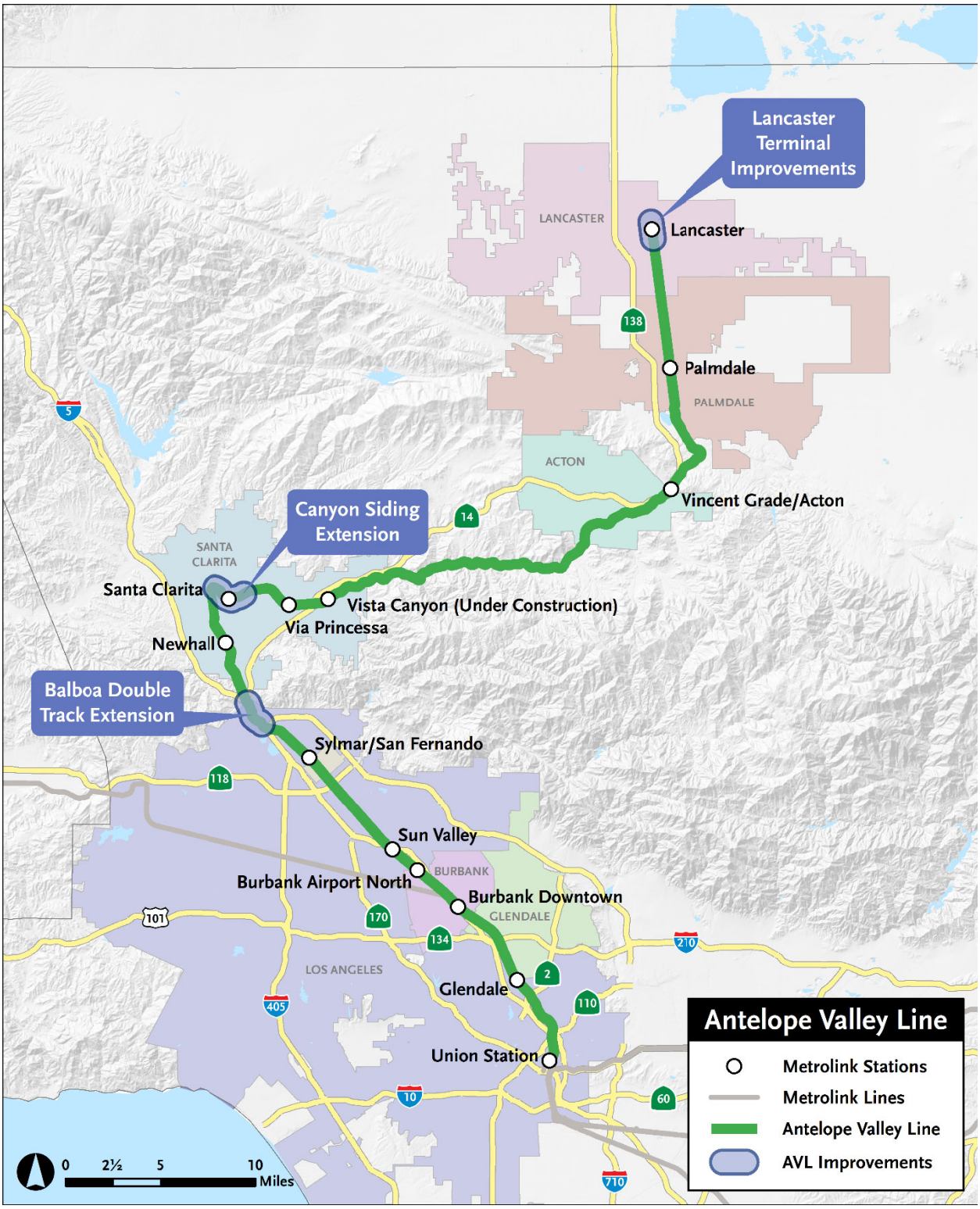
As described in the Draft EIR, the Proposed Project qualifies for a statutory exemption from the California Environmental Quality Act (CEQA) granted by the State legislature. In particular, the Proposed Project is statutorily exempt from CEQA under Section 21080 (b)(10) of the California Public Resources Code (PRC) (also found in Section 15275(b) of State CEQA Guidelines [14 Cal. Code Regs., § 15000 et seq.])), Specified Mass Transit Projects), which provides that CEQA does not apply to:

> *A project for the institution or increase of passenger or commuter services on rail or highway rights-of-way already in use, including the modernization of existing stations and parking facilities.*

The Proposed Project is a project for the institution or increase of passenger and commuter services on rail already in use, including the modernization of existing stations and parking facilities. Therefore, the Proposed Project is exempt from CEQA under Public Resources Code Section 21080(b)(10) and CEQA Guidelines Section 15275(b). Metro has nevertheless elected to prepare this EIR in the interest of comprehensively addressing community and stakeholder concerns and in an effort to provide a clear record of the potential environmental impacts of the Project. It also provides mitigation measures to address potential impacts.

Metro has prepared this Final EIR to satisfy the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Section 15000, et seq.).

Figure ES-1: Regional Context of the Study Corridor



SOURCE: Terry A. Hayes Associates Inc., 2021

This Final EIR is intended to assist Metro in making decisions regarding the adoption of the Proposed Project. It is required by Section 15132 of the CEQA Guidelines to include the Draft EIR or a revision of the draft; comments and recommendations received on the Draft EIR (either verbatim or in summary); a list of persons, organizations, and public agencies who commented on the Draft EIR; responses to significant environmental comments raised in the review and consultation process; and any other relevant information added by the lead agency.

Metro serves as the lead agency for the Proposed Project and has the principal responsibility for approving the Project. Lead agencies are charged with the duty to avoid or substantially lessen significant environmental impacts of a project, where feasible. In determining whether to approve a project that would result in significant adverse environmental effects, a lead agency has an obligation to balance the economic, social, technological, legal, and other benefits of a project against its significant unavoidable impacts on the environment.

ES.2 ENVIRONMENTAL REVIEW PROCESS

In 2017, Metro, in partnership with Metrolink and the North County Transportation Coalition, initiated a study to assess the AVL between Burbank and Lancaster and recommend a range of service frequencies and improvements to the AVL rail corridor to enhance accessibility and reliability. The resultant study, the AVL Study, recommended a phased implementation of service increases and identified capital improvements to enable the recommended service improvements. In July 2019, the Metro Board of Directors approved a motion in support of the proposed service increases and directed staff to move forward with implementation, including obtaining environmental clearances. A Notice of Preparation (NOP) of the Draft EIR was prepared and distributed on October 1, 2020 to the State Clearinghouse and to various other public agencies and the general public for a 30-day scoping period. During the initial 30-day review period, Metro extended the scoping period for an additional 15 days – officially ending the scoping period on November 16, 2020. Three scoping meetings were held during the 45-day scoping period to facilitate public review and comment on the Proposed Project and the scope and contents of the Draft EIR. Metro received a total of 77 comments during the public scoping period. Generally, comments received were a mix of supportive and oppositional sentiments toward the Proposed Project.

Following the public scoping review period and NOP release, the Project Team began developing the Draft EIR. Upon release of the Notice of Availability (NOA) on July 28, 2021, a 45-day review period was initiated for public review and comment on the Draft EIR findings. The NOA provided notice for responsible agencies to transmit their comments on the findings and content of the Draft EIR, focusing on specific information related to their own statutory responsibility. Per CEQA (Title XIV, 15105), a public review period is required when issuing the availability and completion of a Draft EIR.

Metro conducted two virtual public hearings during the public review period on August 18, and August 21, 2021. A total of 56 stakeholders attended the public hearings. Metro received 58 comments during the Draft EIR public review period.

Comments were received through three methods, including via the project email address, traditional ground mail, and by submitting a written and/or oral comment at one of the two public hearings.

Upon the completion of the Final EIR and other required documentation, the Metro Board of Directors certify the Final EIR, the findings relative to the Proposed Project's environmental effects after implementation of mitigation measures and approve the Proposed Project. The public can comment on the contents of the Final EIR when the Metro Board considers the Proposed Project at the Board Meeting on December 2, 2021.

ES.3 PROJECT OBJECTIVES

The AVL plays a critical role in connecting communities in North Los Angeles County to LAUS and the cities in between. Prior to the Coronavirus (COVID-19) pandemic, it carried the third highest ridership in Metrolink's commuter rail system and was responsible for removing approximately one million weekday automobile trips from the region's roadways a year. Consistent with the State Rail Plan and Metrolink's Southern California Optimized Rail Expansion (SCORE) program, and in anticipation of substantial population and employment growth in the North Los Angeles County region over the next 20 years, Metro seeks to improve rail service on the AVL to realize its full potential as a regional mobility enhancement and not just a peak-hour commuter service. Accordingly, the AVL Capacity and Service Improvements Program seeks to:

- Provide regular and more frequent Metrolink services to improve regional connectivity and accessibility through the enabling of 30-minute bi-directional passenger rail service to the Santa Clarita Valley and 60-minute bi-directional service to Lancaster along the AVL corridor.
- Improve passenger service reliability and efficiency on the AVL rail corridor.
- Provide necessary infrastructure improvements to enhance operational flexibility and reliability along the AVL corridor.
- Support the vision and goals for rail service in the region consistent with the California State Rail 2040 Plan and Metrolink's SCORE program.

ES.4 PROJECT HISTORY

In 2011, the Metro Board of Directors passed a resolution to formulate a strategic plan for infrastructure improvements for the AVL, with the directive to determine what improvements could be made to the existing line to significantly reduce the travel time between Lancaster/Palmdale and Los Angeles, as well as to enhance safety. In March 2012, the results of the Strategic Plan were presented to the Metro Board. Since the completion of this plan, at least 10 major capital improvements have been studied for the AVL rail corridor.

In 2017, Metro, in coordination with Metrolink and the North County Transportation Coalition, initiated a study to assess the AVL between Burbank and Lancaster. The resultant study, titled the AVL Study, examined opportunities to enhance rail service between the Burbank and Lancaster stations along the AVL using existing infrastructure and with potential infrastructure

improvements that would mitigate existing operational constraints. A phased strategy was then developed for prioritizing investments and building capacity to realize incremental service improvements, based on benefits and costs. The AVL Study recommended three successive phases of service improvement: a near-term plan to adjust existing schedules to improve service frequency and provide late night service; a mid-term phase which consisted of the Proposed Project; and a long-term phase which included larger levels of investment as well as substantial service improvements intended to be implemented when and if funding were available.

In July 2019, the Metro Board approved a motion in support of implementing Service Scenarios 1 through 3 identified in the AVL Study which are summarized as follows:

1. Service Scenario 1 – Provide one additional late evening train between LAUS and Lancaster on Friday and Saturday evenings;
2. Service Scenario 2 – Provide two additional late evening trains on Friday and Saturday and two additional bi-directional mid-day services between LAUS and Lancaster; and
3. Service Scenario 3 – Provide bi-directional 30-minute service during the regular weekday between LAUS and Santa Clarita Valley and 60-minute bi-directional service to Lancaster.

To achieve these service scenarios the AVL Study identified four capital improvements which were recommended for their combination of operational benefits and cost effectiveness. These capital improvements are identified in the study as the Balboa Double Track Extension, Canyon Siding Extension, Lancaster Terminal Improvements, and the Brighton to McGinley Double Track. The Brighton to McGinley Double Track improvement was approved separately as part of the Brighton to Roxford Double Track Project. The EIR assessed the three remaining capital improvements required for implementation of Service Scenarios 1, 2 and 3, as presented in the AVL Study and supported by the Metro Board. Cumulative impacts are also assessed.

Since the AVL Study design of the Proposed Project has progressed and several design options were included at the Canyon Siding Extension and Lancaster Terminal Improvements sites as a result of consultation with Metrolink. These design options were evaluated in the Draft EIR and no further refinements to the Proposed Project have been made since release of the Draft EIR in July 2021.

ES.5 PROPOSED PROJECT

The Proposed Project is intended to enable improved service along the AVL by constructing capital improvements at three locations strategically selected along the AVL corridor to provide the most operational flexibility possible for the level of investment available. These three capital improvements are the Balboa Double Track Extension in the City of Los Angeles, the Canyon Siding Extension in the City of Santa Clarita, and the Lancaster Terminal Improvement in the City of Lancaster.

At the request of Metrolink, the EIR analyzed platform design options at both the Santa Clarita Station and the Lancaster Terminal. These design options are outside the scope of the existing funding agreements for the Project, and thus, additional funding to implement these design options would be required. These design options are discussed below.

Figure ES-1 shows the regional context of the Project corridor and the location of the proposed capital improvements.

ES.5.1 Balboa Double Track Extension

The Balboa Double Track Extension would extend the existing Sylmar siding approximately 6,300 feet north from Balboa Boulevard to Sierra Highway. It is anticipated that the existing railroad right-of-way (ROW) would accommodate most of the Balboa Double Track Extension. In addition to installation of the proposed double track extension, the improvement would require realignment of the existing Main Track through portions of the site to accommodate the second track and the required clearance to existing structures. The proposed double track would be positioned to the east of the existing AVL Main Track and would tie-in at the existing Sylmar siding terminus on the south end of the site and reconnect with the existing Main Track at the north end just south of the Sierra Highway road bridge. **Figure ES-2** presents the location of the proposed improvement and its surroundings.

ES.5.2 Canyon Siding Extension

The Canyon Siding Extension would improve the existing Saugus Siding by adding approximately 8,400 feet of new track between Bouquet Canyon Road and Golden Oak Road. The Canyon Siding Extension would not require realignment of the Main Track as there is adequate horizontal clearance for both tracks within the existing ROW. The proposed Canyon Siding Extension would include a second side-platform at the existing Santa Clarita Metrolink Station. An at-grade pedestrian crossing would be installed west and east of station platforms to allow passengers to access the proposed new station platform. A new crossover track south of the Santa Clarita Station would be provided to facilitate turnback of Metrolink trains at Santa Clarita Station and improve operational flexibility and reliability. **Figure ES-3** provides the location of the proposed Canyon Siding Extension and its surroundings.

Platform to Platform Pedestrian Undercrossing Design Option

This design option would use a grade separated pedestrian undercrossing at Santa Clarita Station to connect the existing platform to the new second platform, rather than the proposed at-grade pedestrian crossing.

Island Platform with Platform to Parking Lot Pedestrian Undercrossing Design Option

As an alternative to the proposed additional side platform and at-grade pedestrian crossing, this design option would provide a new island platform (with two platform faces) and would include a grade separated pedestrian undercrossing connecting the Santa Clarita Metrolink Station parking area to the new island platform.

Figure ES-2: Balboa Double Track Extension Vicinity

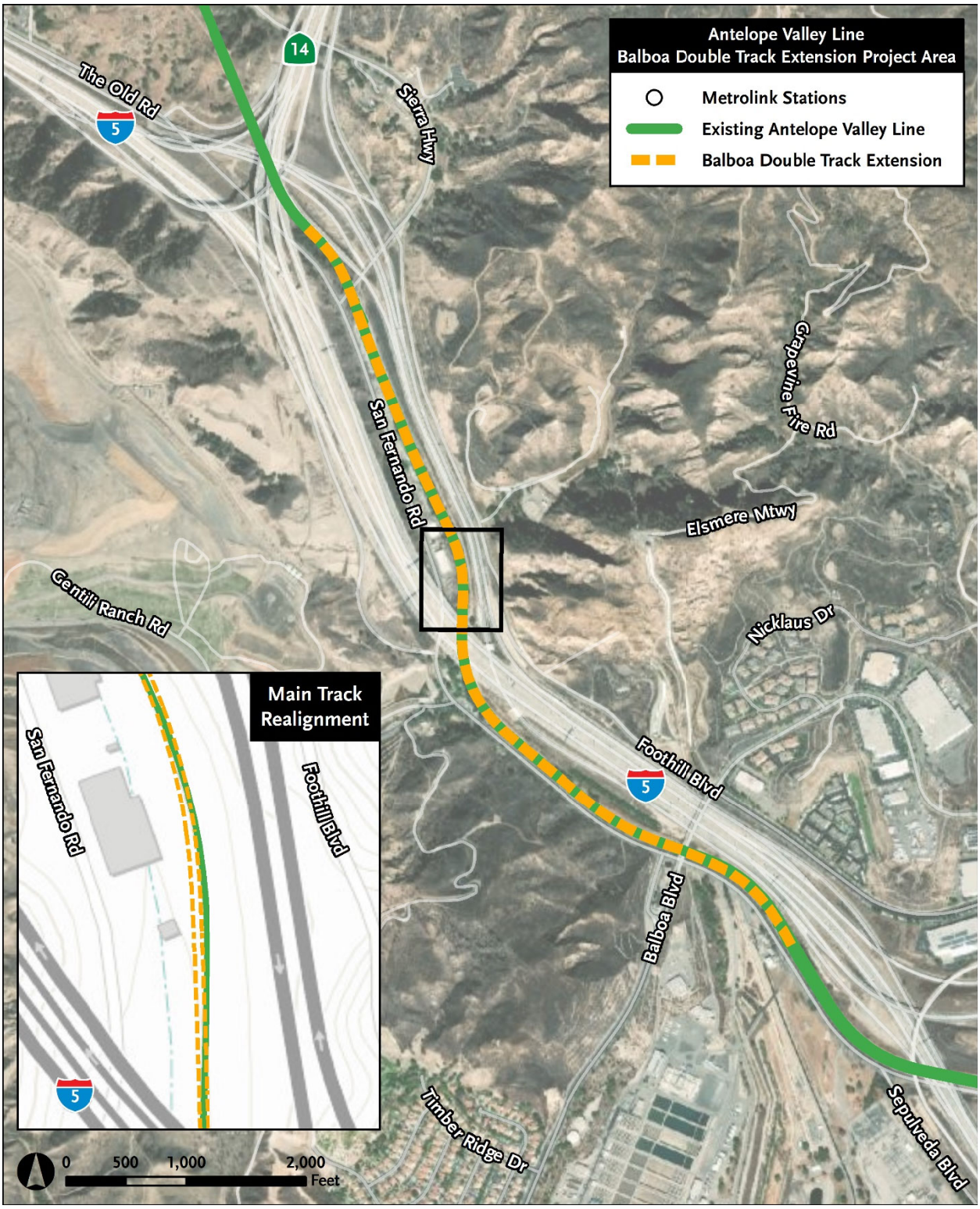


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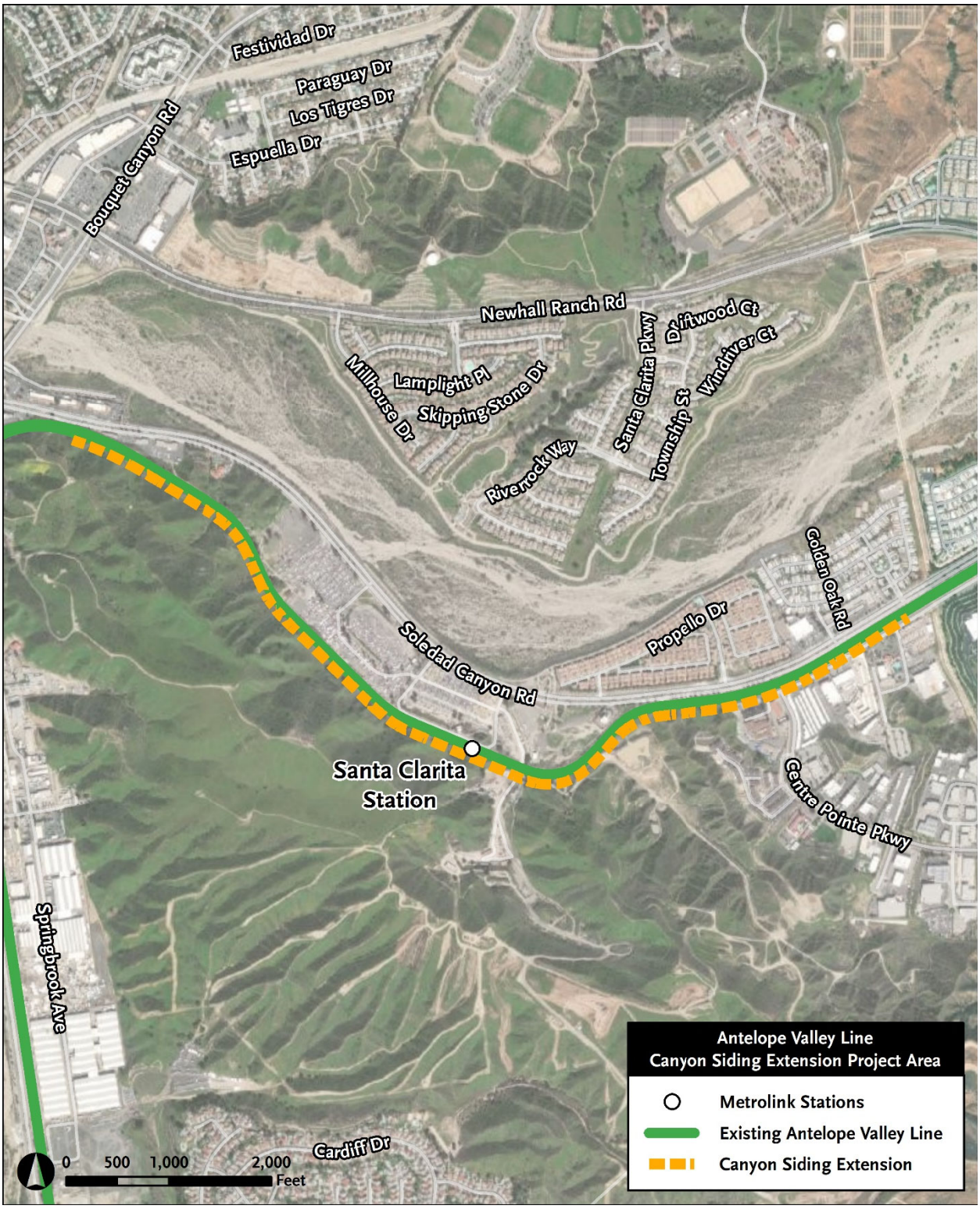
Figure ES-3: Canyon Siding Extension Vicinity



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ES.5.3 Lancaster Terminal Improvements

The Lancaster Terminal Improvements would include the expansion of the existing train layover facilities by adding one new 1,000-foot-long and two 500-foot-long train storage tracks in the vicinity of the existing Lancaster Terminal Metrolink Station. The train storage track design may require an operating easement within the UPRR ROW subject to further design refinements. The proposed layover facility would accommodate up to four 5-car trains. **Figure ES-4** provides the location of the proposed improvement and its surroundings.

Island Platform with Pedestrian Undercrossing Design Option

This design option would provide an island platform with two platform faces at Lancaster Station. The island platform would be constructed within the footprint of the existing station platform and parking lot at Lancaster Station. A grade separated pedestrian undercrossing to the island platform would be constructed in the middle of the new island platform with ramps for access to the proposed island platform.

Island Platform with Pedestrian Overcrossing Design Option

The Island Platform with Pedestrian Overcrossing Design Option would have generally the same track and station configuration as the Island Platform with Pedestrian Undercrossing Design Option, and would use a grade separated pedestrian overcrossing to access the island platform. The pedestrian overcrossing would be constructed on the north end of the island platform with stairs and an elevator to go up and over the railroad track. Pedestrians would access the ground level in the station parking lot near the existing Lancaster Metrolink Station building.

Island Platform with Pedestrian At-Grade Crossing Design Option

The Island Platform with Pedestrian At-Grade Design Option would have generally the same track and station configuration as the Island Platform with Pedestrian Undercrossing Design Option and Island Platform with Pedestrian Overcrossing Design Option, and would use an at-grade pedestrian crossing to access the island platform. The pedestrian at-grade crossings would be constructed on the north and south ends of the island platform. Pedestrians would access the crossing via existing or new sidewalks in the station parking lot.

Figure ES-4: Lancaster Terminal Improvements Vicinity Map

ES.6 DESCRIPTION OF CONSTRUCTION

The Proposed Project would be constructed almost entirely within existing rail or street ROW. Minor acquisitions, easements, or temporary construction easements may be necessary at select locations, mainly to accommodate construction staging and laydown areas or the required grading activities associated with the proposed improvements. Generally, construction activities associated with each capital improvement would include site clearing, grading and retaining wall installation, utility relocation and installation, and track and systems installation and station platform construction.

Construction equipment anticipated to be used for the Proposed Project includes track installation equipment, front-end loaders, dump and haul trucks, excavators, medium to large rams for braking rock, small/medium scrapers, drills for tiebacks/rock bolts, construction forklifts, crane, concrete pump trucks, concrete haul trucks, rail-mounted drill rigs (for pier protection wall installation) and utility/service vehicles.

The construction duration of the Proposed Project is expected to last approximately 24 months per capital improvement. For safety reasons, and to limit disruptions to rail service, project specific work windows would be required for much of the construction work. Similarly, certain activities that could disrupt rail service may require nighttime and weekend construction to minimize disruption. The overall project schedule anticipates construction commencing in 2024 and being completed in 2028.

ES.7 OPERATIONAL CHARACTERISTICS

The Proposed Project is intended to enable the increase in Metrolink service to 30-minute bi-directional service from LAUS to the Santa Clarita Valley and 60-minute bi-directional services from the Santa Clarita Valley to Lancaster. As of 2019, Metrolink operates 30 weekday trains, 12 Saturday trains, and 12 Sunday trains with an end-to-end trip time of approximately two hours and 15 minutes. Peak service operates roughly every 30-60 minutes, with most of the trains making all stops and one train providing express service. Non-peak direction service operates from once every 45 minutes to once every two hours and does not serve the three northern-most stations (Vincent Grade/Acton, Palmdale, and Lancaster). Train speeds along the AVL range from approximately 30 to 70 miles per hour depending on topography, track geometry, and whether there is a single track or double track configuration.

ES.8 SIGNIFICANT AND UNAVOIDABLE IMPACTS

Section 15126.2(c) of the CEQA Guidelines requires EIRs to include a discussion of any significant environmental impacts that cannot be avoided if the Proposed Project is implemented. Sections 3.1 through 3.12 of this EIR provide a detailed analysis of all significant environmental impacts related to the Proposed Project. These sections identify feasible mitigation measures, where available, that could avoid or reduce significant impacts and determine whether the mitigation measures would reduce these impacts to a less than

significant level. Chapter 5.0, Cumulative Impacts, of this Draft EIR identifies the significant cumulative impacts resulting from the combined impacts of the Project and related past, present, and reasonably probable future projects considered in the cumulative analysis.

If a specific impact in either the Proposed Project or cumulative analysis cannot be fully reduced to a less than significant level, it is considered a significant and unavoidable impact. Implementation of the Proposed Project would result in significant and unavoidable impacts related to construction noise and vibration. The following impacts would be significant and unavoidable even after the implementation of mitigation measures:

- Operation of the Proposed Project would conflict with the South Coast Air Quality Management District (SCAQMD) 2016 Air Quality Management Plan (AQMP) as the Proposed Project would generate emissions of nitrogen oxides (NO_X) that would exceed SCAQMD regional thresholds.
- Operation of the Proposed Project would generate emissions of nitrogen oxides (NO_X) that would exceed the SCAQMD regional thresholds resulting in a cumulatively considerable net increase of NO_X contributing to regional non-attainment in the South Coast Air Basin (SCAB). While no mitigation is available to address NO_X emissions from Metrolink diesel locomotives, Metrolink is studying ways to reduce emissions throughout its fleet including transitioning to renewable diesel fuel and new propulsion technologies with the ultimate goal of zero emissions trains.
- Construction and operation of the Proposed Project would result in a net increase in greenhouse gas (GHG) emissions associated with diesel fuel consumption from rail propulsion and therefore would influence the regional GHG inventory through direct emissions of GHGs, While there is no mitigation available to address this direct increase in GHGs, Metrolink is studying ways to reduce emissions throughout its fleet with the ultimate GHG reduction target of reducing total fleetwide operational emissions by 50 percent by 2030.
- Construction activities associated with each of the three capital improvements would result in increases in noise levels that would exceed local significance thresholds. While mitigation measures would likely reduce noise impacts associated with the Canyon Siding Extension construction to less-than-significant in the City of Santa Clarita, higher noise level exceedances associated with the Balboa Double Track Extension in the City of Los Angeles and the Lancaster Terminal Improvements in the City of Lancaster may not be reduced below applicable significance thresholds by mitigation.
- Construction activities associated with each of the three capital improvements would result in vibration levels that would exceed Federal Transit Administration (FTA) annoyance thresholds. While mitigation would likely reduce vibration impacts associated with the Canyon Siding Extension construction to less-than-significant, mitigation may not reduce vibration impacts associated with the Balboa Double Track Extension or the Lancaster Terminal Improvements below impact FTA annoyance impact thresholds.

ES.10 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This Final EIR has been voluntarily prepared by Metro to analyze the potential significant environmental impacts of the Proposed Project and to identify mitigation measures capable of avoiding or substantially reducing significant impacts.

Potential impacts of the Proposed Project have been divided into three categories: significant unavoidable impacts, significant impacts that can be mitigated to less-than-significant levels, and impacts that are less than significant or non-existent. **Table ES-1** provides a summary of the potential environmental impacts, recommended mitigation measures, and the level of significance after mitigation.

Table ES-1: Summary of Impacts and Mitigation Measures

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
AESTHETICS		
Construction equipment and activities associated with the Canyon Siding Extension would be visible to sensitive viewer groups and would temporarily alter the views of the undeveloped hillsides from the residential area north of the Santa Clara River and along the Santa Clara River Trail, resulting in a potentially significant impact to a scenic vista.	**AES-1** During construction in the City Santa Clarita, the perimeter of construction areas, including but not limited to, staging and laydown areas, shall be screened to shield views of construction activities from the residential neighborhood north of Santa Clara River and the Santa Clara River Trail.	Less Than Significant
A soil/rock cut slopes would be installed along the hillside to the south of the Canyon Siding Site, resulting in a permanent change to the hillside and a potentially significant impact to a scenic vista available to residents north of the Santa Clara River and along the Santa Clara River Trail.	**AES-2** In areas where the slope ratio of the soil/rock cut slopes permits vegetation growth, plants shall be placed on the soil/rock cut slopes. The type of vegetation to be planted shall be consistent with the natural vegetation that is generally associated with the undeveloped hillsides adjacent to the rail right-of-way.	Less Than Significant
Nighttime construction work could potentially increase nighttime light or glare, temporarily affecting visibility and possibly resulting in temporary adverse effects (and a potentially significant impact) related to spillover lighting and glare.	**AES-3** During construction, nighttime construction lighting shall be directed toward the interior of the construction area and shielded with temporary construction screening to limit light spillover into adjacent areas.	Less Than Significant
AIR QUALITY		
The Proposed Project would conflict with the SCAQMD 2016 AQMP because rail propulsion operations would generate emissions of NO_X that would exceed the SCAQMD regional thresholds.	No Mitigation Available.	Significant and Unavoidable
The Proposed Project rail propulsion operations would generate emissions of NO_X that would exceed the SCAQMD regional thresholds resulting in a cumulatively considerable net increase of NO_X for which the SCAQMD is non-attainment.	No Mitigation Available.	Significant and Unavoidable

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
BIOLOGICAL RESOURCES		
Construction of the Proposed Project would result in the removal of trees and vegetation used by migratory birds and bats for nesting, a potentially significant impact.	**BIO-1** Vegetation removal shall be conducted outside of the bird nesting season (nesting typically occurs between February 1 through September 30) to the extent feasible. If vegetation removal cannot be conducted outside of the nesting season, a Metro-approved qualified bird biologist shall conduct preconstruction surveys to locate active nests within seven days prior to vegetation removal in each area with a suitable nesting habitat. If nesting birds are found during preconstruction surveys, an exclusionary buffer (150 feet for passerines and 500 feet for raptors) suitable to prevent nest disturbance shall be established by the biologist. The buffer may be reduced based on species-specific and site-specific conditions as determined by the qualified biologist. This buffer shall be clearly marked in the field by construction personnel under the guidance of the biologist, and construction or vegetation removal shall not be conducted within the buffer until the biologist determines that the young have fledged or the nest is no longer active. If work occurs on existing bridges with potential nest sites that will be removed or will have modifications to the substructure, these should be conducted between February 1 and September 30. All bird nests shall be removed prior to February 1. Immediately prior to nest removal, a qualified biologist shall inspect each nest for the presence of torpid bats, which are known to use old swallow nests. Nest removal shall be conducted under the guidance and observation of a qualified biologist. Removal of nests on bridges that are under construction shall be repeated as frequently as necessary to prevent nest completion unless a nest exclusion device has already been installed. Nest removal and exclusion device installation shall be monitored by a qualified biologist. Such exclusion efforts shall be continued to keep the structures free of birds until October or the completion of construction. A biological monitor shall be present during all ground-disturbing activities to ensure no impacts occur to nesting birds during nesting bird season (mid-March to mid-May), if applicable, as well as to ensure minimal impacts to other plant and animal species **BIO-2** To avoid impacts to nesting birds, Metro shall submit to the California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife Service (USFWS) a Nesting Bird Management, Monitoring, and Reporting Plan for review and approval prior to commencement	Less Than Significant

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	of Proposed Project construction activities during the breeding season (February 1 to August 31, and as early as January 1 for some raptors). The Nesting Bird Management, Monitoring, and Reporting Plan should include the following: • Nest survey protocols describing the nest survey methodologies, including the following: o A management plan describing the methods to be used to avoid nesting birds and their nests, eggs, and chicks; o A monitoring and reporting plan detailing the information to be collected for incorporation into a regular Nest Monitoring Log (NML) with sufficient details to enable USFWS and CDFW to monitor the Metro's compliance with California Fish and Game Code Sections 3503, 3503.5, 3511, and 3513; o A schedule for the submittal (usually weekly) of the NML; o Standard buffer widths deemed adequate to avoid or minimize significant project-related edge effects (disturbance) on nesting birds and their nests, eggs, and chicks; o A detailed explanation of how the buffer widths were determined; and o All measures Metro will implement to preclude birds from utilizing project-related structures (i.e., construction equipment, facilities, or materials) for nesting. • Preconstruction nesting bird surveys shall be completed within 72 hours of construction-related activities and implement appropriate avoidance measures for identified nesting birds. To determine the presence of nesting birds that the project activities may affect, surveys should be conducted beyond the Project Area - 300 feet for passerine birds and 500 feet for raptors. The survey protocols should include a detailed description of methodologies utilized by CDFW-approved avian biologists to search for nests and describe avian behaviors that indicate active nests. The protocols should include but are not limited to the size of the Project Area being surveyed, method of search, and behavior that indicates active nests. Each nest identified in	

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	the Project Area should be included in the NML. The NMLs should be updated daily and submitted to the CDFW weekly. Since the purpose of the NMLs is to allow the CDFW to track compliance, the NMLs should include information necessary to allow comparison between nests protected by standard buffer widths recommended for the Proposed Project (300 feet for passerine birds, 500 feet for raptors) and nests whose standard buffer width was reduced by encroachment of project-related activities. The NMLs should provide a summary of each nest identified, including the species, status of the nest, buffer information, and fledge or failure data. The NMLs will allow for tracking the success and failure of the buffers and will provide data on the adequacy of the buffers for certain species. The applicant(s) will rely on its avian biologists to determine the appropriate standard buffer widths for nests within the Project Area to employ based on the sensitivity levels of specific species or guilds of avian species. The determination of the standard buffer widths should be site- and species-/guild-specific and data-driven and not based on generalized assumptions regarding all nesting birds. • The determination of the buffer widths should consider the following factors: o Nesting chronologies; o Geographic location; o Existing ambient conditions (human activity within line of sight—cars, bikes, pedestrians, dogs, noise); o Type and extent of disturbance (e.g., noise levels and quality—punctuated, continual, ground vibrations: blasting-related vibrations proximate to tern colonies are known to make the ground-nesting birds flush the nests); o Visibility of disturbance; o Duration and timing of disturbance; o Influence of other environmental factors; and o Species' site-specific level of habituation to the disturbance. Application of the standard buffer widths should avoid the potential for project-related nest abandonment and fledgling failure and minimize any disturbance to the nesting behavior.	

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	If project activities cause or contribute to a bird being flushed from a nest, the buffer must be widened. **BIO-3** Prior to tree removal or demolition activities, Metro shall retain a qualified biologist to conduct a focused survey for bats and potential roosting sites within buildings to be demolished or trees to be removed. The surveys can be conducted by visual identification and can assume presence of hoary and/or pallid bats. Alternatively, the bats can be identified to a species level with the use of a bat echolocation detector such as an "Anabat" unit. If no roosting sites or bats are found, a letter report confirming absence shall be sent to the CDFW and no further mitigation is required. If roosting sites or hoary bats are found, then the following monitoring and exclusion, and habitat replacement measures shall be implemented. If bats are found roosting outside of nursery season (nursery season typically occurs between May 1 through October 1), then they shall be evicted as described below. First, the bats shall be monitored to determine if the roost site is a maternal roost. This could occur by either visual inspection of the roost bat pups, if possible, or monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats shall be evicted as described below. Because bat pups cannot leave the roost until they are mature enough, eviction of a maternal roost cannot occur during the nursery season. A 250-foot (or as determined in consultation with CDFW) buffer zone shall be established around the roosting site within which no construction or tree removal shall occur. Eviction of bats shall be conducted using bat exclusion techniques, developed by Bat Conservation International (BCI) and in consultation with CDFW, that allow the bats to exit the roosting site but prevent re-entry to the site. This would include, but not be limited to, the installation of one-way exclusion devices. The devices shall remain in place for seven days and then the exclusion points and any other potential entrances shall be sealed. This work shall be completed by a BCI-recommended exclusion professional. The exclusion of bats shall be timed and carried concurrently with any	

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	scheduled bird exclusion activities. Each roost lost (if any) will be replaced in consultation with the California Department of Fish and Game and may include construction and installation of BCI-approved bat boxes suitable to the bat species and colony size excluded from the original roosting site. Roost replacement will be implemented before bats are excluded from the original roost sites. Once the replacement roosts are constructed and it is confirmed that bats are not present in the original roost site, the structures may be removed or sealed. **BIO-4** A revegetation plan will be developed by a qualified biologist to guide the restoration of native vegetation temporarily or permanently impacted by project implementation. **BIO-5** Limits of disturbance will be staked during construction activities to ensure that impacts to the Project Area are minimized, and staking will stay in place until final site stabilization. **BIO-6** If construction must occur during nighttime hours, lighting that produces a green colored beam with an automatic sensor shall be utilized. **BIO-7** Metro/ Metrolink shall retain a qualified biologist with a gnatcatcher survey permit. The qualified biologist shall survey the Project site and adjacent areas to determine presence/absence of gnatcatcher. The qualified biologist shall conduct surveys according to USFWS Coastal California Gnatcatcher (Polioptila californica californica) Presence/Absence Survey Guidelines. The protocol shall be followed for all surveys unless otherwise authorized by the USFWS in writing. Gnatcatcher surveys shall be conducted and USFWS notified (per protocol guidance) prior to starting any Project construction and activities within and adjacent to California coastal gnatcatcher habitat. Where Project construction and activities would occur within and/or adjacent to California coastal gnatcatcher habitat, no work shall occur from February 15 through August 31. There shall be no clearing, removing, or cutting any California coastal gnatcatcher habitat.	

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	If California coastal gnatcatcher habitat is identified within the construction footprint of any of the capital improvement sites, Metro/ Metrolink shall provide compensatory mitigation for loss of any California coastal gnatcatcher habitat at no less than a 2:1. Mitigation lands shall occur within the same watershed, and support California coastal gnatcatcher habitat of similar vegetation composition, density, coverage, and species richness and abundance. **BIO-8** Prior to Project construction activities at the Balboa Double Track Extension site, a qualified biologist shall conduct protocol surveys for least Bell's vireo. All riparian areas and any other potential least Bell's vireo habitat shall be surveyed at least eight times during the period from April 10 to July 31. Survey results, including negative findings, shall be submitted to CDFW and USFWs within 45 calendar days following the completion of protocol-level surveys. If least Bell's vireo is detected no construction work including staging, mobilization, and site preparation, shall occur during the least Bell's vireo nesting season (April 10 to July 31). No habitat supporting least Bell's vireo shall be removed at any time. If least Bell's vireo is detected and work must occur during the least Bell's vireo nesting season for the duration of the Proposed Project, and/or if habitat supporting least Bell's vireo needs to be removed, Metro/Metrolink shall seek appropriate take authorization under the California Endangered Species Act. Metro/ Metrolink shall obtain a permit from California Department of Fish and Wildlife prior to starting any Project construction and activities. **BIO-9** There shall be no impacts on western Joshua trees and seedbank. Access to the Lancaster Terminal Improvements site shall not be allowed from Yucca Avenue/West Milling Street. No activities shall occur within a 250-foot radius of the western Joshua tree to avoid impacts to the tree and potential seedbank. This shall include no site access, vehicle parking, staging areas, refueling, and any activities that may result in ground disturbance. If necessary, Metro/Metrolink shall seek appropriate take authorization under the California Endangered Species Act before starting any construction and activities where impacts to the western Joshua tree and seedbank	

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	cannot be avoided. **BIO-9** At least one year prior to starting any Project construction and activities, qualified biologist shall conduct season appropriate pre-Project presence/absence fish surveys and habitat at the Balboa Double Track Extension site. Surveys shall be performed by a qualified biologists with appropriate Scientific Collecting Permit. Also, surveys shall be performed in consultation and coordination with CDFW. If a California Endangered Species Act (CESA) and/or Endangered Species Act (ESA)-listed fish species is detected and impacts on those fish and habitat cannot be avoided, Metro/ Metrolink shall consult with CDFW and/or USFWS to obtain necessary permits for take of CESA and/or ESA-listed fish species. Metro/ Metrolink shall have a permit from CDFW and/or USFWS prior to starting any Project construction and activities. **BIO-10** If a Species of Special Concern is detected and impacts on those fish and habitat cannot be avoided, Project construction and activities shall only occur after fish are relocated in accordance with a CDFW-approved Fish Species Relocation Plan. Metro/ Metrolink, in consultation with a qualified biologist shall prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. Wildlife shall be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to adjacent appropriate habitat within the open space on site or in suitable habitat adjacent to the Project site (either way, at least 200 feet from the work area). Special status wildlife shall be captured only by a qualified biologist with proper handling permits. **BIO-11** At least one year prior to starting any Project construction and activities, a CDFW-approved biologist shall conduct focused surveys for unarmored threespine stickleback where there is potential habitat at the Canyon Siding Extension site and any locations within the Canyon Siding Extension site that is hydrologically connected to the Santa Clara River. Surveys shall be performed by a qualified biologists with appropriate Scientific Collecting Permit. Also, surveys shall be performed in consultation and coordination with CDFW. Survey results, including negative findings, shall be provided to	

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	CDFW. Metro/ Metrolink shall coordinate with CDFW if unarmored threespine stickleback is found. If unarmored threespine stickleback is found, Metro/ Metrolink shall fully avoid all impacts to unarmored threespine stickleback and habitat supporting this California Fully Protected species. No work shall be performed when water is present in tributaries supporting unarmored threespine stickleback. Also, no dewatering of tributaries shall be performed at any time as draining water and reducing water levels could strand, injure, or cause mortality of unarmored threespine stickleback. **BIO-12** During final design and at least one year prior to construction, a qualified biologist with access to the rail right-of-way, shall conduct a field assessment within the Balboa Double Track Extension and Canyon Siding Extension sites. The assessment shall include an inventory of observable plant and animal species, mapping and characterization of on-site habitats, and an evaluation of each site's potential to support special status species. Presence/absence surveys shall be conducted for special status plants, San Diego desert woodrat, coastal whiptail, western spadefoot toad, arroyo toad, silvery legless lizard, coast horned lizard, as well as small mammals, and bats. Results of the field assessment shall be provided to CDFW. In consultation with CDFW, the qualified biologist shall make recommendations for the avoidance of any identified species including but not limited to additional preconstruction surveys, capture and relocation of terrestrial species by a qualified biologist with proper scientific collection and handling permits, additional restrictions on construction equipment and/or means, and application for appropriate take authorization.	
Construction of the Balboa Double Track Extension and the Canyon Siding Extension would have the potential to remove riparian vegetation and other sensitive plant communities.	**BIO-13** Riparian zones within the three capital improvement sites shall be protected through control of invasive plant species. All construction vehicles and heavy equipment shall be washed (including treads, wheels, and undercarriage) prior to delivery to the Project site to minimize weed seeds entering the construction area via vehicles.	Less Than Significant

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	Slope stabilization and replanting materials used during construction shall be certified as weed-free. Invasive plant species (such as giant reed) located on the Proposed Project site shall be removed during construction. Invasive plan species shall be removed using best management practices that contain and properly dispose of the species' seeds and plant materials (which may reproduce asexually). Transport of any invasive plant material offsite shall be stored in securely covered containers or vehicles and disposed of at facilities that shall properly eliminate the ability of these materials to grow or colonize new areas. **BIO-14** In areas where riparian features are below upland features, a qualified biologist shall determine if any disturbance would occur in upland areas such that runoff could affect wetlands or riparian habitat. If riparian features are identified in locations that may be subject to construction-related runoff, the qualified biologist shall identify these areas, clearly delineate sensitive site conditions on-site, and recommend best management practices for the control of runoff including but not limited to • Minimizing the extent of disturbed areas and duration of exposure; • Stabilizing and protecting disturbed areas; • Keeping runoff velocities low; • Retaining sediment within the construction area; • Use of silt fences or straw wattles; • Temporary soil stabilization; • Temporary drainage inlet protection; • Temporary water diversion around the immediate work area; and • Minimizing debris from construction vehicles on roads providing construction access **BIO-15** Metro shall provide no less than 2:1 ratio for direct impacts on streams and associated riparian plant community. Metro shall provide additional mitigation for impacts on riparian plant communities that have a State Rarity Ranking of S1 and S2 and an additional ranking of 0.1 and 0.2 to be determined through consultation with California Department of Fish and Wildlife and/or Department of Fish and	

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	Wildlife, as applicable. **BIO-16** Metro/ Metrolink shall replace no less than three trees for every one southern California black walnut and coast live oak tree that is removed. **BIO-17** Metro/ Metrolink shall create or restore no less than one acre for every one acre of impact on a sensitive plant community. Metro/ Metrolink shall create or restore no less than two acres for impacts on a sensitive plant community that consists of heritage-sized trees, vigorous trees, or seedlings/saplings. Mitigation shall be provided on lands within the same watershed as the area impacted. The density of trees at the mitigation site shall be at least the same as the density of trees in the habitat that was impacted. The mitigation site shall also provide the same understory species as found in the impacted area.	
Construction activities associated with the Balboa Double Track Extension have the potential to result in hydrological interruption through the inadvertent disturbance of water features associated with grading activities, which may affect riverine features that support wetlands.	**BIO-18** To prevent inadvertent disturbance to areas outside the limits of grading, all grading shall be monitored by a biologist. A Metro-approved Project Biologist shall be contracted to perform biological monitoring during all grading, clearing, grubbing, trenching, and construction activities. The following shall be completed: • The Project Biologist shall perform the monitoring duties before, occasionally during, and after construction. The Project Biologist shall perform the following duties: o Attend the preconstruction meeting with the contractor and other key construction personnel prior to clearing, grubbing, or grading to reduce conflict between the timing and location of construction activities and other mitigation requirements (e.g., seasonal surveys for nesting birds); o Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas prior to clearing, grubbing, or grading; o Discuss procedures for minimizing harm to or harassment of wildlife encountered during construction with the contractor and other key construction personnel prior to clearing,	Less Than Significant

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	grubbing, or grading; ○ Review and/or designate the construction area in the field with the contractor in accordance with the final grading plan prior to clearing, grubbing, or grading; ○ Conduct a field review of the staking to be set by the surveyor, designating the limits of all construction activity prior to clearing, grubbing, or grading; ○ Be present during initial vegetation clearing, grubbing, and grading; ○ Flush special-status species (i.e., avian or other mobile species) from occupied habitat areas immediately prior to brush-clearing and earthmoving activities; and ○ To address hydrology impacts, the Project Biologist shall verify that grading plans include a Stormwater Pollution Prevention Plan. **BIO-19** To comply with the state and federal regulations for impacts to "waters of the United States and state," the following agency permits are required, or verification that they are not required shall be obtained. • The following permit and agreement shall be obtained, or evidence from the respective resource agency that such an agreement or permit is not required shall be provided: ○ A Clean Water Act, Section 401/404 permit issued by the California Regional Water Quality Control Board (RWQCB) and the USACE for all project-related disturbances of waters of the United States and/or associated wetlands. ○ A Section 1602 Streambed Alteration Agreement issued by the CDFW for all project-related disturbances of any streambed. 1. Quantification of the linear feet of streams and area of associated riparian vegetation that would be impacted. 2. An analysis providing information on whether impacts to streams within the immediate project area could cause impacts downstream where there is hydrologic connectivity; 3. A hydrological evaluation of the 100, 50, 25, 10, 5, and	

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	2-year frequency storm event for existing and proposed conditions to provide information on how water and sediment is conveyed through the Project site; 4. A scour analysis demonstrating that stream banks, bed, and channel would not erode and be impaired (e.g., aggrade, incised) as a result of Project activities; 5. An analysis demonstrating that the Project would not impact stream underflow supporting riparian vegetation; 6. Identification, analysis, and discussion of potential impacts on streams and associated vegetation as a result of upland Project construction and activities; 7. Specific activities and actions Metro proposes to take to mitigate for impacts on streams and riparian vegetation, specifically, actions to control invasive plants and animals and reintroducing native biota; 8. A complete description of routine maintenance activities that may be required for the life of the Project including measures to avoid impacts on streams and riparian vegetation during routine maintenance activities occurring for the life of the Project; and, **9.** Protocol survey results (see Mitigation Measures BIO-7 through BIO-11), including negative findings, shall be included as part of the LSA Notification. Survey reports shall include information on habitat within the Project site and whether the Project would impact habitat supporting those species. • Documentation: Metro/Metrolink shall consult each agency to determine if a permit or agreement is required. Upon completion of the agency review of this project, the applicant shall provide a copy of the permit(s)/agreement(s), or evidence from each agency that such an agreement or permit is not required for compliance. • Timing: Prior to approval of any grading and or improvement plans and issuance of any Grading or Construction Permits. • Monitoring: Metro shall review the permits/agreement for compliance with this condition. Copies of these permits should be implemented on the grading plans.	

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
Construction activities at all three capital improvement sites have the potential to remove mature trees, including Coast Live Oak at the Canyon Siding Extension site, as part of site clearing activities and associated grading activities.	**BIO-20** Preconstruction surveys for protected trees (native trees four inches or more in cumulative diameter, as measured at 4.5 feet above the ground level, that are subject to protection under any relevant tree protection ordinance, shall be conducted by a registered consulting arborist with the American Society of Consulting Arborists at least 120 days prior to construction. The locations and sizes of all protected trees shall be identified prior to construction and overlaid on project footprint maps. The registered consulting arborist shall prepare a Protected Tree Report and shall submit three copies to the relevant local jurisdiction. Any protected trees that must be removed due to project construction shall be replaced at a 2:1 ratio (or up to a 4:1 ratio for protected trees on private property) except when the protected tree is relocated on the same property, the relevant local agency has approved the tree for removal, and the relocation is economically reasonable and favorable to the survival of the tree. Each replacement tree shall be at least a 15-gallon specimen, measuring one inch or more in diameter, one foot above the base, and shall be at least seven feet in height measured from the base. **BIO-21** Protect trees that will possibly receive impacts to the root system by restricting root cuts to the outer region of the roots using a distance formula recommended by the International Society of Arboriculture. Adjust utility relocations to avoid as many tree trunks and root clusters as possible and eliminate direct impacts/removal of trees. Hand digging the root protection zones will reduce indirect impacts to the root systems. **BIO-22** Provide temporary supplemental irrigation to existing trees during construction, as necessary. **BIO-23** Replace all impacted trees that cannot be saved with trees of the same genus, species, and variety (if applicable) as the tree that is removed. Replacement trees shall be locally sourced from within the same watershed and not from a supplier. Replacement trees shall come from a local native plant nursery that implements Phytophthora/Clean Nursery Stock protocols. **BIO-24** Determine proven methods of stabilizing the existing landscape to	Less Than Significant

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	minimize disturbances beyond the area of cut and fill. **BIO-25** Consider "Geo-cell" type planted retaining wall stabilization structures, if they can be planted with native chaparral seed. **BIO-26** Provide compost to hold moisture in the soil. Utilize watering bags for the establishment period. **BIO-27** All tree material, especially tree material infected with pests, pathogens, and diseases, shall be left on site, chipping the material for use as ground cover or mulch.	
CULTURAL RESOURCES		
Ground-disturbing activities during construction of the Proposed Project have the potential to encounter previously undiscovered and undocumented archaeological resources, a potentially significant impact.	**CUL-1** Mitigation Measure **CUL-1** pertains specifically to archaeological involvement. The involvement of the Fernandeño Tataviam Band of Mission Indians and Gabrieleno Band of Mission Indians – Kizh Nation (Consulting Tribes) is detailed in Mitigation Measure **TCR-1**. For the purposes of Mitigation Measures **CUL-1** and **TCR-1**, ground disturbing activities include, but are not limited to, excavation, trenching, grading, and drilling. Prior to issuance of grading permits, a qualified archeologist, meeting the Secretary of the Interior's Standards, shall be retained to serve as Program Archaeologist to develop and supervise the archaeological monitoring program. Prior to commencement of any grading activities on site, the Program Archaeologist shall prepare a Cultural Resources Monitoring Plan (CRMP). The CRMP shall be reviewed by the Lead Agency. The Consulting Tribes shall also be provided an opportunity to review and comment on the CRMP. The CRMP should include at a minimum: (1) the roles and responsibilities of the Program Archaeologist, archaeological monitor, and Native American monitor; (2) the definition of an Environmentally Sensitive Area (ESA) around the previously-identified prehistoric resources adjacent to the Canyon Siding Extension project area, (3) a description of monitoring procedures; (4) a description of the frequency of monitoring (e.g., full-time, part-time, spot checking); (5) a description of what types of resources may be encountered; (6) a description of circumstances that would result in the halting of work at the program site (e.g., what is considered a "significant" archaeological site); (7) a description of	Less Than Significant

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	procedures to follow when a resource is encountered including curation procedures agreed upon by the Consulting Tribes; (8) communication/notification protocols; and (9) a description of monitoring reporting procedures. At the commencement of construction, an archaeologist shall provide a Worker Environmental Awareness Program (WEAP) training for all earth moving personnel and their supervisors. WEAP materials shall be developed and distributed to construction personnel over the lifetime of the Program. The program shall inform personnel of the types of artifacts and features that may be encountered, the procedures to be followed if archaeological materials are unearthed during program excavation, contact information for the archaeological and Consulting Tribe personnel, and the regulatory requirements for the protection of archaeological resources including penalties for violations. The archaeological monitor shall be present for all ground-disturbing activities in native soil (i.e., undisturbed, non-fill sediments) within the Balboa Double Track Extension and Lancaster Terminal Improvements sites. Within the Canyon Siding Extension capital improvement area, the archaeological monitor shall be present for all ground-disturbing activities within the ESA, including those in disturbed fill sediments. During ground-disturbing activities outside of the ESA within the Canyon Siding Extension capital improvement area, archaeological monitoring shall be limited to ground-disturbing activities within native soil only. All archaeological monitors, working under the supervision of the Program Archaeologist, shall have construction monitoring experience and be familiar with the types of historical and prehistoric resources that could be encountered. A sufficient number of archaeological monitors shall be present each workday to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. The Program Archaeologist shall have the ability to recommend, with written and photographic justification, the reduction or termination of monitoring efforts to the Lead Agency (i.e., Metro), and should the Lead Agency and the Consulting Tribes concur with this assessment, then monitoring shall be reduced or ceased. If an inadvertent discovery of archaeological materials is made during program-related construction activities, the archaeological monitor shall	

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	have the authority to halt ground disturbing activities within 50 feet of the resource(s) and an ESA physical demarcation shall be constructed. The Program Archaeologist and Lead Agency shall be notified regarding the discovery. If prehistoric or potential TCRs are identified within disturbed or native sediments, the Consulting Tribes shall be notified. The procedures outlined in CRMP shall then be implemented.	
GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES		
The Proposed Project and Station Design Options pose risks of loss, injury, or death related to seismic conditions including ground shaking, liquefaction, slope failure and landslide, a potentially significant impact.	**GEO-1** Prior to the construction of the Proposed Project, Metro shall develop a geotechnical design report to address geological, seismic, and soil-related constraints encountered by the Project. The Proposed Project shall be designed based on the latest versions of local and state building codes and regulations in order to construct seismically resistant structures that help counteract the adverse effects of ground shaking. During final design, site-specific geotechnical investigations shall be performed at the sites where structures are proposed within liquefaction-prone designated areas. The investigations shall include exploratory soil borings with groundwater measurements. The exploratory soil borings shall be advanced, at a minimum, to the depths required by local and state jurisdictions to conduct liquefaction analyses. Similarly, the investigations shall include earthquake-induced settlement analyses of the dry substrata (i.e., above the groundwater table). The investigations shall also include seismic risk solutions to be incorporated into the final design (e.g., deep foundations, ground improvement, remove and replace) for those areas where liquefaction potential may be experienced. The investigation shall include stability analyses of slopes located within earthquake-induced landslide areas and provide appropriate slope stabilization measures (e.g., retaining walls, slopes with shotcrete faces, slopes re-grading). The geotechnical investigations and design solutions shall follow the “Guidelines for Evaluating and Mitigating Seismic Hazards in California” Special Publication 117A of the California Geologic Service, as well as Metro’s Design Criteria and the latest federal and state seismic and environmental requirements.	Less Than Significant
There is potential that construction of the Proposed Project would unearth or destroy unique paleontological	**PAL-1** Full-time paleontological monitoring shall be implemented when Saugus Formation (QTs, Tsr), Pico Formation (Tps, Tp), Towsley	Less Than Significant

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
or geologic features, a potentially significant impact.	Formation (Ttos), or older sedimentary deposits (Qog, Qoa) are impacted. Excavations into artificial fill (af) and younger sedimentary deposits (Qf, Qyfc, Qa, Qg) shall be initially spot-checked during excavations that exceed depths of 5 feet to check for underlying, paleontologically sensitive older sedimentary deposits. If it is determined that only artificial fill (af), modern alluvial fan deposits (Qf), younger alluvial fan deposits (Qyfc), alluvial gravel, and clay of valley areas (Qa), or stream channel deposits (Qg) are impacted, the monitoring program may be reduced or suspended. **PAL-2** Prior to construction, a Paleontological Resources Impact Mitigation Program (PRIMP) shall be prepared that provides detailed recommended monitoring locations; a description of a paleontological resources worker environmental awareness program to inform construction personnel of the potential for fossil discoveries and of the types of fossils that may be encountered; detailed procedures for monitoring, fossil recovery, laboratory analysis, and museum curation; and notification procedures in the event of a fossil discovery by a paleontological monitor or other project personnel. A curation agreement from the NHMLA, or another accredited repository, shall also be obtained prior to excavation in the event that paleontological resources are discovered during the construction phase of the Project.	
GREENHOUSE GAS EMISSIONS		
Construction and operation of the Proposed Project would result in a net increase in greenhouse gas emissions as a result of increased diesel locomotive activity along the AVL.	**GHG-1** The following control techniques shall be included in project specifications and shall be implemented by the construction contractor. • Prepare a comprehensive inventory list of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) (i.e., make, model, engine year, horsepower, emission rates) that could be used an aggregate of 40 or more hours throughout the duration of construction to demonstrate how the construction fleet is consistent with the requirements of Metro's Green Construction Policy • Ensure that all construction equipment is properly tuned and maintained	Significant and Unavoidable

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	• Minimize idling time to 5 minutes, whenever feasible, which saves fuel and reduces emissions • Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary diesel power generators. • Arrange for appropriate consultations with CARB or SCAQMD to determine registration and permitting requirements prior to equipment operation at the site and obtain CARB Portable Equipment Registration with the state or a local district permit for portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, as applicable **GHG-2**: In compliance with Metro's Green Construction Policy, all off-road diesel powered construction equipment greater than 50 horsepower shall comply with USEPA Tier 4 final exhaust emission standards (40 CFR Part 1039). In addition, if not already supplied with a factory-equipped diesel particulate filter, all construction equipment shall be outfitted with best available control technology devices certified by the CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine, as defined by CARB regulations. In addition to the use of Tier 4 equipment, all off-road construction equipment shall be fueled using 100 percent renewable diesel.	
HAZARDS AND HAZARDOUS MATERIALS		
Construction of the Proposed Project would involve the temporary use of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids for on-site construction equipment.	**HAZ-1** Prior to the start of construction, the contractor shall provide Metro/Metrolink with an industrial waste management plan and/or a waste and hazardous materials management plan, such as a plan defined in Title 19 California Code of Regulations or a Spill Prevention, Control, and Countermeasure Plan. These plans shall be completed to Metro contractor specifications and will identify the responsible parties and outline procedures for hazardous waste and hazardous materials worker training, certifications, handling, storage, and transport during construction of the Project. The plan shall specify how the contractor will handle and manage wastes onsite, including:	Less Than Significant

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	• Prescribe BMPs to follow to prevent hazardous material releases and cleanup of any hazardous material releases that may occur • Comply with the SWRCB Construction CWA Section 402 General Permit conditions and requirements for transport, labeling, containment, cover, and other BMPs for storage of hazardous materials during construction During construction, the contractor shall comply with applicable federal and state regulations that consider hazardous material handling and storage practices, such as RCRA, CERCLA, the Hazardous Materials Release Response Plans and Inventory Law, and the Hazardous Waste Control Act. **HAZ-2** Prior to the start of construction, the construction contractor shall retain a qualified environmental consultant to prepare a Soil Management Plan, Soil Reuse Management Plan, Groundwater Management Plan, and/or Soil, Soil Vapor, and Groundwater Management Plan. These plans shall be completed to Metro's contractor specifications and submitted to Metro prior to any ground-disturbing activities for the project. Alternatively, soil, soil vapor, and/or groundwater plans shall be prepared separately and then compiled together as a Soil, Soil Vapor, and Groundwater Management Plan.	
Construction of the Proposed Project has the potential to encounter contaminated soil and groundwater which may contain aerially deposited lead, lead-based paints, asbestos containing materials, methane vapor, explosives, and other hazardous materials related to historic uses that handled hazardous materials.	**HAZ-3** Consistent with Metro's standard practice, prior to the start of construction, the contractor shall provide Phase I Environmental Site Assessments (ESAs) in accordance with standard American Society for Testing and Materials (ASTM) methodologies, to assess the land use history of each parcel that would be acquired for the Project. The determination of parcels that require a Phase II ESA (i.e., soil, groundwater, soil vapor subsurface investigations) shall be evaluated after the Phase I ESAs have been completed and would be based on the results of the Phase I ESAs. Specifically, if the Phase I ESAs identify suspected contamination in the soil, soil vapor, or groundwater; a Phase II ESA shall be conducted to determine whether the suspect contamination had resulted in soil, groundwater, or soil vapor contamination exceeding regulatory action levels.	Less Than Significant

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	If the Phase II ESA concludes that the site is impacted, remediation or corrective action (e.g., removal of contamination, in-situ treatment, capping) shall be conducted prior to or during construction under the oversight of federal, state, and/or local agencies (e.g., United States Environmental Protection Agency (USEPA), Department of Toxic Substances Control (DTSC), Regional Water Quality Control Board (RWQCB), Los Angeles County) and in full compliance with current and applicable federal and state laws and regulations. Additionally, Voluntary Cleanup Agreements shall be used for parcels where remediation or long-term monitoring is necessary. **HAZ-4** The Balboa Double Track Extension shall be designed in accordance with the City of Los Angeles Municipal Code, Chapter IX, Building Regulations, Article 1, Division 71, Methane Seepage Regulations, as amended by the City of Los Angeles Methane Ordinance (No. 175790). Specific requirements shall be determined according to actual methane levels and pressures measured along the Affected Area, and the specific requirements shall be incorporated into the design and construction.	
Portions of the Canyon Siding Extension site are located within the historic boundaries of the Whitaker-Bermite Facility which is included in the Cortese List of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and construction of the Canyon Siding Extension has the potential to pose a hazard to the public or the environment.	See Mitigation Measures **HAZ-1, HAZ-2, HAZ-3,** and **HAZ-4**.	Less Than Significant
HYDROLOGY AND WATER QUALITY		
Construction of the Proposed Project would require grading and excavation requiring temporary changes to existing drainage patterns. Increases in sediment load from the construction area, including potentially contaminated soils associated with the Canyon Siding Extension site, could lead to alterations in drainage patterns due to accumulations of sediment in downstream areas as well as reduced water quality of receiving waters, if not properly managed. Following construction, AVL rail operations would	**WQ-1** During construction, Metro/Metrolink shall prepare a Stormwater Pollution Prevention Plan (SWPPP) in compliance with the provisions of the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (CGP) (Order No. 2009-0009-DWQ, NPDES No. CAS000002) and any subsequent amendments (Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ), as they relate to project construction activities within the Balboa Double Track Extension, Canyon Siding Extension, and/or Lancaster Terminal Improvements sites. Construction activities shall not commence until a waste discharger identification number is received	Less Than Significant

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
contribute pollutants in concentrations and amounts that are typical for transportation facilities consistent with existing conditions and minor alterations to the existing drainage pattern of each capital improvement site requiring compliance with MS4 permit requirements.	from the Stormwater Multiple Application and Report Tracking System. The contractor for each capital improvement shall implement all required aspects of the SWPPP during project construction. **WQ-2** Metro/Metrolink shall comply with the NPDES Waste Discharge Requirements for MS4 Discharges within the Coastal Watersheds of Los Angeles County (Order No. 2012-0175, NPDES No. CAS004001), effective December 28, 2012 (known as the Phase I Permit). and NPDES General Permit for Storm Water Discharges From Small Municipal Separate Storm Sewer Systems (NPDES No. CAS000004), as applicable This post-construction requirement shall apply to each of the capital improvement sites. Metro shall prepare a final Low Impact Design (LID) report in accordance with the applicable local LID Manual. These include the City of Los Angeles Planning and Land Development Handbook for Low Impact Development, May 9, 2016 and the County of Los Angeles Department of Public Works Low Impact Development Standards Manual, February 2014. The LID report shall identify the required BMPs to be in place prior to project operation and maintenance.	
While it is not anticipated that groundwater will be encountered, during construction if groundwater is encountered there is potential for the groundwater to be contaminated resulting in potential for significant impacts to surface water if allowed to flow into local storm drains or other surface water conveyance facilities.	**WQ-3** In the event that groundwater is encountered during excavation, the construction contractor for each capital improvement site where groundwater is present shall comply with the provisions of the General Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2013-0095, NPDES Permit No. CAG994004), effective July 6, 2013 (known as the Dewatering Permit), or NPDES General Permit for Limited Threat Discharges to Surface Waters (Order No. R6T-2014-009, NPDES Permit No. CAG996001) as they relate to discharge of non-stormwater dewatering wastes. The two options to discharge shall be to the local storm drain system and/or to the sanitary sewer system, and the contractor shall obtain a permit from the RWQCB and/or the City of Los Angeles, respectively. **WQ-4** In the event that groundwater is encountered during excavation associated with Canyon Siding Extension, the contractor shall comply with the provisions of the General Waste Discharge Requirements for Discharges of Treated Groundwater from Investigation and/or Cleanup	Less Than Significant

Potentially Significant Impact	Mitigation Measures		Impact After Mitigation
		of VOC Contaminated Sites to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2013-0043, NPDES Permit No. CAG914001), effective April 7, 2013 (known as the Dewatering Permit for contaminated sites), for discharge of non-stormwater dewatering wastes from contaminated sites impacted during construction. The two options to discharge shall be to the local storm drain system and/or to the sanitary sewer system, and the contractor shall require a permit from the RWQCB and/or the City of Santa Clarita, respectively.	
Operation of the proposed layover facility associated with the Lancaster Terminal Improvements would discharge wastewater into the local sewer system resulting in a potentially significant impact if not managed properly.	**WQ-5**	Metro/Metrolink shall comply with the NPDES General Permit for Stormwater Discharges Associated with Industrial Activities (IGP; Order No. 2014-0057-DWQ, NPDES No. CAS000001) for demolished, relocated, or new industrial-related properties impacted by the project. This shall include preparation of industrial SWPPP(s), as applicable.	Less Than Significant
NOISE AND VIBRATION			
Construction of the Proposed Project has the potential to generate noise that could increase ambient noise levels at sensitive receptors by up to 13 dBA at the Balboa Double Track Extension site in the City of Los Angeles, up to 6 dBA at the Canyon Siding Extension site in the City of Santa Clarita and up to 17 dBA at the Lancaster Terminal Improvements site in the City of Lancaster. These increases in noise levels would exceed local significance thresholds, a potentially significant impact.	**NV-1**	Metro/Metrolink's contractor shall develop a Noise Control Plan demonstrating how noise criteria would be achieved during construction. The Noise Control Plan shall be designed to follow Metro requirements, include construction noise control measures, measurements of existing noise, a list of the major pieces of construction equipment that would 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 shall be approved by Metro/Metrolink prior to initiating construction. Where the construction cannot be performed in accordance with the local noise ordinances construction noise standards, the contractor would investigate alternative construction measures that would result in lower sound levels. The noise limits for each jurisdiction are shown in the following table, NV-1 Noise Limits.	Significant and Unavoidable

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation

NV-1 Noise Limits

Land Use	Noise Limit – Daytime [1] L_{eq} (dBA)	Noise Limit – Nighttime L_{eq} (dBA)
Any Residential – City of Los Angeles	Ambient +5 dBA	Ambient +5 dBA [2]
Single-Family Residential – Santa Clarita and Lancaster	75 [2]	60 [2, 3]
Multi-Family Residential – Santa Clarita and Lancaster	80 [2]	64 [2, 3]
Commercial	85 [2]	n/a [4]

[1] Daytime is defined as follows:
Los Angeles: 7 am – 9 pm (Mon-Fri), 8 am – 6 pm (Sat)
Santa Clarita: 7 am – 7 pm (Mon – Fri), 8 am – 6 pm (Sat)
Lancaster: 7 am – 8 pm (Mon – Sat)
[2] L.A County Code Limit
[3] Recommended limit if written permission is allowed for work outside of the "Daytime" defined hours
[4] Commercial properties are not typically sensitive at night.

The contractor would conduct noise monitoring to demonstrate compliance with contract noise limits. Noise-reducing methods that may be implemented by Metro/Metrolink 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 achieve noise levels as close to the nighttime limits of the applicable City of Los Angeles, City of Santa Clarita or City of Lancaster standards as possible.
- Use specialty equipment with enclosed engines, acoustically attenuating shields, and/or high-performance mufflers.
- Locate equipment and staging areas away from noise-sensitive receivers.
- Limit unnecessary idling of equipment.
- Install temporary noise barriers, noise control curtains, and/or noise enclosures. This approach can be particularly effective for stationary noise sources such as compressors and generators. These methods may not be effective for elevated receivers; blocking line-of-sight is necessary.
- Reroute construction-related truck traffic away from local residential streets and/or sensitive receivers.
- Avoid impact pile driving where possible. Where geological conditions permit, the use of drilled piles or a vibratory pile driver is generally quieter.

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	• Use electric instead of diesel-powered equipment and hydraulic instead of pneumatic tools. • Where possible, minimize the use of impact devices such as jackhammers and hoe rams, using concrete crushers and pavement saws instead. • If all conventional noise control measures cannot achieve the noise levels of the applicable City of Los Angeles, City of Santa Clarita or City of Lancaster standards and unavoidable excessive exceedances of the noise limits are predicted, Metro/Metrolink shall offer to temporarily relocate residents to a hotel. The Noise Control Plan shall define excessive exceedance of the noise limits and shall be approved by Metro/Metrolink.	

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
Construction of the Proposed Project includes use of heavy equipment that could produce vibration at nearby receivers that would exceed the FTA's annoyance threshold (72 VdB residential/75 VdB institutional), a potentially significant impact.	**NV-2** Specific measures to be employed to reduce or mitigate construction vibration impacts shall be developed by the contractor and presented in the form of a Vibration Monitoring Plan as part of the Noise Control Plan. Measurements shall be taken during peak vibration generating construction activities, and the results must be submitted to Metro on a weekly basis. The following precautionary vibration mitigation strategies should be implemented to minimize the potential for damage to any structures and annoyance to occupants in the Project area: • **Alternative Construction Procedures**: If high-vibration construction activities must be performed close to structures, it may be necessary for the contractor to use an alternative procedure that produces lower vibration levels. Examples of high-vibration construction activities include the use of vibratory compaction or hoe rams next to sensitive buildings. Alternative procedures include use of non-vibratory compaction in limited areas and a concrete saw in place of a hoe ram to break up pavement. • **Occupant Temporary Relocation.** When construction or demolition must occur very close to the receiver, other less conventional vibration reduction techniques shall be employed. A vibration disturbance coordinator shall be established for affected sensitive occupants regarding vibration annoyance. Vibration levels shall be monitored at the affected uses to determine if vibration levels exceed the vibration annoyance criteria of 0.016 inches per second at residential uses and 0.022 inches per second at commercial uses during construction activity. If construction vibration results in exceedances of the vibration annoyance criteria, occupants shall be temporarily relocated to a hotel during construction times when vibration will be the greatest and most intrusive. Construction activities in non-residential areas shall be scheduled during non-operational hours of commercial uses.	Significant and Unavoidable

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
TRANSPORTATION		
Construction of the Proposed Project may result in temporary traffic delays and inconveniences as well as diminished access to station platforms at the Santa Clarita and Lancaster Terminal Metrolink Stations.	**TR-1** During the final engineering phase and at least 30 days prior to construction of each capital improvement, a construction Traffic Management Plan (TMP) shall be prepared by the contractor for each capital improvement including the Balboa Double Track Extension in the City of Los Angeles, the Canyon Siding Extension in the City of Santa Clarita, and the Lancaster Terminal Improvements in the City of Lancaster. Each TMP shall be reviewed and approved by Metro/ Metrolink, City of Los Angeles, City of Santa Clarita, City of Lancaster, and Caltrans, where applicable. The TMP shall identify proposed detour routes and construction traffic routes, including haul truck routes and preferred delivery/haul-out locations and hours. Lane and/or road closures shall be scheduled in consultation with the local public works departments associated with each capital improvement site to minimize disruptions to community traffic. The nearest local fire responders shall be notified, as appropriate, of traffic control plans, and lane and/or road closures as well as detour routes and construction vehicle routes shall be coordinated with fire responders to minimize disruptions to emergency response routes. The TMP shall identify pedestrian and bicycle circulation and access detours in and around the affected stations, as well as temporary bus stop locations and signage, as applicable.	Less Than Significant
Construction of the Proposed Project would result in construction worker and vehicle movements across active tracks, which has potential to result in Metrolink schedule delays, increased dwell times, and overall decreased performance of the AVL. In addition, construction activities at the Santa Clarita Station and the Lancaster Terminal Station may affect passengers due to temporary access impediments.	**TR-2** During final engineering design and prior to construction, Metro shall establish rail operating agreements and/or memoranda with Metrolink and Union Pacific Railroad (UPRR) to outline mutually agreed upon work windows and contractor operating restrictions. Such agreements shall identify performance objectives such as maximum allowed dwell times and/or on-time performance requirements to be achieved throughout construction, and how construction sequencing and railroad operational protocols would be incorporated into applicable construction documents (plans and specifications) and implemented to maintain the mutually agreed upon performance objectives during construction. Prior to construction, Metro/ Metrolink and the construction contractor shall prepare detailed construction phasing plans for each phase of construction that identify appropriate	Less Than Significant

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	means and methods to maintain mutually agreed upon on-time performance objectives while minimizing impacts on pedestrians and passengers at Santa Clarita Station and/or Lancaster Terminal. Prior to construction, Metro and the construction contractor shall also coordinate with current rail operators to establish temporary construction detours for passengers at the Santa Clarita Station and Lancaster Terminal that correspond to detailed construction phasing plans to minimize impacts on passenger transfer times. Detailed construction phasing plans shall be deemed acceptable by Metrolink prior to commencement of construction activities that could affect regular Metrolink operations. Throughout the duration of construction, Metro/ Metrolink shall solicit UPRR's participation, as-needed, in construction coordination meetings to evaluate the efficiency of the measures in place and Metro/ Metrolink and the construction contractor shall implement changes to means and methods during construction to ensure the performance objectives are maintained at an acceptable level throughout construction.	
TRIBAL CULTURAL RESOURCES		
Ground-disturbing activities during construction of the Proposed Project have the potential to impact previously undiscovered buried tribal cultural resources of historical significance, a potentially significant impact.	**TCR-1** Mitigation Measure **CUL-1** pertains specifically to archaeological involvement. The involvement of the Fernandeño Tataviam Band of Mission Indians and Gabrieleno Band of Mission Indians – Kizh Nation (Consulting Tribes) is detailed in Mitigation Measure **TCR-1**. For the purposes of Mitigation Measures **CUL-1** and **TCR-1**, ground disturbing activities include, but are not limited to, excavation, trenching, grading, and drilling. In addition to the Program Archaeologist and archaeological monitor, a Native American monitor from the Consulting Tribes shall be retained to monitor earth-moving activities. Native American monitoring shall be conducted on a rotational basis between the Consulting Tribes (Fernandeño Tataviam Band of Mission Indians and Gabrieleno Band of Mission Indians – Kizh Nation) during these construction activities, and attendance is ultimately at the discretion of the Consulting Tribes.	Less Than Significant

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	Prior to commencement of any grading activities on site, the Program Archaeologist shall prepare a Cultural Resources Monitoring Plan (CRMP). The CRMP shall be reviewed by the Lead Agency and Consulting Tribes. The CRMP should include at a minimum: (1) the roles and responsibilities of the Program Archaeologist, archaeological monitor, and Native American monitor; (2) the definition of an Environmentally Sensitive Area (ESA) around the previously-identified prehistoric resources adjacent to the Canyon Siding Extension capital improvements area, (3) a description of monitoring procedures; (4) a description of the frequency of monitoring (e.g., full-time, part-time, spot checking); (5) a description of what types of resources may be encountered; (6) a description of circumstances that would result in the halting of work at the program site (e.g., what is considered a "significant" archaeological site); (7) a description of procedures to follow when a resource is encountered including curation procedures agreed upon by the Consulting Tribes; (9) communication/notification protocols; and (8) a description of monitoring reporting procedures. At the commencement of construction, Native American representatives from the Consulting Tribes shall provide a Worker Environmental Awareness Program (WEAP) training for all earth moving personnel and their supervisors. WEAP materials shall be developed and distributed to construction personnel over the lifetime of the program. The program shall inform personnel of the types of artifacts and features that may be encountered, the procedures to be followed if archaeological materials are unearthed during program excavation, contact information for the archaeological and Consulting Tribe personnel, and the regulatory requirements for the protection of archaeological resources including penalties for violations. The Native American monitor shall be present for all ground-disturbing activities in native soil (i.e., undisturbed, non-fill sediments) within the Balboa Double Track Extension and Lancaster Terminal Improvements sites. Within the Canyon Siding Extension site, the Native American monitor shall be present for all ground-disturbing activities within the ESA, including those in disturbed fill sediments. During ground-disturbing activities outside of the ESA within the	

Potentially Significant Impact	Mitigation Measures	Impact After Mitigation
	Canyon Siding Extension capital improvement area, Native American monitoring shall be limited to ground-disturbing activities within native soil only. A sufficient number of Native American monitors shall be present each workday to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. If an inadvertent discovery of archaeological materials is made during program-related construction activities, the Native American monitor shall have the authority to halt ground disturbing activities within 50 feet of the resource(s) and an ESA physical demarcation shall be constructed. The Program Archaeologist, Lead Agency, and Consulting Tribes shall be notified regarding the discovery. The procedures outlined in CRMP shall then be implemented.	

SOURCE: Terry A. Hayes Associates Inc., 2021.

ES.11 COMPARISON OF ALTERNATIVES

CEQA requires an analysis of alternatives to the Proposed Project to reduce or eliminate significant impacts associated with project development. In addition to the route options, two alternatives have been identified to the Proposed Project. Alternative 1 is the No Project Alternative. The No Project Alternative is required by CEQA Guidelines Section 15126.6 (e)(2) and assumes that the Proposed Project would not be implemented by Metro. The No Project Alternative allows decision-makers to compare the impacts of approving the Proposed Project with the impacts of not approving the Proposed Project. The No Project Alternative is evaluated in the context of the existing transportation facilities in the Project Area and other capital transportation improvements and/or transit and highway operational enhancements that are reasonably foreseeable.

Alternative 2 would implement only implement the Balboa Double Track Extension capital improvement enabling hourly service along the AVL between Los Angeles Union Station and the Antelope Valley. Expanded late-night service, including late-night trains seven days a week, would also be enabled under Alternative 2. Neither the Canyon Siding Extension nor the Lancaster Terminal Improvements would be implemented under Alternative 2, which would limit Metrolink's ability to expand service above an hourly frequency due to the limitations on expanded rolling stock presented by existing storage track capacity and operational conflicts associated with the single-track configuration through the Canyon Siding Extension site. Alternative 2 would be consistent with Phase 2 of the Metro Board-approved Motion (File #2019-0571), supporting funding and planning for the Proposed Project.

The No Project Alternative is considered the environmentally superior alternative because there would be no physical changes to the existing environment and a minor increase in Metrolink service. Other transit projects would be constructed to enhance the regional network, including the Brighton to Roxford Double Track Project and the Link US Project, which would improve AVL service reliability and safety. Not constructing and operating the Proposed Project would eliminate the potentially significant impacts related to transportation (construction), aesthetics (construction and operations), air quality (operations), biological resources (construction), cultural resources (construction), geology and soils (construction and operations), greenhouse gas emissions (construction and operations), noise (construction), and tribal cultural resources (construction). However, the regional transit network within the Project corridor would not be substantially enhanced by the other transit projects.

If the No Project Alternative is identified as the environmentally superior, CEQA requires identification of the environmentally superior alternative other than the No Project Alternative from among the Proposed Project and the other alternatives evaluated in the Draft EIR. Alternative 2 is the environmentally superior alternative because, as compared to the Proposed Project and design options, it avoids or reduces multiple construction impacts in the City of Santa Clarita and the City of Lancaster related to transportation, aesthetics, air quality, biological resources, cultural resources, energy resources, geology and soils, hazardous materials, noise, and tribal cultural resources. It also avoids or reduces operational impacts related to transportation, aesthetics, air quality, and greenhouse gases emissions.

1. Introduction

This chapter provides an overview of the purpose of this Final Environmental Impact Report (EIR) for the Antelope Valley Line (AVL) Capacity and Service Improvements Program (Proposed Project). This Final EIR has been prepared to comply with the requirements of California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Chapter 3, Section 15000 et seq.).

The AVL is a 76.6-mile-long commuter rail line that serves Northern Los Angeles County as part of the Metrolink system. The AVL extends from Los Angeles Union Station in the City of Los Angeles to Lancaster Terminal in the City of Lancaster with stations in the cities and communities of Los Angeles, Glendale, Burbank, Sun Valley, Sylmar, San Fernando, Newhall, Santa Clarita, Acton, Palmdale, and Lancaster. The Proposed Project proposes expansion of commuter rail service along the entire AVL corridor as well as three capital improvements required to facilitate the proposed service increase. The three capital improvements are the Balboa Double Track Extension, the Canyon Siding Extension, and the Lancaster Terminal Improvements. The Balboa Double Track Extension and the Canyon Siding Extension would be located within the City of Los Angeles and the City of Santa Clarita, respectively, while the Lancaster Terminal Improvements would be located in the City of Lancaster. These capital improvements are a part of a package of four capital improvements on the AVL corridor to increase rail capacity. The fourth capital improvement, the Brighton to McGinley Double Track Extension was separately approved as part of the Brighton to Roxford Double Track Project.

1.1 INTENDED USES OF THE ENVIRONMENTAL IMPACT REPORT

This Final EIR is intended to assist Los Angeles County Metropolitan Transportation Authority (Metro) in making decisions regarding the adoption of the Proposed Project. It is required by Section 15132 of the CEQA Guidelines to include the Draft EIR or a revision of the draft; comments and recommendations received on the Draft EIR (either verbatim or in summary); a list of persons, organizations, and public agencies who commented on the Draft EIR; responses to significant environmental comments raised in the review and consultation process; and any other relevant information added by the lead agency. This document also contains comments received on the Draft EIR and their responses, as well as updates and clarifications to the text and graphics.

1.2 ENVIRONMENTAL REVIEW PROCESS AND COMMUNITY OUTREACH

In July 2019, Metro staff presented the AVL Study, which assessed a range of service scenarios and associated infrastructure requirements for the AVL to the Metro Board of Directors. The Metro Board approved a motion in support of implementing the recommendations of the AVL

Study and directed staff to initiate environmental studies assessing the recommended service scenarios and associated capital improvements.

In compliance with Section 15082 of the CEQA Guidelines, a Notice of Preparation (NOP) of the Draft EIR was prepared and distributed on October 1, 2020 to the State Clearinghouse and to various other public agencies and the general public for a 30-day review and comment period. During the initial 30-day review period, Metro extended the public scoping period for an additional 15 days – officially ending the scoping period on November 16, 2020. Three scoping meetings were held during the public review period, two in October and one in November, to facilitate public review and comment on the Proposed Project and the scope of the Draft EIR.

Metro received a total of 77 written comments during the public scoping period as well as oral comments provided during the three scoping meetings. Generally, comments received were a mix of supportive and oppositional sentiments toward the Proposed Project. The scoping process and comments received to date are detailed in Chapter 7, Public Outreach. The NOP and Scoping Report, including the NOP comment letters received by Metro, are contained in Appendix A of the Draft EIR.

Following the public scoping review period and NOP release, the project team began developing the Draft EIR. Upon release of the Notice of Availability (NOA) on July 28, 2021, a 45-day review period was initiated for public review and comment on the Draft EIR findings. The NOA provided notice for responsible agencies to transmit their comments on the findings and content of the Draft EIR, focusing on specific information related to their own statutory responsibility. Per CEQA, a public review period is required when issuing the availability and completion of a Draft EIR. Appendix A of the Final EIR includes the Public Outreach Report for activities occurring after publication of the Draft EIR. Metro utilized a variety of notification methods to communicate the release and availability of the Draft EIR and to encourage participation in the public hearings. These notification methods included print (direct mail and legal newspaper notices), electronic (eblasts and social media), meeting notices, advertising, and extended outreach. Legal advertisement notices were published in eleven newspapers of general circulation in the Project area, and condensed newspaper advertisements were published in two additional newspapers. In addition, a total of 2,381 notices were mailed to contacts in project database and property owners and occupants surrounding the three capital improvement sites. Most notification materials were prepared in English, Spanish, and Armenian. Additionally, a copy of the NOA was filed with the Los Angeles County Clerk and State Clearinghouse.

Public hearings were held on Wednesday, August 18, 2021 from 6:00 p.m. to 7:30 p.m. and Saturday, August 21, 2021, from 11:00 a.m. to 12:30 p.m. To promote safety during the COVID-19 pandemic, the public hearings were held virtually in the form of Zoom webinars with additional options to participate directly via telephone. Meeting dates and times were selected to maximize participation from residents, businesses and community stakeholders across the project area. Simultaneous interpretation in Spanish and Armenian was offered for both meetings. Multilingual presentations in English, Spanish and Armenian were available to the public prior to the meeting via the project webpage and during the meeting within the virtual

meeting room. A court reporter was also available to capture the official record of the meeting, including public comments. A total of 56 attendees participated across both virtual public hearings. Meeting transcripts are included in Appendix B. Comments were received through three methods, including via the project email address, traditional ground mail, and by submitting a written and/or oral comment at one of the two public hearings.

A total of 58 comments submissions from 34 individuals, agencies and organizations were received for the Draft EIR. Most of the comments received were submitted via email. Several of the comment themes touched on service frequency, environmental, transit connections, safety, engineering design, Metrolink operations and amenities. Throughout this public engagement effort, the Metro team gathered feedback about the technical aspects of the Proposed Project through the Project Development Team (PDT) which was first convened in the pre- scoping phase of project. The PDT met six times during the development of the Draft EIR. The PDT provided valuable insight to the project team and provided a forum for the early identification of opportunities and constraints associated with the proposed improvements. In addition, individual stakeholder meetings were held to increase awareness, provide status updates and address potential issues and concerns. Stakeholders with whom Metro held individual meetings include California Department of Fish and Wildlife (CDFW), California Department of Transportation (Caltrans) District 7, California Public Utilities Commission, Union Pacific Railroad (UPRR), Town of Acton, North County Transportation Coalition, Los Angeles County 5th District Supervisor Staff, Fernandeño Tataviam Band of Mission Indians, and the Gabrieleno Band of Mission Indians - Kizh Nation.

Upon completion of the Final EIR and other required documentation, the Metro Board of Directors may adopt the findings relative to the Proposed Project's environmental effects after implementation of mitigation measures, certify the Final EIR, and approve the Proposed Project.

1.3 FINAL EIR ORGANIZATION

This Final EIR is comprised of the chapters listed below. After the Introduction, the chapters include corrections and additions to the Draft EIR. New content is shown in underline and removed content is shown in ~~strikethrough~~. These revisions were either initiated by the lead agency or made to address comments received during the public review period.

1. **Introduction**. This chapter briefly discusses the purpose of the Final EIR, the intended uses of this Final EIR, the environmental review process and community outreach efforts, and the contents of this Final EIR.

2. **Corrections and Additions**. This chapter identifies any revisions made to provide more detail, clarify, and/or correct the text and graphics contained within the Draft EIR. These revisions were either initiated by the lead agency or made to address comments received during the public review period. None of these corrections or additions constitute significant new information which would necessitate a recirculation of the Draft EIR.

3. **Responses to Comments**. This chapter contains a list of commenting agencies and individuals and a copy of each comment letter received by Metro during the public review period for the Draft EIR. Consistent with Section 15088 of the CEQA Guidelines, each of the comment letters is followed by the corresponding responses to each of the comments within each letter that pertain to the analysis and findings contained in the Draft EIR.

4. **Mitigation Monitoring and Reporting Program (MMRP)**. This chapter includes the MMRP for the Proposed Project. The MMRP lists the required mitigation measures and identifies the enforcement agency, monitoring agency, monitoring phase, monitoring frequency, and the action indicating compliance with each measure.

2. Corrections and Additions

As required by Section 15088(d) of the CEQA Guidelines, this chapter provides corrections or clarifications to the Draft EIR. None of the corrections and additions constitute significant new information or substantial project changes, as defined by Section 15088.5 of the CEQA Guidelines, and thus, recirculation of the Draft EIR is not required. The changes to text and graphics contained in the Draft EIR are indicated below under the corresponding Draft EIR section heading. Deletions are shown in ~~strikeout text~~ and additions in <u>underlined text</u>.

SECTION 2.0 PROJECT DESCRIPTION

Page 2-9, the second paragraph has been revised as follows:

> From the Santa Clarita Metrolink Station, the proposed Saugus Siding extension would continue parallel to the Main Track for approximately 3,500 feet to Golden Oak Road. The proposed siding extension would cross Golden Oak Road and connect back to the Main Track approximately 500 feet north of Golden Oak Road. The proposed grade crossing at Golden Oak Road would not provide enough space for vehicle storage to the east for traffic moving northwest through the intersection. Accordingly, the crossing at Golden Oak Road would require installation of new road traffic signals, new striping throughout the intersection, curb adjustments to provide pedestrian and bicycle safety improvements, installation of new crossing gates, and high visibility crosswalk markings. <u>The proposed intersection modifications would provide an additional shared through/left turn lane in the northbound direction and an additional southbound through lane.</u> **Figure 2-5** provides a sketch of the proposed crossing improvements.

Page 2-11, the following note has been added after Figure 2-5:

> <u>Note: The western crosswalk leg at Soledad Canyon Road has been removed. There is no available aerial photography that shows this change in conditions.</u>

SECTION 3.1 TRANSPORTATION

Page 3.1-15, the following bullets have been added under subheading 3.1.2.3 Roadway Network:

- <u>Bouquet Canyon Road: Bouquet Canyon Road connects the Santa Clarita Valley to the Antelope Valley through the Angeles National Forest.</u>
- <u>Sierra Highway: Sierra Highway, which generally parallels the SR-14 corridor, also provides connection to the Antelope Valley, as well as a non-freeway</u>

connection between the Santa Clarita Valley and the Los Angeles Basin, through the Newhall Pass.

- Soledad Canyon Road: Soledad Canyon Road currently provides the primary east-west connection between I-5 and SR-14 through the Santa Clarita Valley. Soledad Canyon Road also provides the primary non-freeway connection between the City of Santa Clarita and the communities of Agua Dulce and Acton.
- Via Princessa: Via Princessa is a designated Major Highway providing north-south circulation between Whites Canyon Road/Soledad Canyon Road and SR-14.

Page 3.1-13, after the first paragraph, the following discussion has been added under subheading 3.1.2.1 Existing AVL Service.

In addition to AVL passenger service, up to 12 UPRR trains operate along the AVL per day. UPRR holds the freight operating rights on the AVL. UPRR has a reserved rail freight easement for use of shared-use facilities on the line pursuant to the Shared Use Agreement (Saugus Line) between Southern Pacific Transportation Company and Los Angeles County Transportation Commission, dated December 16, 1992. There are several provisions of the 1992 Agreement that directly impact commuter rail operations, including the potential to expand AVL service. The key provisions with relevance to this study are summarized as follows:

- During Peak Commuter Periods the Railroad (UPRR) shall have no right to use any portion of the shared use facilities, which has a single main line track, with certain specified exceptions.
- At times, other than the Peak Commuter Periods, the Railroad shall have the right to use any portion of the Shared Use Facilities, which has a single main line Track for Freight Trains.

Page 3.1-22, paragraph under Transit subheading under Impact 3.1-1 has been revised as follows:

Less-Than-Significant Impact with Mitigation. Construction may affect portions of the AVL mainline track as part of the Balboa Double Track Extension or Canyon Siding Extension improvements. Construction worker and vehicle movements across active tracks would occur along the portions of the AVL within the three capital improvement sites. There is potential for construction to result in schedule delays, increased dwell times, and overall decreased performance of the AVL as well as UPRR operations. Construction activities associated with the Canyon Siding Extension at the Santa Clarita Station may affect passengers due to temporary access impediments, pedestrian detours, and/or temporary shuttle service to nearby stations. Under the Island Platform design option, it is anticipated that the

Santa Clarita Station would be out of service for periods of construction and a shuttle service would be provided. Without mitigation, the Proposed Project would result in a significant impact on transit related to construction activities.

Page 3.1-26, Mitigation Measure **TR-2** has been revised as follows:

During final engineering design and prior to construction, Metro shall establish rail operating agreements and/or memoranda with Metrolink and Union Pacific Railroad (UPRR) to outline mutually agreed upon work windows and contractor operating restrictions. Such agreements shall identify performance objectives such as maximum allowed dwell times and/or on-time performance requirements to be achieved throughout construction, and how construction sequencing and railroad operational protocols would be incorporated into applicable construction documents (plans and specifications) and implemented to maintain the mutually agreed upon performance objectives during construction. Prior to construction, Metro and the construction contractor shall prepare detailed construction phasing plans for each phase of construction that identify appropriate means and methods to maintain mutually agreed upon on-time performance objectives while minimizing impacts on pedestrians and passengers at Santa Clarita Station and/or Lancaster Terminal. Prior to construction, Metro and the construction contractor shall also coordinate with current rail operators to establish temporary construction detours for passengers at the Santa Clarita Station and Lancaster Terminal that correspond to detailed construction phasing plans to minimize impacts on passenger transfer times. Detailed construction phasing plans shall be deemed acceptable by Metrolink prior to commencement of construction activities that could affect regular Metrolink operations.

Throughout the duration of construction, Metro shall solicit Metrolink's and UPRR's participation, as-needed, in construction coordination meetings to evaluate the efficiency of the measures in place and Metro, and the construction contractor shall implement changes to means and methods during construction to ensure the performance objectives are maintained at an acceptable level throughout construction.

SECTION 3.4 BIOLOGICAL RESOURCES

Page 3.4-4, the following paragraph and associated table and figure have been added to the discussion under subheading 3.4.2.3, Special Status Species:

A review of the California Natural Diversity Database (CNDDB) identified occurrences of several threatened or endangered species, as well as special status natural communities within one mile of one or more capital improvement sites. **Table 3.4-1** lists CNDDB identified special status species and natural communities identified within one mile of one or more capital improvement sites. **Figures 3.4-1** through **3.4-3** depict CNDDB occurrences within one mile of one or more capital improvements sites.

Table 3.4-1: CNDDB Species Occurrences Within One Mile of Capital Improvement Sites

Scientific Name	Common Name	Taxonomic Group	Federal Listing[1]	State Listing[1]	State Rank[2]	Plant Rank[3]	CDFW Status[4]
BALBOA DOUBLE TRACK EXTENSION							
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	Riparian	None	None	S4		
Danaus plexippus pop. [1]	monarch - California overwintering population	Insects	None	None	S2S3		
Calochortus clavatus var. gracilis	slender mariposa-lily	Monocots	None	None	S2S3	1B.2	
Neotoma lepida intermedia	San Diego desert woodrat	Mammals	None	None	S3S4		SSC
Malacothamnus davidsonii	Davidson's bush-mallow	Dicots	None	None	S2	1B.2	
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered	S2		
CANYON SIDING EXTENSION							
Calochortus palmeri var. palmeri	Palmer's mariposa-lily	Monocots	None	None	S2	1B.2	
Southern Riparian Scrub	Southern Riparian Scrub	Riparian	None	None	S3.2		
Harpagonella palmeri	Palmer's grapplinghook	Dicots	None	None	S3	4.2	
Orcuttia californica	California Orcutt grass	Monocots	Endangered	Endangered	S1	1B.1	
Dodecahema leptoceras	slender-horned spineflower	Dicots	Endangered	Endangered	S1	1B.1	
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None	S3S4		SSC
Senecio aphanactis	chaparral ragwort	Dicots	None	None	S2	2B.2	
Southern Willow Scrub	Southern Willow Scrub	Riparian	None	None	S2.1		
Arizona elegans occidentalis	California glossy snake	Reptiles	None	None	S2		SSC
Anniella sp.	California legless lizard	Reptiles	None	None	S3S4		SSC
Calochortus clavatus var. gracilis	slender mariposa-lily	Monocots	None	None	S2S3	1B.2	
Gasterosteus aculeatus williamsoni	unarmored threespine stickleback	Fish	Endangered	Endangered	S1		FP
Gila orcuttii	arroyo chub	Fish	None	None	S2		SSC
Accipiter cooperii	Cooper's hawk	Birds	None	None	S4		WL
Calochortus plummerae	Plummer's mariposa-lily	Monocots	None	None	S4	4.2	
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	None	None	S3		SSC
Spea hammondii	western spadefoot	Amphibians	None	None	S3		SSC

Scientific Name	Common Name	Taxonomic Group	Federal Listing[1]	State Listing[1]	State Rank[2]	Plant Rank[3]	CDFW Status[4]
LANCASTER TERMINAL IMPROVEMENTS							
Athene cunicularia	burrowing owl	Birds	None	None	S3		SSC
Xerospermophilus mohavensis	Mohave ground squirrel	Mammals	None	Threatened	S2S3		
Chorizanthe parryi var. parryi	Parry's spineflower	Dicots	None	None	S2	1B.1	
Canbya candida	white pygmy-poppy	Dicots	None	None	S3S4	4.2	
Astragalus preussii var. laxiflorus	Lancaster milk-vetch	Dicots	None	None	S1	1B.1	
Buteo swainsoni	Swainson's hawk	Birds	None	Threatened	S3		
Calochortus striatus	alkali mariposa-lily	Monocots	None	None	S2S3	1B.2	

SOURCE: California Natural Diversity Database, 2020

[1] Endangered: A plant or wildlife species that is in danger of extinction within the foreseeable future throughout all or a significant portion of its range, both federally and/or state listed species.

Threatened: A plant or wildlife species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, both federally and/or state listed species.

[2] S1: Critically imperiled in the state because of extreme rarity or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.

S2: Imperiled in the state because of rarity, restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation from the nation or state.

S3: Vulnerable in the state because of a restricted range, relatively few populations, recent or widespread declines, or other factors making it vulnerable to extirpation.

S4: Uncommon but not rare; some cause for long-term concern because of declines or other factors.

S5: Secure, widespread, and abundant in the state.

[3] 1A: Plant species presumed extinct in California and rare/extinct elsewhere.

1B.1: Plant species are rare, threatened, or endangered in California and elsewhere; seriously threatened in California.

1B.2: Plant species are rare, threatened, or endangered in California and elsewhere; fairly threatened in California.

2B.1: Plant species are rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California.

2B.2: Plant species are rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California.

3.1: Plant species needs more information; seriously threatened in California.

3.2: Plant species needs more information; fairly threatened in California.

3.3: Plants about which we need more information; not very threatened in California.

4.1: Plant species of limited distribution; seriously threatened in California.

4.2: Plant species of limited distribution; fairly threatened in California.

4.3: Plant species of limited distribution; not very threatened in California.

4SSC: Species of Special Concern - A species, subspecies, or distinct population of animal native to California that currently satisfies one or more of the following criteria: 1) is extirpated from the state or, in the case of birds, is extirpated in its primary season or breeding role; 2) is listed as federally-, but not state-, threatened or endangered; meets the state definition of threatened or endangered but has not formally been listed; 3) is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status; or 4) has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for state threatened or endangered status.

WL: Watch List - Species that were previously designated as SSC, but no longer merit that status, or which do not yet meet SSC criteria, but for which there is a concern and a need to additional information to clarify status.

Figure 3.4-1: Balboa Double Track Extension Site CNDDB Occurrences Within One Mile

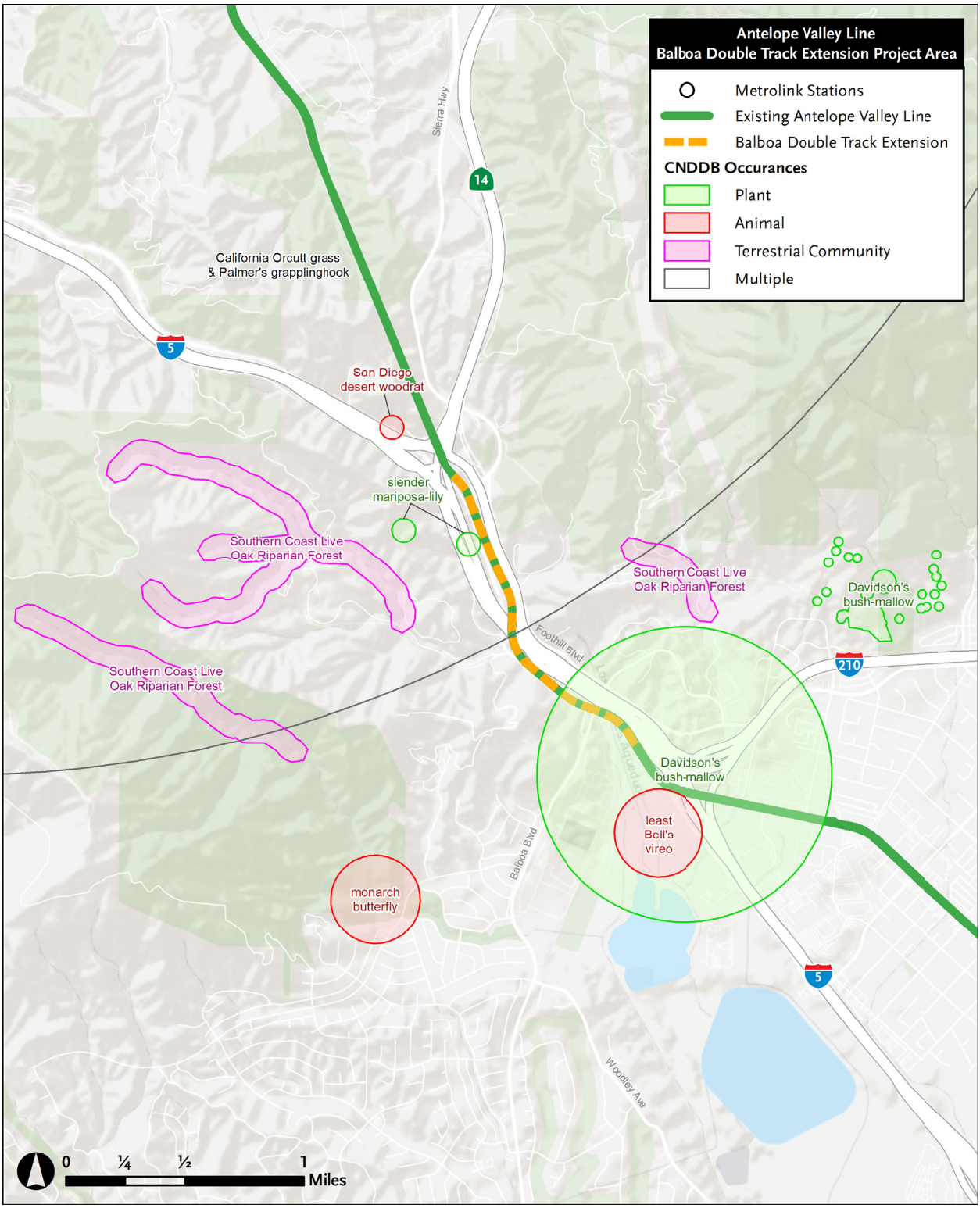
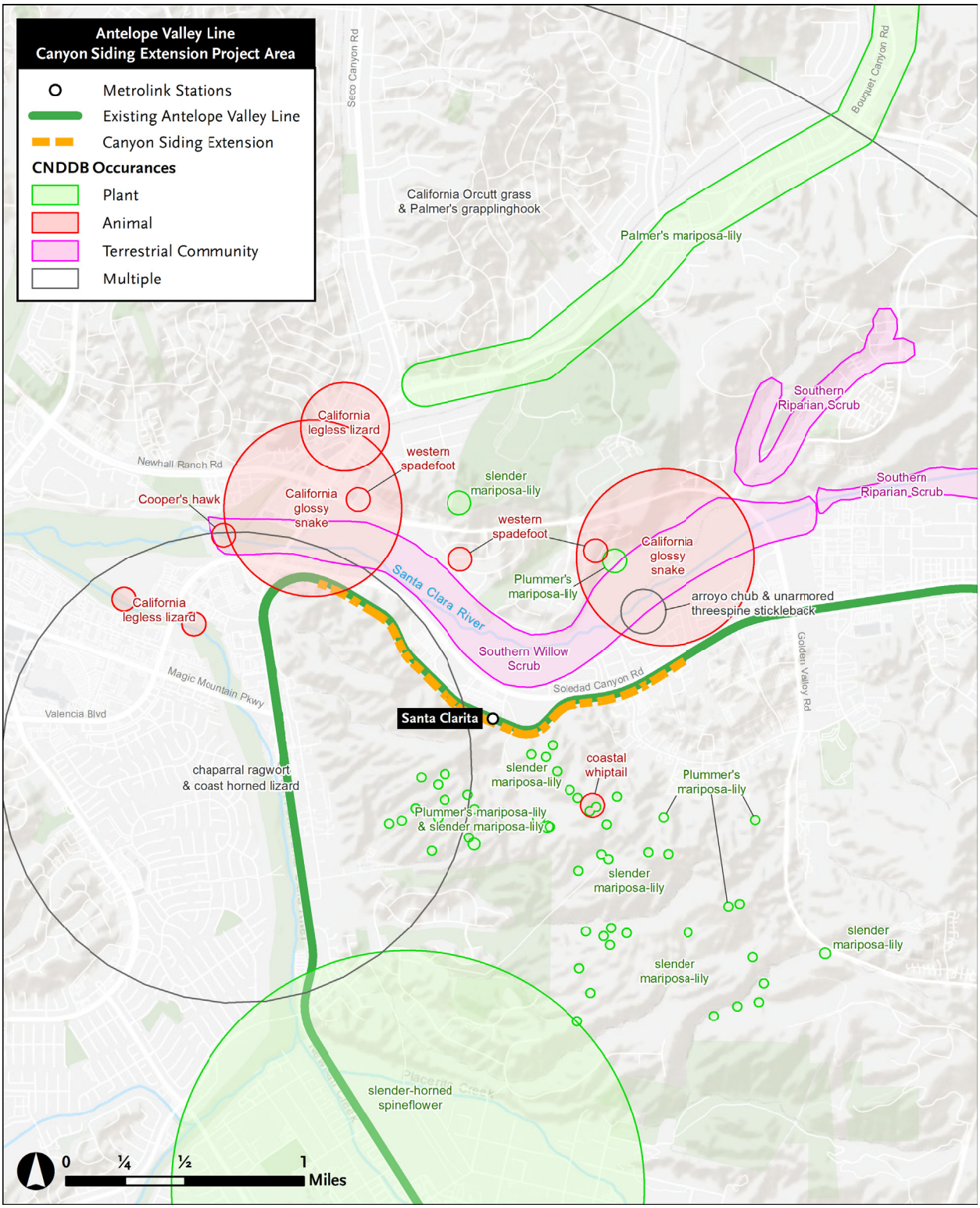
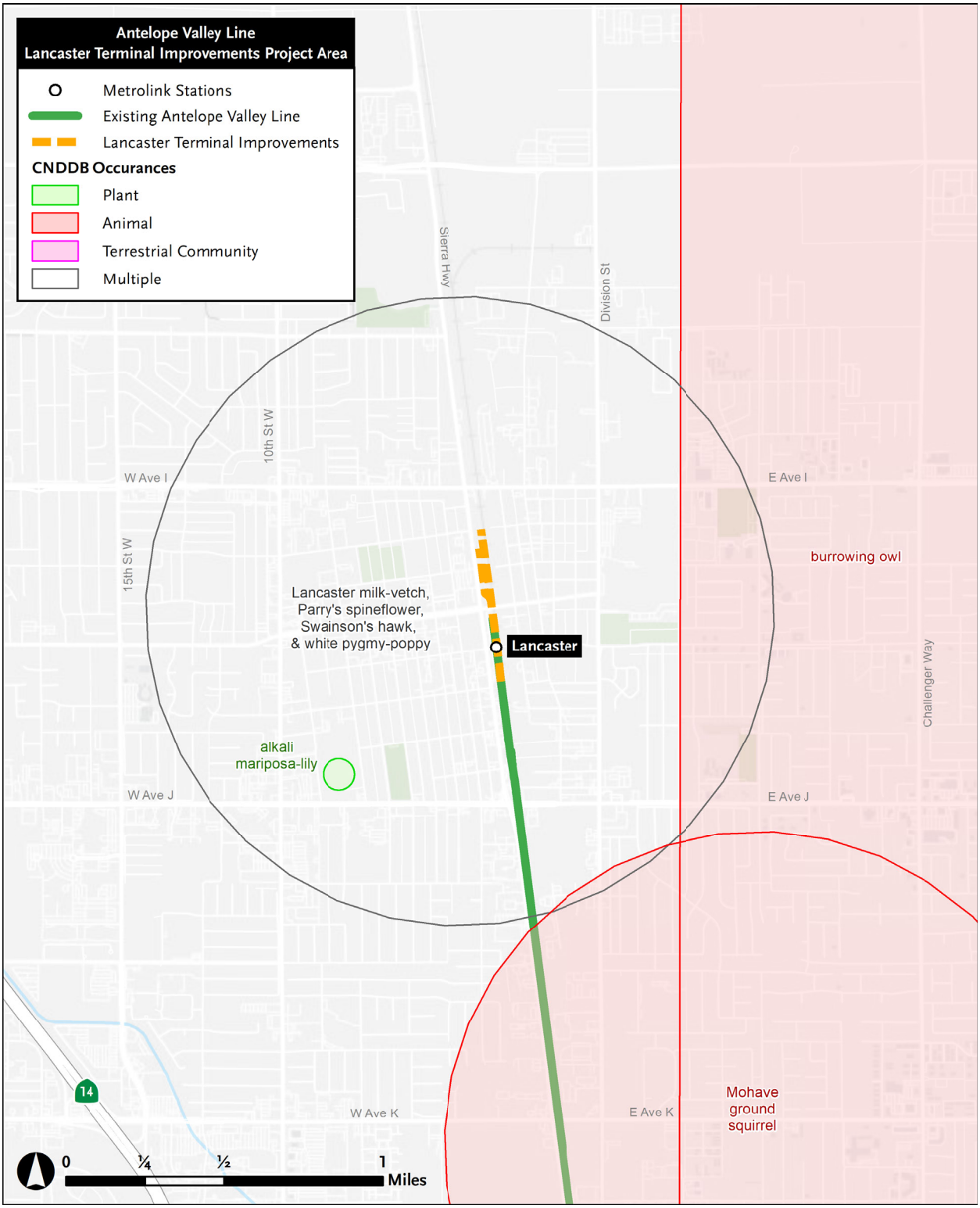


Figure 3.4-2: Canyon Siding Extension Site CNDDB Occurrences Within One Mile



Metro

Figure 3.4-3: Lancaster Terminal Improvements Site CNDDB Occurrences Within One Mile



Page 3.4-7, the following bullets have been added under Literature Review:

- Review of the CDFW CNDDB species lists for the Oat Mountain, San Fernando, Newhall, Mint Canyon, East Lancaster, and West Lancaster 7.5-foor Quadrangles.
- Review of CDFW CNDDB RareFind species occurrence records.

Page 3.4-9, the following has been added after the last paragraph under subheading, Construction, under Impact 3.4-1:

More specifically, coastal California gnatcatcher habitat has been identified to the north of the Balboa Double Track Extension site and to the south of the Canyon Siding Extension site. While no coastal California gnatcatcher habitat has been identified within either capital improvement site, there is potential for vegetation within the two capital improvement sites to support coastal California gnatcatcher, particularly within the hillside along the south side of the Canyon Siding Extension site. Grading activities along the hillside are likely to result in the removal of some vegetation along the upper slopes. Mitigation Measure **BIO-7** would ensure that coastal California gnatcatcher protocol surveys are conducted to determine presence of the species and further requires avoidance of any identified habitat, particularly during the nesting season.

In addition, presence of water and riparian vegetation within the properties adjacent to the Balboa Double Track Extension site suggests there is potential for least Bell's vireo to be present in and around the site given nearby occurrences of the species to the south. Mitigation Measure **BIO-8** would ensure that least Bell's vireo protocol surveys are conducted to determine if the species is present at the Balboa Double Track Extension site or its surroundings and requires avoidance of disturbing active nests or removal of identified habitat.

Plant surveys conducted at the Lancaster Terminal Improvements site identified a single western Joshua tree located approximately 280 feet east of the Lancaster Terminal Station platform at the intersection of Yucca Avenue and Milling Street. On September 22, 2020, the California Fish and Game Commission determined that listing western Joshua tree as threatened under CESA may be warranted. While no construction activities are anticipated at this location, movement of construction equipment and personnel near the western Joshua tree has the potential to disturb the root zone and soils supporting the tree potentially resulting in impacts to the tree's health and seedbank. Potential impacts would be most likely under one of the proposed design options as construction work would occur along the existing station platform, within 250 feet of the tree. Mitigation Measure **BIO-9** would ensure that no construction activities or access would occur near the identified western Joshua tree by restricting construction access from Yucca Avenue or Milling Street.

Special status fish species known to have ranges in the vicinity of the capital improvement sites include the Santa Ana sucker near the Balboa Double Track Extension site and the unarmored threespine stickleback near the Canyon Siding Extension site. While survey work at the Balboa Double Track Extension site and the Canyon Siding Extension site did not identify presence of any fish, access limitations restricted biologist's ability to survey the full extent of both sites, including water bodies. While water bodies at both sites are limited to several open channels and earthen ditches on the properties adjacent to the Balboa Double Track site and drainage inlets along the length of the Canyon Siding Extension site, these features may be hydrologically connected to river systems that support these special status species, namely the Santa Clara River. While it is not anticipated that any construction work would occur within a tributary, crews working near streams may cause stream bank erosion, which can result in impacts to fish by potentially resulting in crushing, burying, smothering, or displacing fish, fish fry, nesting burrows, and eggs, or microscopic flora and fauna food sources for fish and fry. Additionally, excessive sedimentation may degrade substrate and water conditions needed for reproduction, potentially causing reduced reproductive capacity and success. The Proposed Project may require vegetation removal within or adjacent to waterbodies. This can potentially result in additional stream bank erosion. Flow regime changes or changes to streambed composition may affect the viability and reproductive capacity of fish. Mitigation Measure **BIO-10** would require additional survey work to determine if any fish are present in or around the Balboa Double Track Extension site or the Canyon Siding Extension site and would require application for proper permits if impacts on special status fish species cannot be avoided. Mitigation Measure **BIO-11** would require unarmored threespine stickleback protocol surveys at the Canyon Siding Extension site to determine if the species is present and would require avoidance if identified within the site or affected tributaries.

Grading activities proposed in both the Balboa Double Track Extension site and the Canyon Siding Extension site also has potential to impact other special status species or their habitat identified through a search of the CNDDB. These species include: slender mariposa-lily, San Diego desert woodrat, Davidson's bush-mallow, Palmer's mariposa-lily, Plummer's mariposa-lily, coastal whiptail, and western spadefoot toad. If present during grading activities, these special status species could potentially experience injury or death as well as a loss of critical habitat. Mitigation Measure **BIO-12** would require on-site and surrounding biological surveys to determine the presence of special status terrestrial and plant species potentially affected by the Proposed Project.

Page 3.4-13, the following mitigation measure has been revised:

BIO-7 ~~All native vegetation in California gnatcatcher habitat (coastal sage scrub) that must be cleared for project construction must be cleared outside of breeding season (breeding season typically occurs between February 15 to August 31). If construction activities must take place in gnatcatcher breeding season, a pre-construction survey will be conducted for active nests within 500 feet of the construction footprint. Surveys will continue weekly throughout the breeding season. If a nest is within 250 feet of ongoing project activities, Proposed Project work will cease within that 250 feet until the nest has failed or fledged.~~

Metro shall retain a qualified biologist with a gnatcatcher survey permit. The qualified biologist shall survey the Project site and adjacent areas to determine presence/absence of gnatcatcher. The qualified biologist shall conduct surveys according to USFWS Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines. The protocol shall be followed for all surveys unless otherwise authorized by the USFWS in writing. Gnatcatcher surveys shall be conducted and USFWS notified (per protocol guidance) prior to starting any Project construction and activities within and adjacent to California coastal gnatcatcher habitat.

Where Project construction and activities would occur within and/or adjacent to California coastal gnatcatcher habitat, no work shall occur from February 15 through August 31.

There shall be no clearing, removing, or cutting any California coastal gnatcatcher habitat.

If California coastal gnatcatcher habitat is identified within the construction footprint of any of the capital improvement sites, Metro shall provide compensatory mitigation for loss of any California coastal gnatcatcher habitat at no less than a 2:1. Mitigation lands shall occur within the same watershed, and support California coastal gnatcatcher habitat of similar vegetation composition, density, coverage, and species richness and abundance.

Page 3.4-13, the following mitigation measures have been added:

BIO-8 Prior to Project construction activities at the Balboa Double Track Extension site, a qualified biologist shall conduct protocol surveys for least Bell's vireo. All riparian areas and any other potential least Bell's vireo habitat shall be surveyed at least eight times during the period from April 10 to July 31. Survey results, including negative findings, shall be submitted to CDFW and USFWs within 45 calendar days

following the completion of protocol-level surveys. If least Bell's vireo is detected, no construction work, including staging, mobilization, and site preparation, shall occur during the least Bell's vireo nesting season (April 10 to July 31). No habitat supporting least Bell's vireo shall be removed at any time.

If least Bell's vireo is detected and work must occur during the least Bell's vireo nesting season for the duration of the Proposed Project, and/or if habitat supporting least Bell's vireo needs to be removed, Metro shall seek appropriate take authorization under the California Endangered Species Act. Metro shall obtain a permit from California Department of Fish and Wildlife prior to starting any Project construction and activities.

BIO-9 There shall be no impacts on western Joshua trees and seedbank. Access to the Lancaster Terminal Improvements site shall not be allowed from Yucca Avenue/West Milling Street. No activities shall occur within a 250-foot radius of the western Joshua tree to avoid impacts to the tree and potential seedbank. This shall include no site access, vehicle parking, staging areas, refueling, and any activities that may result in ground disturbance. If necessary, Metro shall seek appropriate take authorization under the California Endangered Species Act before starting any construction and activities where impacts to the western Joshua tree and seedbank cannot be avoided.

BIO-10 At least one year prior to starting any Project construction and activities, a qualified biologist shall conduct season appropriate pre-Project presence/absence fish surveys and habitat at the Balboa Double Track Extension site. Surveys shall be performed by a qualified biologists with appropriate Scientific Collecting Permit. Also, surveys shall be performed in consultation and coordination with CDFW. If a California Endangered Species Act (CESA) and/or Endangered Species Act (ESA)-listed fish species is detected and impacts on those fish and habitat cannot be avoided, Metro shall consult with CDFW and/or USFWS to obtain necessary permits for take of CESA and/or ESA-listed fish species. Metro shall have a permit from CDFW and/or USFWS prior to starting any Project construction and activities.

If a Species of Special Concern is detected and impacts on those fish and habitat cannot be avoided, Project construction and activities shall only occur after fish are relocated in accordance with a CDFW-approved Fish Species Relocation Plan. Metro, in consultation with a qualified biologist shall prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. Wildlife shall be protected, allowed to move away on

its own (non-invasive, passive relocation), or relocated to adjacent appropriate habitat within the open space on site or in suitable habitat adjacent to the Project site (either way, at least 200 feet from the work area). Special status wildlife shall be captured only by a qualified biologist with proper handling permits.

BIO-11 At least one year prior to starting any Project construction and activities, a CDFW-approved biologist shall conduct focused surveys for unarmored threespine stickleback where there is potential habitat at the Canyon Siding Extension site and any locations within the Canyon Siding Extension site that is hydrologically connected to the Santa Clara River. Surveys shall be performed by a qualified biologist with appropriate Scientific Collecting Permit. Also, surveys shall be performed in consultation and coordination with CDFW. Survey results, including negative findings, shall be provided to CDFW.

Metro shall coordinate with CDFW if unarmored threespine stickleback is found. If unarmored threespine stickleback is found, Metro shall fully avoid all impacts to unarmored threespine stickleback and habitat supporting this California Fully Protected species. No work shall be performed when water is present in tributaries supporting unarmored threespine stickleback. Also, no dewatering of tributaries shall be performed at any time as draining water and reducing water levels could strand, injure, or cause mortality of unarmored threespine stickleback.

BIO-12 During final design and at least one year prior to construction, a qualified biologist with access to the rail right-of-way, shall conduct a field assessment within the Balboa Double Track Extension and Canyon Siding Extension sites. The assessment shall include an inventory of observable plant and animal species, mapping and characterization of on-site habitats, and an evaluation of each site's potential to support special status species. Presence/absence surveys shall be conducted for special status plants, San Diego desert woodrat, coastal whiptail, western spadefoot toad, arroyo toad, silvery legless lizard, coast horned lizard, as well as small mammals, and bats. Results of the field assessment shall be provided to CDFW. In consultation with CDFW, the qualified biologist shall make recommendations for the avoidance of any identified species including but not limited to additional preconstruction surveys, capture and relocation of terrestrial species by a qualified biologist with proper scientific collection and handling permits, additional restrictions on construction equipment and/or means, and application for appropriate take authorization.

Page 3.4-13, under subheading, Significance of Impacts after Mitigation, the following paragraph has been revised:

> Mitigation Measure **BIO-7** would avoid potential impacts on California gnatcatcher, a special status species, by ensuring that protocol surveys are conducted to identify the presence of California gnatcatcher and requirements to avoid any identified habitat, particularly during the nesting season. ~~that identified California gnatcatcher habitat is not affected by construction during breeding season. If vegetation clearing must happen during breeding season, a preconstruction survey would be required with restrictions on construction activities if active nests are identified thus ensuring~~ Impacts on California gnatcatcher would be less than significant.

Page 3.4-13, under subheading, Significance of Impacts after Mitigation, the following paragraphs have been added:

> Mitigation Measure **BIO-8** would avoid potential impacts on least Bell's vireo, a special status species, by ensuring that protocol surveys are conducted to identify the presence of least Bell's vireo and requires avoidance of disturbing active nests or removal of identified habitat. Impacts on least Bell's vireo would be less than significant.
>
> Mitigation Measure **BIO-9** would avoid potential impacts on western Joshua tree, a special status species, by ensuring that construction activities and access to the construction site avoid the tree. Impacts on western Joshua tree would be less than significant.
>
> Mitigation Measures **BIO-10** would avoid impacts to sensitive fish species, particularly Santa Ana sucker by requiring additional survey work to determine if any fish are present in or around the Balboa Double Track Extension site or the Canyon Siding Extension site and would require application for proper permits if impacts on special status fish species cannot be avoided. Mitigation Measure **BIO-11** would avoid impacts to unarmored threespine stickleback by requiring protocol surveys at the Canyon Siding Extension site to determine if the species is present and would require avoidance if identified within the site or affected tributaries. Impacts on sensitive fish species would be less than significant.
>
> Mitigation Measure **BIO-12** would avoid impacts to other sensitive species by requiring a field assessment within the Balboa Double Track Extension and Canyon Siding Extension ROW to determine if other sensitive species are present or have habitat potentially affected by the Project. The field assessment would be required to make additional recommendations for the avoidance of impacts to special status species.

Page 3.4-14, the following paragraph has been revised under Impact 3.4-2, subheading Construction:

> **Less-Than-Significant Impact with Mitigation**. CDFW considers riparian habitat to be a sensitive biological community. Construction of the Proposed Project could temporarily impact riparian vegetation in both the Balboa Double Track Extension site and Canyon Siding Extension site. Although, there are no permanent impacts to riparian habitat or sensitive natural communities anticipated since the permanent features of the Proposed Project at these sites would be limited to the existing ROW, which does not include riparian habitat or known sensitive plant communities. Construction would be temporary and limited in scope as the proposed improvements in areas of riparian habitat are limited to the construction of new rail lines in existing ROW. Given that riparian vegetation is present adjacent to the Balboa Double Track Extension and the Canyon Siding Extension sites, indirect impacts such as introduction and colonization of nonnative, invasive plant species. In addition, dust, construction-related chemicals such as fuels and refuse, and run-off from the construction site can accumulate within water courses or other areas supporting riparian vegetation or other sensitive plant communities, particularly in low-lying areas along edges of the AVL ROW. Adherence to Mitigation Measures **BIO-~~8~~ 13** ~~through~~ and **BIO-1~~0~~** in this document would ensure that impacts would be less than significant. Though not anticipated, if permanent impacts to riparian habitat or other sensitive natural communities are identified through implementation of Mitigation Measures **BIO-7** through **BIO-12**, Mitigation Measure **BIO-15** would be implemented to ensure the Proposed Project does not result in a significant reduction in the quality or quantity of the State's riparian habitat and sensitive natural communities.
>
> Southern California black walnut trees have been observed along the slopes adjacent to the Balboa Double Track Extension site and coast live oak trees are present along the south side of the Canyon Siding Extension site near the Santa Clarita Station platform. Southern California black walnut CDFW considers both California walnut groves and coast live oak woodland to be sensitive natural communities. Grading activities at both locations have the potential to require removal of these sensitive trees. Mitigation Measures **BIO-16** and **BIO-17** would be implemented to replace any impacted southern California black walnut or coast live oak trees or associated sensitive plant communities removed as part of the Project.

Page 3.4-14, the following mitigation measures has been revised:

> **BIO-1~~3~~8** Riparian zones within the three capital improvement sites shall be protected through control of invasive plant species ~~and animal species following final site stabilization~~. All construction vehicles and heavy equipment shall be washed (including treads, wheels, and

undercarriage) prior to delivery to the Project site to minimize weed seeds entering the construction area via vehicles. Slope stabilization and replanting materials used during construction shall be certified as weed-free. Invasive plant species (such as giant reed) located on the Proposed Project site shall be removed during construction. Invasive plant species shall be removed using best management practices that contain and properly dispose of the species' seeds and plant materials (which may reproduce asexually). Transport of any invasive plant material offsite shall be stored in securely covered containers or vehicles and disposed of at facilities that shall properly eliminate the ability of these materials to grow or colonize new areas.

BIO-14~~9~~ In areas where riparian features are below upland features, a qualified biologist shall determine if any disturbance would occur in upland areas such that runoff could affect wetlands or riparian habitat. If riparian features are identified in locations that may be subject to construction-relate runoff, the qualified biologist shall identify these areas, clearly delineate sensitive site conditions on-site, and recommend best management practices for the control of runoff including but not limited to:

- Minimizing the extent of disturbed areas and duration of exposure;
- Stabilizing and protecting disturbed areas;
- Keeping runoff velocities low;
- Retaining sediment within the construction area;
- Use of silt fences or straw wattles;
- Temporary soil stabilization;
- Temporary drainage inlet protection;
- Temporary water diversion around the immediate work area; and
- Minimizing debris from construction vehicles on roads providing construction access.

BIO-15~~10~~ Metro shall provide no less than 2:1 ratio for direct impacts on streams and associated riparian plant community. Metro shall provide additional mitigation for impacts on riparian plant communities that have a State Rarity Ranking of S1 and S2 and an additional ranking of 0.1 and 0.2 to be determined through consultation with California Department of Fish and Wildlife and/or Department of Fish and Wildlife, as applicable. ~~Native biota shall be re-introduced to riparian areas impacted by Proposed Project construction as required.~~

Page 3.4-13, the following mitigation measures have been added:

BIO-16 Metro shall replace no less than three trees for every one southern California black walnut and coast live oak tree that is removed.

BIO-17 Metro shall create or restore no less than one acre for every one acre of impact on a sensitive plant community. Metro shall create or restore no less than two acres for impacts on a sensitive plant community that consists of heritage-sized trees, vigorous trees, or seedlings/saplings. Mitigation shall be provided on lands within the same watershed as the area impacted. The density of trees at the mitigation site shall be at least the same as the density of trees in the habitat that was impacted. The mitigation site shall also provide the same understory species as found in the impacted area.

Page 3.4-14, under subheading, Significance of Impacts after Mitigation, the following paragraph has been revised:

Mitigation Measures **BIO-13~~8~~** through **BIO-15~~10~~** would ensure that impacts to riparian habitat would be less-than-significant by controlling invasive species, identifying potential runoff into riparian wetland areas, and by ~~reintroducing native biota in areas where Proposed Project construction has cleared vegetation~~ requiring mitigation compensation for streams and riparian plan community that are directly impacted by the Proposed Project. Mitigation Measures **BIO-16** and **BIO-17** would ensure impacts to other sensitive plant communities, including southern California black walnut and coast live oak, would be less-than-significant by requiring the replacement of impacted trees or sensitive plant communities.

Page 3.4-15, the following paragraph has been revised under Impact 3.4-3, subheading Construction:

Less-Than-Significant Impact with Mitigation. There are multiple riverine and freshwater pond features within the vicinity of the capital improvement sites, including one riverine feature that demonstrates indicators of wetland presence adjacent to the Balboa Double Track Extension site. None of these features contain State or federally protected wetlands. However, construction activities have the potential to result in hydrological interruption through the inadvertent disturbance of water features associated with grading activities. Mitigation Measures **BIO-18~~11~~** and **BIO-19~~12~~** would ensure that any potential impacts to water features surrounding the capital improvement sites would have less than significant impacts on any potential wetlands.

Page 3.4-15, the following mitigation measure has been revised:

BIO-19~~12~~ To comply with the state and federal regulations for impacts to “waters of the United States and state,” the following agency permits are required, or verification that they are not required shall be obtained.

- The following permit and agreement shall be obtained, or provide evidence from the respective resource agency that such an agreement or permit is not required:
  - A Clean Water Act, Section 401/404 permit issued by the California Regional Water Quality Control Board (RWQCB) and the USACE for all project-related disturbances of waters of the United States and/or associated wetlands.
  - A Section 1602 Streambed Alteration Agreement (LSA) issued by the CDFW for all project related disturbances of any streambed.
    - If required, the Streambed Alteration Agreement notification shall include the following information and analyses:
      1. Quantification of the linear feet of streams and area of associated riparian vegetation that would be impacted;
      2. An analysis providing information on whether impacts to streams within the immediate project area could cause impacts downstream where there is hydrologic connectivity;
      3. A hydrological evaluation of the 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions to provide information on how water and sediment is conveyed through the Project site;
      4. A scour analysis demonstrating that stream banks, bed, and channel would not erode and be impaired (e.g., aggrade, incised) as a result of Project activities;
      5. An analysis demonstrating that the Project would not impact stream underflow supporting riparian vegetation;
      6. Identification, analysis, and discussion of potential impacts on streams and associated vegetation as a result of upland Project construction and activities;
      7. Specific activities and actions Metro proposes to take to mitigate for impacts on streams and riparian vegetation, specifically, actions to control invasive plants and animals and reintroducing native biota;
      8. A complete description of routine maintenance activities that may be required for the life of the Project including measures to avoid impacts on streams and riparian vegetation during routine maintenance activities occurring for the life of the Project; and
      9. Protocol survey results (see Mitigation Measures **BIO-7** through **BIO-12**), including negative findings, shall be included as part of the LSA Notification. Survey reports shall include information on habitat within the Project site and whether the Project would impact habitat supporting those species.
- Documentation: Metro shall consult each agency to determine if a permit or agreement is required. Upon completion of the agency review of this

project, the applicant shall provide a copy of the permit(s)/agreement(s), or evidence from each agency that such an agreement or permit is not required for compliance.

- Timing: Prior to approval of any grading and or improvement plans and issuance of any Grading or Construction Permits.
- Monitoring: Metro shall review the permits/agreement for compliance with this condition. Copies of these permits should be implemented on the grading plans.

Page.3.4-18, the follow mitigation measure numbers have been revised:

BIO-20~~13~~ Preconstruction surveys for protected trees (native trees four inches or more in cumulative diameter, as measured at 4.5 feet above the ground level, that are subject to protection under any relevant tree protection ordinance, shall be conducted by a registered consulting arborist with the American Society of Consulting Arborists at least 120 days prior to construction. The locations and sizes of all protected trees shall be identified prior to construction and overlaid on project footprint maps. The registered consulting arborist shall prepare a Protected Tree Report and shall submit three copies to the relevant local jurisdiction. Any protected trees that must be removed due to project construction shall be replaced at a 2:1 ratio (or up to a 4:1 ratio for protected trees on private property) except when the protected tree is relocated on the same property, the relevant local agency has approved the tree for removal, and the relocation is economically reasonable and favorable to the survival of the tree. Each replacement tree shall be at least a 15-gallon specimen, measuring one inch or more in diameter, one foot above the base, and shall be at least seven feet in height measured from the base.

BIO-21~~14~~ Protect trees that will possibly receive impacts to the root system by restricting root cuts to the outer region of the roots using a distance formula recommended by the International Society of Arboriculture. Adjust utility relocations to avoid as many tree trunks and root clusters as possible and eliminate direct impacts/removal of trees. Hand digging the root protection zones will reduce indirect impacts to the root systems.

BIO-22~~15~~ Provide temporary supplemental irrigation to existing trees during construction, as necessary.

BIO-2~~3~~3~~16~~ Replace all impacted trees that cannot be saved <u>with trees of the same genus, species, and variety (if applicable) as the tree that is removed. Replacement trees shall be locally sourced from within the same watershed and not from a supplier. Replacement trees shall come from a local native plant nursery that implements</u>

Phytophthora/Clean Nursery Stock protocols ~~with native drought tolerant trees of comparable size to the impacted trees~~.

BIO-~~24~~17 Determine proven methods of stabilizing the existing landscape to minimize disturbances beyond the area of cut and fill.

BIO-25~~18~~ Consider "Geo-cell" type planted retaining wall stabilization structures if they can be planted with native chaparral seed.

BIO-26~~19~~ Provide compost to hold moisture in the soil. Utilize watering bags for the establishment period.

Page 3.4-19, the following mitigation measure has been added:

BIO-27 All tree material, especially tree material infected with pests, pathogens, and diseases, shall be left on site, chipping the material for use as ground cover or mulch.

Page 3.4-19, under subheading, Significance of Impacts after Mitigation, the following paragraph has been revised:

Mitigation Measures **BIO-19~~13~~** through **BIO-27~~19~~** would ensure a less-than-significant impact related to local ordinances by requiring compliance with local tree ordinances including conducting a preconstruction tree survey, requiring replacement of displaced trees and providing protections of existing trees, including root protection, compost, and slope stabilization measures.

SECTION 3.5 CULTURAL RESOURCES

Page 3.5-7, the following discussion has been added to the second paragraph under subheading 3.5.2, Existing Setting:

The results of the South Central Coastal Information Center (SCCIC) records search indicate that 126 previously-recorded resources are located within the 0.25-mile records search radius of the Project Area. Resources that have been identified as overlapping or adjacent to the Project Area are discussed below. Appendix E provides additional detail on the records search results. In addition, the Fernandeño Tataviam Band of Mission Indians provided information on one resource that had been recorded by a private citizen. In 2018, the private citizen provided the resource and locational information to Fernandeño Tataviam Band of Mission Indians.

Page 3.5-8, the following addition to the last paragraph under subheading 3.5.3.2, Archaeological Resources has been made:

> Although no prehistoric resources overlap the Project Area, ~~nine~~ ten prehistoric resources have been previously-recorded within 0.25 miles of the Canyon Road Station. The prehistoric resources include ~~four~~ five deposits of lithic tools, lithic debitage, ground stone artifacts (P-19-000351/CA-LAN-000351, P-19-001824/CA-LAN-001824, P-19-003043/CA-LAN-003043, ~~and~~ P-19-120063, and one resource recorded by a private citizen) and five isolated lithic flakes (P-19-100341, P-19-100343, P-19-100344, P-19-100345, and P-19-100346).

Page 3.5-12, the Mitigation Measure **CUL-1** has been revised as follows:

> **CUL-1** Mitigation Measure **CUL-1** pertains specifically to archaeological involvement. The involvement of the Fernandeño Tataviam Band of Mission Indians and Gabrieleno Band of Mission Indians – Kizh Nation (Consulting Tribes) is detailed in Mitigation Measure **TCR-1**. For the purposes of the Mitigation Measures **CUL-1** and **TCR-1**, ground disturbing activities include, but are not limited to, excavation, trenching, grading, and drilling.
>
> Prior to issuance of grading permits for each capital improvement site, a qualified archeologist, meeting the Secretary of the Interior's Standards shall be retained to serve as Project Archaeologist ~~and~~ to develop and supervise the archaeological monitoring program. ~~In addition, Native American monitors from the Consulting Tribe(s) shall be retained to monitor earth-moving activities in native (i.e., non-fill) sediments. Native American monitoring shall be conducted on a rotational basis between Consulting Tribes (should more than one be involved) during these construction activities, and attendance is ultimately at the discretion of the Tribe(s).~~
>
> Prior to commencement of any grading activities on site, the Program Archaeologist shall prepare a Cultural Resources Monitoring Plan (CRMP). The CRMP shall be reviewed by the Lead Agency. The Consulting Tribes shall also be provided an opportunity to review and comment on the CRMP. The CRMP should include at a minimum: (1) the roles and responsibilities of the Program Archaeologist, archaeological monitor, and Native American monitor; (2) the definition of an Environmentally Sensitive Area around the previously-identified prehistoric resources adjacent to the Canyon Siding Extension project area, (3) a description of monitoring procedures; (4) a description of the frequency of monitoring (e.g., full-time, part-time, spot checking); (5) a description of what types of resources may be encountered; (6) a description of circumstances that would result in the halting of work at

the program site (e.g., what is considered a "significant" archaeological site); (7) a description of procedures to follow when a resource is encountered including curation procedures agreed upon by the Consulting Tribes; (8) communication/notification protocols; and (9) a description of monitoring reporting procedures.

At the commencement of construction, an archaeologist shall provide a Worker Environmental Awareness Program (WEAP) training for all earth moving personnel and their supervisors. WEAP materials shall be developed and distributed to construction personnel over the lifetime of the Program. The program shall inform personnel of the types of artifacts and features that may be encountered, the procedures to be followed if archaeological materials are unearthed during program excavation, contact information for the archaeological and Consulting Tribe personnel, and the regulatory requirements for the protection of archaeological resources including penalties for violations.

The archaeological ~~and Native American~~ monitor~~s~~ shall be present for all ground-disturbing activities in native soil (i.e., undisturbed, non-fill sediments) within the Balboa Double Track Extension and Lancaster Terminal Improvements sites. Within the Canyon Siding Extension capital improvement area, the archaeological monitor shall be present for all ground-disturbing activities within the Environmentally Sensitive Area, including those in disturbed fill sediments During ground-disturbing activities outside of the Environmentally Sensitive Area within the Canyon Siding Extension capital improvement area, archaeological monitoring shall be limited to ground-disturbing activities within native soil only.

All archaeological monitors, working under the supervision of the Project Archaeologist, shall have construction monitoring experience and be familiar with the types of historical and prehistoric resources that could be encountered. ~~Ground-disturbing activities include, but are not limited to, excavation, trenching, grading, and drilling.~~ A sufficient number of archaeological ~~and Native American~~ monitors shall be present each workday to ensure that simultaneously-occurring ground-disturbing activities receive thorough levels of monitoring coverage. The Project Archaeologist shall have the ability to recommend, with written and photographic justification, the reduction or termination of monitoring efforts to the Lead Agency (i.e., Metro), and should the Lead Agency and the ~~Native American participant(s)~~ Consulting Tribes concur with this assessment, then monitoring shall be reduced or ceased.

If an inadvertent discovery of archaeological materials is made during project-related construction activities, the archaeological ~~and Native~~

~~American~~ monitors shall have the authority to halt ground-disturbing activities within 50 feet of the resource(s) and an Environmentally Sensitive Area physical demarcation shall be constructed. The Project Archaeologist and Lead Agency shall be notified regarding the discovery. If prehistoric or potential tribal cultural resources (TCRs) are identified within disturbed or native sediments, the Consulting Tribes shall be notified. ~~In the event of an inadvertent discovery, t~~ The procedures outlined in a ~~Cultural Resources Monitoring Plan (~~CRMP ~~Mitigation Measure **CUL-2**~~) shall then be ~~followed~~ implemented.

Page 3.5-13, Mitigation Measure **CUL-2** has been deleted as follows:

~~**CUL-2** Prior to commencement of any grading activities on site, the Project Archaeologist shall prepare a CRMP. The CRMP shall be reviewed by the Lead Agency. The Consulting Tribe(s) shall be provided an opportunity to review and comment on the CRMP. The CRMP should include at a minimum: (1) the roles and responsibilities of the Project Archaeologist, archaeological monitors, and Native American monitors; (2) a description of monitoring procedures; (3) a description of the frequency of monitoring (e.g., full-time, part-time, spot checking); (4) a description of what types of resources may be encountered; (5) a description of circumstances that would result in the halting of work at the project site (e.g., what is considered a "significant" archaeological site); (6) a description of procedures to follow when a resource is encountered; (7) communication/notification protocols; and (8) a description of monitoring reporting procedures. If any significant historical resources, archaeological resources, TCRs, or human remains are found during monitoring, work shall be stopped within 50 feet of the resource until such time as the resource can be evaluated by the Project Archaeologist in coordination with the Lead Agency and Consulting Tribe(s).~~

~~At the commencement of construction, an archaeologist and Native American representative shall provide a Worker Environmental Awareness Program (WEAP) training for all earth-moving personnel and their supervisors. WEAP materials will be developed and distributed to construction personnel over the lifetime of the Project. The program will inform personnel of the types of artifacts and features that may be encountered, the procedures to be followed if archaeological materials are unearthed during project excavation, contact information for the archaeological personnel, and the regulatory requirements for the protection of archaeological resources including penalties for violations.~~

Page 3.5-15, the following paragraph has been revised under subheading Significance of Impacts after Mitigation:

> Implementation of Mitigation Measures **CUL-1** ~~and **CUL-2**~~ would mitigate inadvertent impacts to potential subsurface archaeological deposits during construction activities. Therefore, with mitigation, the Proposed Project would result in a less-than-significant impact related to archaeological resources.

SECTION 3.10 NOISE AND VIBRATION

Page 3.10-3, under the Los Angeles County subheading, the following discussion has been added :

> **Los Angeles County General Plan Noise Element.** The following portions of the General Plan are relevant to the project:
>
> - Goal N 1: The reduction of excessive noise impacts.
> - Policy N 1.1: Utilize land uses to buffer noise-sensitive uses from sources of adverse noise impacts.
> - Policy N 1.2: Reduce exposure to noise impacts by promoting land use compatibility.
> - Policy N 1.3: Minimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering controls through Best Available Technologies (BAT).
> - Policy N 1.4: Enhance and promote noise abatement programs in an effort to maintain acceptable levels of noise as defined by the Los Angeles County Exterior Noise Standards and other applicable noise standards.
> - Policy N 1.6: Ensure cumulative impacts related to noise do not exceed health-based safety margins.
> - Policy N 1.7: Utilize traffic management and noise suppression techniques to minimize noise from traffic and transportation systems.
> - Policy N 1.9: Require construction of suitable noise attenuation barriers on noise sensitive uses that would be exposed to exterior noise levels of 65 dBA CNEL and above, when unavoidable impacts are identified.

SECTION 3.11 TRIBAL CULTURAL RESOURCES

Page 3.11-5, the following paragraph has been revised:

> By the late 18th century, the Gabrieleño population had significantly dwindled due to introduced European diseases and dietary deficiencies. Gabrieleño communities disintegrated as families were separated during the practice of missionization; however, current descendants of the Gabrieleño remain in the Los Angeles Basin today. Although there are no federally-recognized Gabrieleño groups or tribes, State of California recognizes several groups of Gabrieleño descent~~, including the Tongva and Kizh Nation bands~~.

Page 3.11-7, the following paragraph has been revised:

> During AB 52 consultation, the Project corridor was identified as a TCR by Mr. Andrew Salas of the Gabrieleno Band of Mission Indians – Kizh Nation and Mr. Jairo Avila of the Fernandeño Tataviam Band of Mission Indians identified a location immediately outside of the 0.25-mile records search radius within the vicinity of the Canyon Siding Extension project area, as a TCR. A summary of AB 52 Consultation Communication to date as well as copies of correspondence to date with the NAHC and tribal groups is provided in Appendix E.

Page 3.11-8, the following paragraph under Section 3.11.3.2, Methodology, has been revised:

> The analysis of tribal cultural resources was based on the results of the records search and literature review, a search of the SLF from the NAHC, and AB 52 consultation. No known TCRs were identified within the Project Area during the SLF search; however, the the Gabrieleno Band of Mission Indians – Kizh Nation identified the Project Area as a TCR and the Fernandeño Tataviam Band of Mission Indians identified locations immediately outside of the 0.25-mile records search radius within the vicinity of the Balboa Double Track Extension and Canyon Siding Extension project areas, as TCRs. This analysis examines the possibility of encountering additional, unrecorded TCRs during Project construction.

Page 3.11-11, the following paragraph has been revised under Impact 3.11-1:

> The Proposed Project is located within an urbanized area and has been subject to disruption by development activities associated with the railroad and surrounding urban uses. As a result of previous development activities, surficial archaeological resources and any above-ground tribal cultural resources that may have existed have likely been displaced or destroyed. Considering the stated sensitivity of the Project Area with regard to the assumed presence of materials, artifacts, and unmarked burials along the AVL corridor there is a possibility that ground-disturbing activities could impact previously undiscovered buried tribal cultural resources of historical significance. Therefore, without

mitigation, construction of the Proposed Project would result in a potentially significant impact related to TCRs. Potential impacts to TCRs that are not listed or eligible for listing in the California Register or a local register are discussed in Impact 3.11-2. Compliance with Mitigation Measures **CUL-1** and ~~**CUL-2**~~ **TCR-1** would reduce impacts to the TCR to less-than-significant levels.

Page 3.11-11, the following paragraph has been revised under Mitigation Measures subheading:

Refer to Mitigation Measures **CUL-1** ~~and **CUL-2**~~ in Section 3.5, Cultural Resources of the Draft EIR. ~~Ongoing AB 52 consultation with Native American tribes may result in specific TCR Mitigation Measures, based on the results of consultation.~~

Page 3.11-11, the following Mitigation Measure has been added under Mitigation Measures subheading:

TCR-1 Mitigation Measure **CUL-1** pertains specifically to archaeological involvement. The involvement of the Fernandeño Tataviam Band of Mission Indians and Gabrieleno Band of Mission Indians – Kizh Nation (Consulting Tribes) is detailed in Mitigation Measure **TCR-1**. For the purposes of the Mitigation Measures **CUL-1** and **TCR-1**, ground disturbing activities include, but are not limited to, excavation, trenching, grading, and drilling.

In addition to the Program Archaeologist and archaeological monitor (See Mitigation Measure **CUL-1**), a Native American monitor from the Consulting Tribes shall be retained to monitor earth-moving activities. Native American monitoring shall be conducted on a rotational basis between the Consulting Tribes (Fernandeño Tataviam Band of Mission Indians and Gabrieleno Band of Mission Indians – Kizh Nation) during these construction activities, and attendance is ultimately at the discretion of the Consulting Tribes.

Prior to commencement of any grading activities on site, the Program Archaeologist shall prepare a Cultural Resources Monitoring Plan (CRMP). The CRMP shall be reviewed by the Lead Agency and Consulting Tribes. The CRMP should include at a minimum: (1) the roles and responsibilities of the Program Archaeologist, archaeological monitor, and Native American monitor; (2) the definition of an Environmentally Sensitive Area (ESA) around the previously-identified prehistoric resources adjacent to the Canyon Siding Extension capital improvements area, (3) a description of monitoring procedures; (4) a description of the frequency of monitoring (e.g., full-time, part-time, spot checking); (5) a description of what types of resources may be encountered; (6) a description of circumstances that would result in the

halting of work at the program site (e.g., what is considered a "significant" archaeological site); (7) a description of procedures to follow when a resource is encountered including curation procedures agreed upon by the Consulting Tribes; (9) communication/notification protocols; and (8) a description of monitoring reporting procedures.

At the commencement of construction, an archaeologist and Native American representatives from the Consulting Tribes shall provide a Worker Environmental Awareness Program (WEAP) training for all earth moving personnel and their supervisors. WEAP materials shall be developed and distributed to construction personnel over the lifetime of the program. The program shall inform personnel of the types of artifacts and features that may be encountered, the procedures to be followed if archaeological materials are unearthed during program excavation, contact information for the archaeological and Consulting Tribe personnel, and the regulatory requirements for the protection of archaeological resources including penalties for violations.

The Native American monitor shall be present for all ground-disturbing activities in native soil (i.e., undisturbed, non-fill sediments) within the Balboa Double Track Extension and Lancaster Terminal Improvements sites. Within the Canyon Siding Extension site, the Native American monitor shall be present for all ground-disturbing activities within the ESA, including those in disturbed fill sediments. During ground-disturbing activities outside of the ESA within the Canyon Siding Extension site, Native American monitoring shall be limited to ground-disturbing activities within native soil only. A sufficient number of Native American monitors shall be present each workday to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage.

If an inadvertent discovery of archaeological materials is made during program-related construction activities, the Native American monitor shall have the authority to halt ground disturbing activities within 50 feet of the resource(s) and an ESA physical demarcation shall be constructed. The Program Archaeologist, Lead Agency, and Consulting Tribes shall be notified regarding the discovery. The procedures outlined in CRMP shall then be implemented.

Page 3.11-10, the following paragraph has been revised under Significance of Impacts after Mitigation subheading:

Mitigation Measures **CUL-1** and **TCR-1** ~~**CUL-2**~~ would mitigate inadvertent impacts to potential subsurface archaeological deposits or tribal cultural

resources during construction activities. Therefore, with mitigation, the Proposed Project would result in a less-than-significant impact.

Page 3.11-10, the following paragraph has been revised under Impact 3.11-2:

As discussed in Section 3.11.2, the NAHC reported the search of the SLF revealed negative results for the relevant United States Geological Survey quadrangles; however, the Project corridor was identified by Mr. Andrew Salas of the Gabrieleno Band of Mission Indians – Kizh Nation as a TCR and Mr. Jairo Avila of the Fernandeño Tataviam Band of Mission Indians identified locations immediately outside of the 0.25-mile records search radius within the vicinity of the Balboa Double Track Extension and Canyon Siding Extension project areas, as TCRs. Project notification letters were sent to 15 tribes or tribal representatives with an invitation to consult on the Project under AB 52.

Page 3.11-10, the following paragraph has been revised under Construction subheading:

There is the possibility that previously undiscovered and undocumented resources could be adversely affected or otherwise altered by ground-disturbing activities during construction of the project. Disturbance of undocumented resources would be a potentially significant impact without implementation of mitigation measures. Implementation of Mitigation Measures **CUL-1** and **TCR-1** ~~**CUL-2**~~, as presented below, would avoid or reduce potential impacts to unknown buried resources to a level that is less than significant.

Page 3.11-10, the following has been revised under Mitigation Measures subheading:

Mitigation Measures **CUL-1** and **TCR-1** ~~**CUL-2**~~.

Page 3.11-10, the following has been revised under Significance of Impacts after Mitigation subheading:

Mitigation Measures **CUL-1** and **TCR-1** ~~**CUL-2**~~ would mitigate inadvertent impacts to potential subsurface archaeological deposits or TCRs during construction activities. Therefore, with mitigation, the Proposed Project would result in a less-than-significant impact related to TCRs.

APPENDIX E ARCHAEOLOGICAL AND TRIBAL CULTURAL RESOURCES TECHNICAL REPORT

Page 32 of the Archaeological and Tribal Cultural Resources Technical Report (Appendix E) Table 5: Summary of AB 52 Consultation Communication has been revised as follows:

Table 1: Summary of AB 52 Consultation Communication

Recipient	Response
Jairo Avila Fernandeño Tataviam Band of Mission Indians	**October 13, 2020:** Request to initiate consultation sent by Metro. **November 8, 2020:** Mr. Avila sent an email stating that the Program is within the traditional ancestral territory of the Fernandeño Tataviam Band of Mission Indians and encompasses lineage-villages from which members of the Tribe descend. He requested to review grading/excavation plans, geotechnical report, and cultural resource assessment report prior to providing tribal comments or scheduling a consultation meeting. **November 11, 2020:** Mr. Avila had a phone call with Mr. Brian Balderrama stating he was concerned about resources that have been recorded as Tribal Cultural Resources with the tribe. He requested that a 1-mile records search radius be used. **August 31, 2021:** A consultation call was held with Mr. Avila regarding the Mitigation Measures (MMs) proposed in the Draft Environmental document. In attendance were Brian Balderrama (Metro), Eric Banghart (Mott MacDonald), Peter Feldman (TAHA), and Liz Denniston (Paleo Solutions). Mr. Avila requested that a resource that has been recorded solely with the tribe be included in the cultural resources investigation, that the MMs specify which tribal groups would be included in the monitoring efforts, include a statement that all tribal groups be notified in the event of any finds, that all resources, including those that are in disturbed material be treated as potentially TCRs, and specify that the Cultural Resources Monitoring Plan (CRMP) would include language to establish curation procedures. At this time, it was also explained to Mr. Avila that the records search radius was decreased to 0.25-mile due to the number of previously recorded resources within the project vicinity, and the results had been received prior to his request for a 1-

	mile radius. Mr. Avila stated that he appreciated the clarification. **September 29, 2021:** An email was sent by Metro stating that in response to their concerns, the mitigation measures were updated as requested. Mr. Balderrama stated that monitoring for excavation outside of the established ESAs will be limited to native, non-fill material. While it is infeasible to employ monitoring of ground disturbing activities in fill material outside of the established ESAs, Mr. Balderrama stated that the Tribe was welcome to do so of their own volition. **November 4, 2021:** Mr. Avila replied stating that the Tribe finds the mitigation measures to be acceptable for the proposed Project and there were no further comments at this time. They requested that they be notified of any changes or updates and were looking forward to reviewing the final mitigation measures and the CRMP once drafted.
Andrew Salas Gabrieleno Band of Mission Indians – Kizh Nation	**October 13, 2020:** Request to initiate consultation sent by Metro. **October 22, 2020:** Mr. Salas sent an email requesting consultation. **December 16, 2020:** A consultation call was held between Metro and the Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation). In attendance were Brian Balderrama (Metro), Eric Banghart (Mott MacDonald), Andrew Salas (Kizh Nation), Matt Teutimez (Kizh Nation), and Liz Denniston (Paleo Solutions). Mr. Balderrama began by providing an overview of the Program. He stated that while the Program follows the CHSR alignment, the Program is being completed by Metro and the CHSRA is acting only as a stakeholder in the Program. Mr. Balderrama explained that the Program consists of adding a parallel track within the existing railroad corridor, along with updating infrastructure at three locations along the alignment: Lancaster Terminal, Canyon Siding Extension, and Balboa Double Track Extension. Mr. Banghart stated that the alignment is entirely within the Metro right-of-way. Mr. Salas explained that the Program alignment followed a corridor of trade routes and villages heavily utilized by Native Americans. It is part of a tribal cultural resource for the Kizh

	Nation and is considered highly sensitive for cultural materials. He stated that most railroad alignments through California follow Native American travel routes because they were already established paths of travel. Mr. Teutimez stated that because the corridors were heavily used during trade activities, there is an abundance of materials that are not native to the area, such as shell and obsidian. He stated that during trading and travel, if someone died, they were buried on the spot or, preferably at the intersection of the trail and riparian corridor. As a result, it is assumed that unmarked burials exist along the entire corridor. He stated that this might be the last time for the resources in the area to be recorded. Mr. Salas stated that they are also interested in observing fill material because it is often from the same area and reused. Mr. Balderrama stated that the Program was still within the initial stages of the environmental studies and the design is still in the works, with construction activities planned for 2023. He stated that he appreciates the Kizh Nation's time and discussion about the Program area and will keep the Kizh Nation involved in the entire process of the Program. Mr. Salas stated that he appreciates Metro's time and involvement in the Program and will share information relevant to the area. **September 16, 2021:** Mr. Balderrama emailed Mr. Salas updated MMs for review. **September 17, 2021:** In response to the revised MMs, Mr. Salas emailed a request that 1) all reference to the Tongva be removed from the ethnographic section and 2) that the archaeological and TCR MMs be clearly delineated to separate the two. In response, Mr. Balderrama set up a second consultation meeting for September 23, 2021. **September 23, 2021:** Brian Balderrama (Metro), Eric Banghart (Mott MacDonald), Peter Feldman (TAHA), and Liz Denniston (Paleo Solutions) joined the call, however, neither Mr. Salas, nor a tribal representative joined the call. The tribe has not contacted Mr. Balderrama to reschedule. **September 29, 2021:** An email was sent by Metro stating that in response to their concerns, the mitigation measures were updated as requested. Mr. Balderrama stated that monitoring for excavation outside of the established ESAs will

	be limited to native, non-fill material. While it is infeasible to employ monitoring of ground disturbing activities in fill material outside of the established ESAs, Mr. Balderrama stated that the Tribe was welcome to do so of their own volition. **October 6, 2021:** An email was sent to Metro stating that Mr. Salas had concerns with language added regarding non-native materials. Mr. Balderrama replied asking for a convenient time to discuss Mr. Salas's concerns. **October 25, 2021:** An email was sent to Metro stating that Mr. Salas was available to speak on November 4th. A meeting was set for November 4th. **November 4, 2021:** Mr. Balderrama called Mr. Salas directly. Mr. Salas expressed concerns related to excavations in fill vs. native soils. Mr. Balderrama reiterated that tribal monitoring will be allowed in native, non-fill material and that the Tribe would be allowed to monitor ground disturbing activities in fill material outside of the established ESAs of their own volition. Mr. Salas stated that he was satisfied with the measures as proposed.

APPENDIX I NOISE AND VIBRATION TECHNICAL REPORT

Page 235 of the Noise and Vibration Technical Report (Appendix I), Appendix C, Table 22: Sensitive Receivers and Predicted Noise Increases, has been revised as follows:

Table 2: Sensitive Receivers and Predicted Noise Increases

Receiver ID	FTA Category	Address (Provided Where Available Through LA County Data)	Distance To Near Track (Ft)	Speed (mph) (Design Speed)	Existing Noise (dba)	Predicted Noise Increase (dba)	Allowable Increase (Dba)	
							Moderate	Severe (Significant For CEQA)
NB-6-001	2 - residential	–11514 SOLEDAD CANYON RD	141	34	72	0.2	0.8	2.5
NB-6-002	2 - residential	–11433 SOLEDAD CANYON RD	273	34	71	0.2	1.0	2.6
NB-6-003	2 - residential	–10002 SOLEDAD CANYON RD	709	34	70	0.1	1.0	2.8
NB-6-007	2 - residential	~~VAC/SOLEDAD CYN RD/VIC BRIGGS RD~~ 9411 SOLEDAD CANYON RD	569	34	66	0.2	1.4	3.6
NB-6-008	2 - residential	9142 ~~9316~~ SOLEDAD CANYON RD	920	34	64	0.1	1.6	4.1
NB-6-009	2 - residential	9140 ~~9142~~ SOLEDAD CANYON RD	832	34	66	0.1	1.4	3.6
NB-6-010	2 - residential	9070 ~~9140~~ SOLEDAD CANYON RD	661	34	70	0.1	1.1	2.9
NB-6-011	2 - residential	~~–~~8235 SOLEDAD CANYON RD	101	34	73	0.3	0.6	2.4
NB-6-012	2 - residential	–8235 SOLEDAD CANYON RD	107	34	73	0.3	0.6	2.4
NB-6-014	2 - residential	–7433 SOLEDAD CANYON RD	161	34	71	0.3	1.0	2.6
NB-6-015	2 - residential	~~–~~7433 SOLEDAD CANYON RD	167	34	71	0.3	1.0	2.6
NB-6-017	2 - residential	~~29303 OLSON RD~~ 5726 SOLEDAD CANYON RD	182	35	71	0.3	1.0	2.8
NB-6-020	2 - residential	~~VAC/VIC SOLEDAD CYN RD~~ 4700 CROWN VALLEY RD	339	39	68	0.3	1.2	3.2
NB-6-021	2 - residential	~~VAC/VIC SOLEDAD CYN RD~~ 4700 CROWN VALLEY RD	209	39	70	0.1	1.1	2.9
NB-6-022	2 - residential	~~30380 ARRASTRE CANYON RD~~ 33540 VAC ANGELES FOREST HIGHWAY DR	895	39	60	0.3	2.2	5.4
NB-6-023	2 - residential	~~VAC/PLATZ RD/VIC NETTIE RD~~ PLATZ RD VIC NETTIE RD	465	39	62	0.6	1.7	4.4
NB-6-027	2 - residential	~~32580~~ 32557 ALISO CANYON RD	254	39	73	0.2	0.6	2.4
NB-6-029	2 - residential	~~32548~~ 32538 ALISO CANYON RD	269	39	73	0.1	0.6	2.4
NB-6-030	2 - residential	~~32538~~ 32530 ALISO CANYON RD	112	39	73	0.3	0.6	2.4
NB-6-031	2 - residential	~~32530~~ 32570 ALISO CANYON RD	94	39	74	0.3	0.6	2.4

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							Moderate	Severe (Significant For CEQA)
NB-6-033	2 - residential	~~32463 PETES WY~~ 2215 DOLORES PL	627	39	73	0.0	0.6	2.4
NB-6-035	2 - residential	~~-~~32828 EL SASTRE RD	230	39	73	0.1	0.6	2.4
NB-6-038	2 - residential	~~VAC/FORESTON DR(DRT)/VIC RIMSIDE~~ 821 FORESTON DR	853	39	66	0.1	1.4	3.6
NB-6-039	2 - residential	~~821~~ 809 FORESTON DR	967	39	65	0.1	1.4	3.6
NB-6-040	2 - residential	~~809~~ 761 FORESTON DR	660	39	67	0.1	1.2	3.2
NB-6-041	2 - residential	~~756~~ 741 FORESTON DR	1115	39	65	0.1	1.5	3.9
NB-6-042	2 - residential	~~741~~ 733 FORESTON DR	1253	39	64	0.1	1.5	3.9
NB-6-045	2 - residential	~~892~~ 888 W CARSON MESA RD	829	75	66	0.1	1.3	3.4
NB-6-047	2 - residential	~~790 770~~ CARSON MESA RD	631	75	67	0.1	1.2	3.2
NB-6-051	2 - residential	~~1721~~ 1817 CARSON MESA RD	881	49	59	0.4	2.4	5.8
NB-6-055	2 - residential	~~35320~~ 35240 SMALL RD	813	49	59	0.4	2.4	5.8
SB-6-002	2 - residential	~~VAC/VIC SOLEDAD CYN RD/PACIFIC~~ 7435 SOLEDAD CANYON RD	307	34	67	0.3	1.3	3.4
SB-6-003	2 - residential	~~-~~6201 SOLEDAD CANYON RD	207	35	70	0.2	1.1	2.9
SB-6-006	2 - residential	~~5255~~ 5205 SOLEDAD CANYON RD	620	35	65	0.2	1.4	3.6
SB-6-007	2 - residential	~~VAC/VIC SOLEDAD CYN RD/RAVENNA D~~ 5005 SOLEDAD CANYON RD	516	35	66	0.2	1.3	3.4
SB-6-011	2 - residential	3661 SOLEDAD CANYON RD	472	39	65	0.3	1.5	3.9
SB-6-01~~0~~2	2 - residential	3591 SOLEDAD CANYON RD	389	39	66	0.3	1.3	3.4
SB-6-01~~4~~3	2 - residential	~~4050 ACTON AVE~~ 3531 SOLEDAD CANYON RD	422	39	66	0.3	1.3	3.4
~~SB-6-011~~	~~2 - residential~~	~~3591 SOLEDAD CANYON RD~~	~~472~~	~~39~~	~~65~~	~~0.3~~	~~1.5~~	~~3.9~~
~~SB-6-012~~	~~2 - residential~~	~~3620 SOLEDAD CANYON RD~~	~~166~~	~~39~~	~~73~~	~~0.1~~	~~0.6~~	~~2.4~~
SB-6-014	2 - residential	~~31625 2ND ST~~ 3511 SOLEDAD CANYON RD	407	39	66	0.3	1.3	3.4

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							Moderate	Severe (Significant For CEQA)
SB-6-015	2 - residential	3620 SOLEDAD CANYON RD	166	39	73	0.1	0.6	2.4
SB-6-016	2 - residential	~~3435~~ 3449 SOLEDAD CANYON RD	399	39	66	0.4	1.3	3.4
SB-6-017	2 - residential	~~3413~~ 3419 SOLEDAD CANYON RD	281	39	74	0.1	0.6	2.4
SB-6-019	2 - residential	~~3413 SOLEDAD CANYON RD~~ 31800 3RD ST	557	39	62	0.7	1.9	4.7
SB-6-021	2 - residential	~~31813 CROWN VALLEY RD~~ 31810 3RD ST	546	39	62	0.7	1.9	4.7
SB-6-022	2 - residential	~~–~~31812 3RD ST	571	39	62	0.6	1.9	4.7
SB-6-023	2 - residential	~~–~~31823 CROWN VALLEY RD	446	39	62	0.7	1.7	4.4
SB-6-024	2 - residential	~~VAC/SMITH AVE/GILLESPIE AVE~~ 32018 CROWN VALLEY RD	625	0	62	0.5	1.9	4.7
SB-6-025	2 - residential	~~VAC/SMITH AVE/GILLESPIE AVE~~ 32020 CROWN VALLEY RD	661	0	62	0.5	1.9	4.7
SB-6-026	2 - residential	~~VAC/SMITH AVE/GILLESPIE AVE~~ 32032 CROWN VALLEY RD	732	0	62	0.4	1.9	4.7
SB-6-027	2 - residential	~~VAC/SMITH AVE/GILLESPIE AVE~~ 3542 GILLESPIE AVE	344	0	62	0.8	1.7	4.4
SB-6-028	2 - residential	~~VAC/VIC CROWN VLY R~~ 3560 SYRACUSE AVE	887	0	57	0.9	2.6	6.2
SB-6-030	2 - residential	~~32451 MICHIGAN AVE~~ 32314 WISCONSIN ST	697	0	58	0.6	2.4	5.8
SB-6-032	2 - residential	~~2897~~ 2883 SOLEDAD CANYON RD	201	0	66	0.4	1.4	3.6
SB-6-033	2 - residential	~~32451~~ 32443 MICHIGAN AVE	831	0	57	0.3	2.6	6.2
SB-6-034	2 - residential	~~2883~~ 2875 SOLEDAD CANYON RD	232	0	66	0.3	1.4	3.6
SB-6-035	2 - residential	~~2875~~ 2851 SOLEDAD CYN RD	338	0	65	0.2	1.4	3.6
SB-6-036	2 - residential	~~32320~~ 32310 MICHIGAN AVE	733	0	57	0.4	2.6	6.2
SB-6-038	2 - residential	~~2835~~ 2910 SOLEDAD CANYON RD	224	0	66	0.4	1.4	3.6
SB-6-039	2 - residential	~~32320 MICHIGAN AVE~~	841	0	57	0.3	2.9	6.6

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							Moderate	Severe (Significant For CEQA)
		32311 OHIO AVE						
SB-6-040	2 - residential	~~2910~~ 2880 SACRAMENTO AVE	502	0	65	0.1	1.4	3.6
SB-6-041	2 - residential	~~2910 SACRAMENTO AVE~~ 2805 SOLEDAD CANYON RD	362	0	65	0.2	1.4	3.6
SB-6-042	2 - residential	~~32235~~ 32250 OHIO AVE	579	0	65	0.1	1.4	3.6
SB-6-044	2 - residential	~~32235 OHIO AVE~~ 2795 SOLEDAD CANYON RD	310	0	65	0.3	1.4	3.6
SB-6-045	2 - residential	~~32235 OHIO AVE~~ 2810 SACRAMENTO AVE	649	0	65	0.1	1.4	3.6
SB-6-046	2 - residential	~~32235 OHIO AVE~~ 32233 INDIANA AVE	461	0	65	0.1	1.4	3.6
SB-6-047	2 - residential	~~32235 OHIO AVE~~ 2771 SOLEDAD CANYON RD	294	0	65	0.3	1.4	3.6
SB-6-048	2 - residential	~~32214~~ 32254 INDIANA AVE	702	0	65	0.1	1.4	3.6
SB-6-050	2 - residential	~~32214~~ 32256 INDIANA AVE	629	0	65	0.2	1.4	3.6
SB-6-051	2 - residential	~~32256~~ 32258 INDIANA AVE	702	0	65	0.2	1.4	3.6
SB-6-052	2 - residential	~~2680 KASHMERE CANYON RD~~ 32515 SADDLE PEAK CT	817	0	73	0.0	0.6	2.4
SB-6-053	2 - residential	~~2733 SACRAMENTO AVE~~ 32505 SADDLE PEAK CT	744	0	73	0.0	0.6	2.4
SB-6-054	2 - residential	~~2733 SACRAMENTO AVE~~ 32501 SADDLE PEAK CT	687	0	73	0.0	0.6	2.4
SB-6-055	2 - residential	~~–~~32504 SADDLE PEAK CT	610	0	73	0.0	0.6	2.4
SB-6-057	2 - residential	~~2610~~ 2620 KASHMERE CANYON RD	439	0	73	0.1	0.6	2.4
SB-6-059	2 - residential	~~2655 KASHMERE CANYON RD~~ 2575 PALOMINO DR	573	0	73	0.0	0.6	2.4
SB-6-061	2 - residential	~~2655 KASHMERE CANYON RD~~ 2565 PALOMINO DR	559	0	73	0.0	0.6	2.4
SB-6-062	2 - residential	~~2570~~ 2560 PALAMINO DR	216	0	73	0.1	0.6	2.4

Receiver ID	FTA Category	Address (Provided Where Available Through LA County Data)	Distance To Near Track (Ft)	Speed (mph) (Design Speed)	Existing Noise (dba)	Predicted Noise Increase (dba)	Allowable Increase (Dba)	
							Moderate	Severe (Significant For CEQA)
SB-6-063	2 - residential	~~2655 KASHMERE CANYON RD~~ 2555 PALOMINO DR	520	0	73	0.0	0.6	2.4
SB-6-064	2 - residential	~~2560~~ 2550 PALOMINO DR	251	0	73	0.1	0.6	2.4
SB-6-065	2 - residential	~~2540 BRIDLE PATH DR~~ 2545 PALOMINO DR	477	0	73	0.0	0.6	2.4
SB-6-066	2 - residential	~~2550~~ 2540 PALOMINO DR	319	0	73	0.1	0.6	2.4
SB-6-067	2 - residential	~~2530 BRIDLE PATH DR~~ 2535 PALOMINO DR	460	0	73	0.1	0.6	2.4
SB-6-068	2 - residential	~~—~~2510 PALOMINO DR	557	0	73	0.1	0.6	2.4
SB-6-069	2 - residential	~~2531 SOLEDAD CANYON RD~~ 2505 BRIDLE PATH DR	816	0	73	0.0	0.6	2.4
SB-6-071	2 - residential	~~32643 GEM WY~~ 2451 SOLEDAD CANYON RD	572	0	73	0.0	0.6	2.4
SB-6-072	2 - residential	~~VAC/SANTIAGO RD/VIC ACCORD PL~~ 32616 SANTIAGO RD	115	0	73	0.2	0.6	2.4
SB-6-073	2 - residential	~~32940 OLD MINER RD~~ 32835 CHANTADA AVE	877	0	61	0.2	1.9	4.7
SB-6-074	2 - residential	~~32924 OLD MINER RD~~ 32815 CHANTADA AVE	800	0	61	0.3	1.9	4.7
SB-6-075	2 - residential	~~32906 OLD MINER RD~~ 32805 CHANTADA AVE	743	0	61	0.3	1.9	4.7
SB-6-076	2 - residential	~~32835~~ 32846 CHANTADA AVE	759	0	61	0.3	1.9	4.7
SB-6-077	2 - residential	~~32815~~ 32820 CHANTADA AVE	669	0	61	0.3	1.9	4.7
SB-6-078	2 - residential	~~VAC/TINDALL AVE/VIC SOLEDAD CYN~~ 32850 TINDALL AVE	802	0	61	0.3	1.9	4.7
SB-6-081	2 - residential	~~32915~~ 32838 LISTIE AVE	703	0	61	0.3	1.9	4.7
SB-6-085	2 - residential	~~32920 JOSHUA AVE~~ 32909 HORNDEAN AVE	885	0	61	0.2	1.9	4.7
SB-6-087	2 - residential	~~33017~~ 32905 MALINTA AVE	646	0	61	0.3	1.9	4.7

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							Moderate	Severe (Significant For CEQA)
SB-6-088	2 - residential	~~33017~~ 33032 MALINTA AVE	1024	0	73	0.0	0.6	2.4
SB-6-089	2 - residential	~~33032~~ 33014 MALINTA AVE	907	0	73	0.0	0.6	2.4
SB-6-091	2 - residential	~~1414~~ 1380 SOLEDAD CYN RD	192	0	73	0.1	0.6	2.4
SB-6-092	2 - residential	~~1380~~ 1346 SOLEDAD CANYON RD	225	0	73	0.1	0.6	2.4
SB-6-093	2 - residential	~~33100 MALINTA AVE~~ 1625 TORTUGA ST	1006	0	73	0.0	0.6	2.4
SB-6-094	2 - residential	~~1625 TORTUGA ST~~ 1245 SOLEDAD CANYON RD	878	0	73	0.0	0.6	2.4
SB-6-095	2 - residential	~~1245~~ 1235 SOLEDAD CANYON RD	894	0	73	0.0	0.6	2.4
SB-6-A	3 - institutional	~~Church~~ School, 3015 SACRAMENTO AVE	785	0	56	0.8	6.0	10.9

3. Responses to Comments

3.1 INTRODUCTION

Section 15088(a) of the CEQA Guidelines states that the "lead agency shall evaluate comments on environmental issues received from persons who reviewed the Draft EIR and shall prepare a written response. The Lead Agency shall respond to comments that were received during the noticed comment period and any extensions and may respond to late comments." This section of the Final EIR provides a list of persons, organizations, and public agencies that commented on the Draft EIR, along with the responses of the Lead Agency to significant environmental points raised in the review and consultation process.

This section of the Final EIR contains comment letters received during the 45-day public review period of the Draft EIR, which concluded on September 10, 2021.

3.2 RESPONSES TO COMMENTS

In accordance with Section 15088(c) of CEQA, reasoned, factual responses have been provided to all comments received during the public review period, with a particular emphasis on significant environmental issues. The comments and responses are organized as follows: agencies and organizations, individuals, comments received at the Draft EIR public hearing, and comments received via social media. All comments and responses to comments are included in this Final EIR and will be considered by the Metro Board prior to certification of this EIR and in any approval of the Proposed Project.

Each comment letter has been assigned a number, see **Table 3-1**. This results in a tiered numbering system, whereby the first comment in Comment Letter No. 1 is depicted as Comment No. 1-1 and so on. Copies of each comment letter are provided prior to each response. Comments that present opinions about the Proposed Project or raise issues not directly related to the substance of the environmental analysis in the Draft EIR are noted but, in accordance with CEQA, are not required to receive a detailed response. In response to some of the comments received, the text of the Draft EIR has been revised. Refer to Chapter 2, Corrections and Additions, for a list of these changes.

3.3 PUBLIC HEARINGS COMMENTS AND RESPONSES

Oral comments and questions and answers were received during two public hearings held on August 18, and August 21, 2021. The transcripts of the two public hearings are included in Appendix B.

Table 3-1 - List of Commenters on the Draft EIR

No.	Name	Organization/Address	Date of Letter
AGENCIES			
1	Erinn Wilson-Olgin	California Department of Fish and Wildlife South Coast Region 3883 Ruffin Road San Diego, CA 92123	September 10, 2021
2	Miya Edmonson	California Department of Transportation District 7- Office of Regional Planning 100 S. Main St., Suite 100 Los Angeles, CA 90012	August 31, 2021
3	Jonathan P. Canuela	California Department of Water Resources	August 3, 2021
4	Joseph Saunders	California Highway Patrol Southern Division Staff Services 411 N. Central Ave., Suite 410 Glendale, CA 91203	September 3, 2021
5	Matthew Cervantes, PE	California Public Utilities Commission 320 W. 4th St., Suite 500 Los Angeles, CA 90013	September 10, 2021
6	Lirissa De La Cruz	City of Lancaster 44933 Fern Ave. Lancaster, CA 93534	September 2, 2021
7	Joel Bareng	City of Santa Clarita 23920 Valencia Blvd. Santa Clarita, CA 91355	September 9, 2021
8	Arnold Hackett	Metrolink Southern California Regional Rail Authority 900 Wilshire Blvd., Suite 1500 Los Angeles, CA 90017	September 10, 2021
GROUPS/ORGANIZATIONS			
9	Jeremiah Owen	Acton Town Council P.O. Box 810 Acton, CA 93510	September 10, 2021
10	Brian Yanity	Rail Passenger Association of California and Nevada (RailPAC) Fullerton, California	August 31, 2021
11	Arthur V. Sohikian	North Los Angeles County Transportation Coalition JPA (NCTC)	September 10, 2021
12	Peggy Harris	Union Pacific Railroad 1400 Douglas Street, Stop 1120 Omaha, Nebraska 68179	October 15, 2021
INDIVIDUALS			
13	Adam Spieckermann		August 20, 2021
14	Dylan Giliberto		July 28, 2021
15	Numan Parada		August 17, 2021

No.	Name	Organization/Address	Date of Letter
16	Robert Frampton		August 22, 2021
17	Robert Frampton		August 30, 2021
PUBLIC HEARING AND QUESTIONS AND ANSWERS NO. 1 ON AUGUST 18, 2021			
PH1-1	David Hardy		
PH1-2	Andrew Buenko		
PH1-3	David Hardy		
PH1-4	Andrew Buenko		
PH1-5	Bart Reed		
PH1-6	Anjie Preston		
PH1-7	Michael Bertell		
PH1-8	David Hardy		
PH1-9	Bart Reed		
PH1-10	Anjie Preston		
PH1-11	Jose Ubaldo		
PH1-12	Jacqueline Ayer		
PH1-13	Bart Reed		
PH1-14	Frances Sereseres		
PH1-15	Jacqueline Ayer		
PH1-16	Jacqueline Ayer		
PH1-17	Bart Reed		
PH1-18	Jacqueline Ayer		
PH1-19	Bart Reed		
PH1-20	Jacqueline Ayer		
PH1-21	Jacqueline Ayer		
PH1-22	Marsha McLean		
PH1-23	Bart Reed		
PH1-24	Jacqueline Ayer		
PH1-25	Anjie Preston		
PH1-26	Fred Boehnert		
PUBLIC HEARING AND QUESTIONS AND ANSWERS NO. 2 ON AUGUST 21, 2021			
PH2-1	Perias Pillay		
PH2-2	Ian Pari		
PH2-3	Jacqueline Ayer		
PH2-4	Matthew Pearson		
PH2-5	Jacqueline Ayer		

3.3 RESPONSES TO PUBLIC AGENCIES

COMMENT LETTER 1

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

September 10, 2021

Brian Balderrama
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, Mail Stop 99-17-2
Los Angeles, CA 90012
AVL@metro.net

Subject: Draft Environmental Impact Report for the Antelope Valley Line Capacity and Service Improvements Program, SCH #2020109001, Los Angeles County Metropolitan Transportation Authority, Los Angeles County

Dear Mr. Balderrama:

The California Department of Fish and Wildlife (CDFW) has reviewed a Draft Environmental Impact Report (DEIR) from the Los Angeles County Metropolitan Transportation Authority (Metro; Lead Agency and Project Applicant) for the Antelope Valley Line Capacity and Service Improvements Program (Project). Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect State fish and wildlife resources. 1-1

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 *et seq.*). Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by State law, of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 *et seq.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, § 1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

Project Description and Summary

Objective: The Antelope Valley Line (AVL) is a 76.6-mile-long commuter rail line that serves Northern Los Angeles County as part of the Metrolink system. The AVL extends from the Los Angeles Union Station in the City of Los Angeles and terminates in the City of Lancaster. Stations along the AVL are in the cities and communities of Los Angeles, Glendale, Burbank, Sun Valley, Sylmar, San Fernando, Newhall, Santa Clarita, Acton, Palmdale, and Lancaster. To meet forecasted ridership demands of up to 17,500 daily riders by 2028, more capacity on the AVL corridor will be required to meet the forecasted ridership and to provide riders with more regular and frequent peak and off-peak services.

The proposed Project would expand commuter rail service along the entire AVL corridor and involve three capital improvements required to facilitate forecasted service increase. These improvements are:

1) Balboa Double Track Extension: extend the existing double track approximately 6,300 feet north from Balboa Boulevard to the Sierra Highway. The existing railroad right-of-way would accommodate most of the Balboa Double Track Extension. The improvement would require realignment of the existing AVL Main Track through portions of the site to accommodate the second track and the required clearance to existing structures. The proposed double track would be positioned to the east of the existing AVL Main Track and would tie-in at the existing Sylmar siding terminus on the south end of the site and reconnect with the existing AVL Main Track at the north end just south of the Sierra Highway Road bridge. Just north of the I-5 bridge, an approximately 475-foot long retaining wall would be constructed along the west side of the corridor.

2) Canyon Siding Extension: add approximately 8,400 feet of new double track between Soledad Canyon Road to Golden Oak Road. The improvements would provide a second station platform at the existing Santa Clarita Metrolink Station. Due to the topography of the surrounding area, substantial grading would be required to accommodate the double track construction. Hills on the south side of the corridor abut the rail bed along the length of most of the proposed Canyon Siding Extension within the construction zone. Generally, the areas requiring grading would be located within the existing right-of-way. It is anticipated that retaining walls would be used in some areas to avoid encroachments outside of the right-of-way.

3) Lancaster Terminal Improvements: expand existing train layover facilities by adding one new 1,000-foot-long and two 500-foot-long train storage tracks in the vicinity of the existing Lancaster Terminal Metrolink Station.

The Project would be constructed almost entirely within existing rail or street right-of-way. Minor acquisitions, easements, or temporary construction easements may be necessary at select locations, mainly to accommodate construction staging and laydown areas or the required grading activities associated with the proposed improvements. Generally, construction activities associated with the Project would include site clearing, grading, retaining wall installation, utility relocation and installation, track and systems installation, and station platform construction.

1-1 (cont.)

Location: The Balboa Double Track Extension improvements are located within the City of Los Angeles and would extend an existing double track north from Balboa Boulevard to the Sierra Highway. The Balboa Double Track Extension improvements would be located between the Newhall Metrolink Station (24300 Railroad Avenue, Santa Clarita, CA) and Sylmar/San Fernando Metrolink Station (12219 Frank Modugno Dr., Los Angeles, CA). The Canyon Siding Extension improvements are located at the Santa Clarita Metrolink Station (22122 Soledad Canyon Road, Santa Clarita, CA). The Lancaster Terminal improvements are located at the Lancaster Metrolink Station (44812 N. Sierra Highway, Lancaster, CA).

1-1 (cont.)

Comments and Recommendations

CDFW visited the Balboa Double Track Extension and Canyon Siding Extension improvement sites with Metro September 8, 2021. Based on the documents for review and the site visit, CDFW offers the comments and recommendations below to assist Metro in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions are also included to improve the environmental document. CDFW recommends the measures or revisions below be included in a science-based monitoring program that contains adaptive management strategies as part of the Project's CEQA mitigation, monitoring and reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097).

1-2

Specific Comments

Comment #1: Insufficient Biological Resources Impact Assessment

Issue: The DEIR is missing information as to the Project's potentially significant impacts on the State's biological resources.

Specific impacts: The Project may impact biological resources not previously known to occur. Plants, wildlife, and plant communities could be impacted, either directly or through habitat modifications, during Project construction and activities. These impacts could result in injury or mortality (trampling, crushing) of plants and wildlife; reduced reproductive capacity; population declines; or local extirpation of rare, sensitive, or special status species. Also, loss of foraging, breeding, nesting, or nursery habitat supporting wildlife may occur.

Why impacts would occur: The Biological Resources Technical Report for the Project evaluated impacts on 18 species of threatened and endangered species and habitats based on the Information for Planning and Consultation report generated from the U.S. Fish and Wildlife Service (USFWS) online service. The report that was generate is not an exhaustive list of State rare, threatened, and endangered species, or species considered to be rare or sensitive by CDFW.

1-3

Based on a search of the California Natural Diversity Database (CNDDB), CDFW found additional species that should have been evaluated in preparation of the DEIR (CDFW 2021a). These species include:

- Balboa Double Track Extension – Oat Mountain and San Fernando quadrangles
  - Amphibians: coast range newt (*Taricha torosa*); western spadefoot (*Spea*

hammondii)
- Fish: arroyo chub (*Gila orcuttii*); Santa Ana specked dace (*Rhinichthys osculus* ssp. 8)
- Insects: Crotch's bumble bee (*Bomus crotchii*)
- Mammals: San Diego desert woodrat (*Neotoma lepida intermedia*); western mastiff bat (*Eumops perotis californicus*); California leaf-nosed bat (*Macrotus californicus*); hoary bat (*Lasiurus cinereus*); San Diego desert woodrat (*Neotoma lepida intermedia*); Townsend's big-eared bat (*Corynorhinus townsendii*)
- Reptiles: California legless lizard (*Anniella* spp.); coast horned lizard (*Phrynosoma blainvillii*); coastal whiptail (*Aspidocelis tigris stejnegeri*); two-striped garter snake (*Thamnophis hammondii*)
- Rare plants: Davidson's bush-mallow (*Malacothamnus davidsonii*); Greata's aster (*Symphyotrichum greatae*); Payne's bush lupine (*Lupinus paynei*); Santa Susana tarplant (*Deinandra minthornii*); mesa horkelia (*Horkelia cuneata* var. *puberula*); Palmer's grapplinghook (*Harpagonella palmeri*); Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*); San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*); Plummer's mariposa-lily (*Calochortus plummerae*); slender mariposa-lily (*Calochortus clavatus* var. *gracilis)*
- Sensitive plant communities[1]: Southern Mixed Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Willow Scrub, Riversidian Alluvial Fan Sage Scrub, California Walnut Woodland, Valley Oak Woodland

1-3 (cont.)

- Canyon Siding Extension – Newhall and Mint Canyon quadrangles:
  - Amphibians: western spadefoot (*Spea hammondii*)
  - Fish: arroyo chub (*Gila orcuttii*)
  - Insects: Crotch's bumble bee (*Bomus crotchii*); quino checkerspot butterfly (*Euphydryas editha quino*);
  - Mammals: pallid bat (*Antrozous pallidus*); Townsend's big-eared bat (*Corynorhinus townsendii*); spotted bat (*Euderma maculatum*); San Diego black-tailed jackrabbit (*Lepus californicus bennettii*); southern grasshopper mouse (*Onychomys torridus ramona*); American badger (*Taxidea taxus*)
  - Reptiles: California legless lizard (*Anniella* spp.); California glossy snake (*Arizona elegans occidentalis*); coastal whiptail (*Aspidocelis tigris stejnegeri*); western pond turtle (*Emys marmorata*); coast horned lizard (*Phrynosoma blainvillii*); two-striped garter snake (*Thamnophis hammondii*)
  - Rare plants: Peirson's morning-glory (*Calystegia peirsonii*); San Fernando Valley spineflower (*Chorizanthe parryi var. fernandina*); slender-horned spineflower (*Dodecahema leptoceras*); Palmer's grapplinghook (*Harpagonella palmeri*); Newhall sunflower (*Helianthus inexpectatus*); Piute Mountains navarretia (*Navarretia setiloba*); white rabbit-tobacco (*Pseudognaphalium leucocephalum*);

[1] In 2007, the State Legislature required CDFW to develop and maintain a vegetation mapping standard for the State (Fish & Game Code, § 1940). This standard complies with the National Vegetation Classification System, which utilizes alliance- and association-based classification of unique vegetation stands. CDFW utilizes vegetation descriptions found in the Manual of California Vegetation (MCV), found online at http://vegetation.cnps.org/. To determine the rarity ranking of vegetation communities on the Project site, the MCV alliance/association community names should be provided as CDFW only tracks rare natural communities using this classification system.

chaparral ragwort (*Senecio aphanactis*); Plummer's mariposa-lily (*Calochortus plummerae*); slender mariposa-lily (*Calochortus clavatus* var. *gracilis)*; Palmer's mariposa-lily (*Calochortus palmeri var. palmeri*)
- Sensitive plant communities: Southern Mixed Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Willow Scrub, Riversidian Alluvial Fan Sage Scrub, California Walnut Woodland, Valley Oak Woodland

- Lancaster Terminal Improvements- Lancaster East and Lancaster West quadrangles:
  - Birds: burrowing owl (*Athene cunicularia*); ferruginous hawk (*Buteo regalis*); loggerhead shrike (*Lanius ludovicianus*); merlin (*Falco columbarius*); mountain plover (*Charadrius montanus*); Swainson's hawk (*Buteo swainsoni*); tricolored blackbird (*Agelaius tricolor*)
  - Insects: Crotch's bumble bee (*Bomus crotchii*)
  - Mammals: coast horned lizard (*Phrynosoma blainvillii*); northern California legless lizard (*Anniella pulchra*)
  - Rare plants: Lancaster milk-vetch (*Astragalus preussii var. laxiflorus*); Parry's spineflower (*Chorizanthe parryi var. parryi*); Rosamond eriastrum (*Eriastrum rosamondense*); sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisiarum*); white pygmy-poppy (*Canbya candida*); alkali mariposa-lily (*Calochortus striatus*)

The Biological Resources Technical Report did not include a search of the CNDDB. As such, the DEIR does not evaluate the Project's potential impacts on those plants, wildlife, and plant communities listed above. These species include California Species of Special Concern (SSC); endangered, rare, or threatened species under CESA; or species per CEQA Guidelines section 15380. According to page 2-23 in the DEIR, "generally, construction activities associated with each Capital Improvement would include site clearing, grading and retaining wall installation, utility relocation and installation, and track and systems installation and station platform construction." Project construction and activities could impact plants, wildlife, and plant communities, either directly or through habitat modifications. 1-3 (cont.)

For example, the western spadefoot is known to occur in the hillslopes at the Canyon Siding Extension site (i.e., Whittaker Bermite area). Ground disturbing activities and vegetation removal could crush western spadefoot toads, which tends to by a cryptic species hidden under structures such as rocks, burrows, or logs. Moreover, substantial grading of the hillside to accommodate the double track could result in loss of western spadefoot habitat. The EIR has not proposed avoidance, minimization, or mitigation measures to address potential impacts on western spadefoot or SSC. As a result, the Project have significant impacts on SSC.

Evidence impact would be significant: One of the purposes of CEQA to inform governmental decision makers and the public about the potentially significant environmental effects of proposed activities (CEQA Guidelines, § 15002). CEQA requires an adequate and complete effort of full disclosure of significant environmental impacts (CEQA Guidelines, § 15003). An EIR should demonstrate that the lead agency has in fact analyzed and considered the ecological implications of its actions (CEQA Guidelines, § 15003).

The DEIR is missing information as to the Project's effects on the State's biological resources. As a result of this missing information, the DEIR may not have completely analyzed and considered the Project's effects on biological resources. These biological resources include, but are not limited to, the following:

- Rare, sensitive, and special status plants, wildlife, plant communities;
- California Species of Special Concern;
- California Terrestrial and Vernal Pool Invertebrates of Conservation Priority;
- Endangered, threatened, or candidate species protected under CESA; and,
- California Fully Protected Species.

1-3 (cont.)

As a result of the DEIR's shortcomings, the DEIR does not yet provide sufficient information that would allow the public and public agencies to review and comment on the Project's potential impacts on biological resources.

Additionally, impacts on those biological resources listed above may require a mandatory finding of significance (CEQA Guidelines, § 15065). Inadequate avoidance, minimization, and mitigation measures for impacts on the State's biological resources will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on a plant or wildlife species, or plant community, identified as a candidate, rare, sensitive, or special status by CDFW.

Recommended Potentially Feasible Mitigation Measure(s):

Recommendation #1: CDFW recommends Metro provide a biological assessment analyzing and discussing the Project's potential impacts on the State's biological resources. CDFW recommends the assessment provide the following information supported by a thorough literature review:

1) A complete, recent, assessment of rare, threatened, and endangered, and other sensitive species on site and within the area of potential effect, including California Species of Special Concern and California Fully Protected Species (Fish & G. Code, §§ 3511, 4700, 5050, and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of land around the three capital improvements should also be addressed. CDFW's California Natural Diversity Database in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat (CDFW 2021a). At a minimum, CDFW recommends searching the following quadrangles: Balboa Double Track Extension (Oak Mountain and San Fernando quadrangles); Canyon Siding Extension (Newhall and Mint Canyon quadrangles); Lancaster Terminal Improvements (Lancaster East and Lancaster West quadrangles).
2) A thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). Adjoining habitat areas should be included where Project construction and activities could lead to direct or indirect impacts off site.
3) Floristic, alliance- and/or association-based mapping and vegetation impact

1-4

assessments conducted at the Project site and within the neighboring vicinity. The Manual of California Vegetation (MCV), second edition, should be used to inform this mapping and assessment (Sawyer et al. 2009). CDFW tracks plant communities and rare plant communities using the Manual of California Vegetation classification system only.

4) A rare plant assessment using online databases for rare, threatened, and endangered plants, including the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California (CNPS 2021) as well as the Calflora's Information on Wild California Plants database (Calflora 2021a).
5) A complete assessment of potential impacts on California Terrestrial and Vernal Pool Invertebrates of Conservation Priority that may occur on site and within the area of potential effect (CDFW 2017).

1-4 (cont.)

Recommendation #2: CDFW recommends Metro recirculate the Project's CEQA document to provide more information as to the Project's impacts on the State's biological resources. CDFW recommends Metro provide measures to avoid, minimize, and/or mitigate for potentially significant effects on biological resources that were not previously identified. Pursuant under CEQA Guidelines section 15088.5, "a lead agency is required to recirculate an EIR when significant new information is added." Also, an EIR should be recirculated when a new significant environmental impact would result from the Project. A decision not to recirculate an EIR must be supported by substantial evidence in the administrative record (CEQA Guidelines, § 15088.5).

1-5

Comment #2: Impacts on Least Bell's Vireo

Issue: Project construction and activities at the Balboa Double Track Extension site could impact least Bell's vireo (*Vireo bellii pusillus*). The least Bell's vireo is a CESA and federal Endangered Species Act (ESA) -listed species.

Specific impacts: Project-construction and activities occurring during the nesting season for least Bell's vireo may result in nest abandonment or reproductive suppression. Injury and/or mortality of least Bell's vireo nestlings could lead to a population decline of the least Bell's vireo in Los Angeles County. Additionally, the Project could result in loss of occupied habitat supporting least Bell's vireo.

Why impacts would occur: The Balboa Double Track Extension site is less than one mile north of the Van Norman Complex. The Van Norman Complex supports one of three remaining populations of least Bell's vireo in Los Angeles County. Least Bell's vireo could occur at the Balboa Double Track Extension site because the Balboa Double Track Extension site 1) is less than one mile from a known population (i.e., source population) and 2) supports suitable riparian habitat. The least Bell's vireo is an obligate riparian breeder. Least Bell's vireo habitat requirements include thickets of willow, low shrubs, and water, including dry, intermittent streams. The Balboa Double Track Extension site has suitable riparian habitat and water sources for least Bell's vireo The riparian habitat and water sources is found in the features mapped as *Riverine-2* and *Waters of the State-1 (Weldon Canyon)* (see exhibit 30 in Appendix C: Technical Memorandum – Jurisdictional Delineation). Within those areas, there is species and structurally diverse riparian habitat, consisting of mulefat (*Baccharis glutinosa*) and willow (*Salix* genus). Also, within those areas, there is a perennial or intermittent water source.

1-6

Evidence impact would be significant: There are only a few populations and breeding pairs of least Bell's vireo remaining in Los Angeles County. Project construction and activities resulting in loss of breeding pairs or nestlings, or riparian habitat supporting least Bell's vireo may result in the Project potentially causing a wildlife population to drop below self-sustaining levels; threaten to eliminate an animal community; or substantially reduce the number of restrict the range of an endangered, rare or threatened species (CEQA Guidelines, § 15065). Accordingly, impacts on least Bell's vireo may require a mandatory finding of significance (CEQA Guidelines, § 15065).

CDFW considers adverse impacts to a species protected by CESA to be significant without mitigation under CEQA. Inadequate avoidance, minimization, and mitigation measures for impacts on the least Bell's vireo will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on a wildlife species identified as special status by CDFW and USFWS.

As to CESA, take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). Take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting.

1-6 (cont.)

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: Prior to Project construction and activities at the Balboa Double Track Extension site, CDFW recommends Metro retain a qualified biologist to conduct protocol surveys for least Bell's vireo. Surveys should follow USFWS Least Bell's Vireo Survey Guidelines (USFWS 2001). All riparian areas and any other potential least Bell's vireo habitat should be surveyed at least eight times during the period from April 10 to July 31. Survey results, including negative findings, should be submitted to CDFW and USFWs within 45 calendar days following the completion of protocol-level surveys.

Mitigation Measure #2: If least Bell's vireo is detected, CDFW recommends Metro fully avoid impacts on least Bell's vireo. No work should occur during the least Bell's vireo nesting season (April 10 to July 31). This includes staging, mobilization, and site preparation.

Mitigation Measure #3: If least Bell's vireo is detected and Metro must work during the least Bell's vireo nesting season for the duration of the Project, and/or if habitat supporting least Bell's vireo needs to be removed, CDFW recommends Metro seek appropriate take authorization under CESA before starting any construction and activities where impacts to least Bell's vireo will occur. Metro should have a permit from CDFW prior to starting any Project construction and activities.

1-7

Recommendation #1: If the Project would impact least Bell's vireo, early consultation with CDFW is encouraged, as significant modification to a Project and mitigation measures may be required to obtain a CESA Permit. Appropriate authorization from CDFW may include an Incidental Take Permit or a Consistency Determination in certain circumstances, among other options [Fish & G. Code, §§ 2080.1, 2081, subds. (b) and (c)].

Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an Incidental Take Permit unless the Project CEQA document addresses all Project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an Incidental Take Permit. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA Incidental Take Permit. 1-7 (cont.)

Recommendation #2: If the Project cannot avoid impacts on an ESA-listed species, CDFW recommends Metro consult with USFWS to comply with ESA well in advance of any construction and activities where impacts to an ESA-listed species occur. 1-8

Comment #3: Impacts on Western Joshua Tree

Issue: The Project could impact a western Joshua tree (*Yucca brevifolia*) during the improvements at the Lancaster Terminal site. The western Joshua tree is a candidate species granted protection under CESA.

Specific impacts: Project construction and activities such as access, staging, and refueling could occur adjacent to a western Joshua tree. These activities could impact the western Joshua tree's root zone and seedbank. Additionally, the Project could remove the western Joshua tree.

Why impacts would occur: According to the *Tree Survey/Impacts Assessment Technical Memo* provided in the Biological Resources Technical Report, Project construction or access could occur where a western Joshua tree is located at Yucca Avenue and West Milling Street. Additionally, equipment, materials, and chemical storage could occur adjacent to the western Joshua tree. Disturbing the root zone and soils around the western Joshua tree could impact the tree's health and seedbank. Lastly, to avoid impacts on the western Joshua tree, the *Tree Survey/Impacts Assessment Technical Memo* recommends moving the western Joshua tree to a "state-approved Joshua tree mitigation site." Digging up and relocating the western Joshua tree could cause stress, injury, or mortality of the tree. 1-9

Evidence impact would be significant: On September 22, 2020, the California Fish and Game Commission determined that listing western Joshua tree as threatened under CESA may be warranted (CDFW 2020). As a CESA candidate species, western Joshua tree is granted full protection of a threatened species under CESA. Take of western Joshua tree is defined as any activity that results in the removal of a western Joshua tree, or any part thereof, or impacts the seedbank surrounding one or more western Joshua trees (CDFW 2021b). CDFW considers adverse impacts to a species protected by CESA to be significant without mitigation under CEQA. As to CESA, take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9).

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends Metro avoid impacts on western Joshua trees and seedbank. CDFW recommends Metro avoid accessing the Lancaster Terminal Improvements site from Yucca Ave/West Milling Street. CDFW recommends no activities occur within a 290- 1-10

foot radius of the western Joshua tree to avoid impacts to the tree and potential seedbank. This should include site access, vehicle parking, staging areas, refueling, and any activities that may result in ground disturbance.

Mitigation Measure #2: If the Project, Project construction, or any Project-related activity for the duration of the Project will result in take of the western Joshua tree, CDFW recommends Metro seek appropriate take authorization under CESA before starting any construction and activities where impacts to western Joshua tree will occur. Early consultation is encouraged, as significant modification to a Project and mitigation measures may be required to obtain a CESA Permit (See Comment #2, Recommendation #1).

1-10 (cont.)

Comment #4: Lake and Streambed Alteration (LSA)

Issue: The Project could impact streams subject to LSA Notification under Fish and Game Code section 1602 et seq.

Specific impacts: The Project could impact streams and riparian habitat. Page 3.4-14 in the DEIR states, "construction of the Proposed Project could temporarily impact riparian vegetation in both the Balboa Double Track Extension site and Canyon Siding Extension site." The Project could channelize streams or restrict and redirect flow as a result of new rail tracks, fill, and retaining walls placed adjacent to streams. Also, the Project could result in temporary or permanent loss of riparian habitat.

Why impacts would occur:

Balboa Double Track Extension site: According to page 29 in the Biological Resources Technical Report, "all waters in the site are non-jurisdictional wetlands and are considered waters of the state of California. These include two open channels Waters of the State-1 [Weldon Canyon], and Waters of the State-2 [Sunshine Canyon]." Exhibit 12 in the Biological Resources Technical Report shows two additional riverine features. These features are Riverine 1 and Riverine 2 along the existing AVL Main Track. These streams could be impacted during Project construction and activities. For example, page 45 in the Biological Resources Technical Report states, "the placement of fill (approximately 0.2 acres) is proposed for the slopes lining the southern open channel […] Construction activities related to this fill placement may impact this channel and a permit may be needed […]."

1-11

Canyon Siding Extension site: According to page 29 in the Biological Resources Technical Report, "for the Canyon Siding Extension site, the only WOTUS [Waters of the United States] nearby is Castaic Creek. All other waters in the site are non-jurisdictional wetlands and are considered waters of the state." These streams could be impacted during Project construction and activities. Generally, according to page 45 in the Biological Resources Technical Report, "the proposed Project could temporarily impact riparian vegetation in both the Balboa Double Track Extension and Canyon Siding Extension sites in the event that appropriate mitigation as detailed herein is not adhered to, although there are no permanent impacts to riparian habitat at a level of significance since the Proposed Project in these areas is limited to double tracking existing railroad lines."

Downstream impacts: Impacts on streams within the Project site could result in downstream impacts where there is hydrologic connectivity. According to page 39 in the Biological

Resources Technical Report, "there are, however, discharge points identified at both the Balboa Double Track Extension and Canyon Siding Extension sites that ultimately flow to other water bodies." Modification to streams within the Project site could result in increased erosion. Excess sediment could be transported downstream and impair waters and habitat outside of the Project site.

Inadequate mitigation: Impacts on streams and riparian habitat could be significant absent appropriate avoidance, minimization, or mitigation measures. Mitigation measures BIO-8, BIO-9, and BIO-10 may be insufficient to reduce impacts to streams and riparian habitat. Furthermore, those measures could result in unintended environmental consequences that could result in additional impacts on biological resources.

BIO-8: BIO-8 proposes to protect riparian zones by controlling invasive plant and animal species. It is unclear what species would be controlled, what methods would be used, frequency of control, performance criteria, and success criteria. Additionally, efforts to control invasive species could have unintended consequences on the environment. For example, herbicide application could impact non-targeted plant species and controlling animal species using poisons could injure or kill native species. If a mitigation measure would cause one or more significant effects, the effects of the mitigation measure shall be discussed [in the EIR] but in less detail than the significant effects of the project as proposed (CEQA Guidelines, § 15126.4).

BIO-9: BIO-9 proposes to enlist a qualified biologist to determine if disturbance in upland areas would create runoff that could affect riparian areas below upland features. Pursuant to CEQA Guidelines section 15126.4, mitigation measures "shall not be deferred until some future time" and "adopts specific performance standards the mitigation will achieve and identifies type(s) of potential action(s) that can feasibly achieve that performance standard that will be considered, analyzed, and potentially incorporated in the mitigation measure." Potential impacts should be disclosed in the DEIR to provide the public and public agencies an opportunity to understand what those impacts could be, recommend measures to avoid or minimize those impacts, and comment on the adequacy of mitigation measures to reduce impacts on riparian areas. Also, BIO-9 does not identify specific actions Metro would take if a qualified biologist determined that impacts would occur.

1-11 (cont.)

BIO-10: BIO-10 proposes to reintroduce native biota into riparian areas impacted by Project construction or operations. The impacts that BIO-10 seeks to mitigate for are not disclosed in the DEIR. Also, BIO-10 does not include information as to what Metro considers to be native biota, what plants and/or wildlife species would be introduced, where plants would be sourced, where native biota would be introduced, performance criteria, and success criteria. Introducing any biota into an environment could result in unintended consequences on the environment. For example, introducing biota could introduce pests, pathogens and diseases to a system not previously exposed to those stressors. Pests, pathogens, and diseases could result in injury or mortality of plants and wildlife. Furthermore, introduced biota could compete against existing biota for resources such as habitat and food. Interspecific and intraspecific competition could result in injury or mortality of wildlife and could result in wildlife displacement or exclusion from previously occupied habitat.

Lastly, it is unclear if any of the mitigation measures, BIO-8, BIO-9, or BIO-10 would mitigate for loss of sensitive natural communities. Without sufficient mitigation, the Project could result in net loss of a sensitive natural community.

Evidence impacts would be significant: The Project could impact streams. CDFW exercises its regulatory authority as provided by Fish and Game Code section 1600 et seq. to conserve fish and wildlife resources which includes rivers, streams, or lakes and associated plant communities. Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following:

- Divert or obstruct the natural flow of any river, stream, or lake[2];
- Change the bed, channel, or bank of any river, stream, or lake;
- Use material from any river, stream, or lake; or,
- Deposit or dispose of material into any river, stream, or lake.

Although the DEIR acknowledges that impacts on streams and riparian habitat could occur, the DEIR is unclear as to what the impacts would be. For instance, it is unclear as to where specifically impacts would occur; linear feet of streams that would be impacted; what types of plant communities would be impacted; and for each plant community, the total area that would be impacted. The Project could impact a sensitive natural community. Many riparian plant communities in the State have a State Rarity rank of S1, S2, or S3. This is a result of the significant reduction in quantity and quality of riparian and wetland habitat remaining in the State. CDFW considers plant communities with ranks of S1, S2, or S3 to be sensitive natural communities (CDFW 2021c). Impacts to sensitive natural communities should be addressed in CEQA (CDFW 2021c). Sensitive natural communities with an additional ranking of 0.1 or 0.2 is a natural community that is very threatened or threatened, respectively, within the State.

1-11 (cont.)

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW concurs with the Project's proposed Mitigation Measure BIO-12 which would require Metro to notify CDFW pursuant to Fish and Game Code section 1600 et seq. Based on this notification and other information, CDFW determines whether an LSA Agreement with Metro is required prior to conducting Project activities. Please visit CDFW's Lake and Streambed Alteration Program webpage for information about LSA Notification and online submittal through the Environmental Permit Information Management System (EPIMS) Permitting Portal (CDFW 2021d).

Mitigation Measure #2: CDFW recommends the LSA Notification include the following information and analyses:

1-12

1) Quantification of the linear feet of streams and area of associated riparian vegetation that would be impacted. Plant community names should be provided based on vegetation association and/or alliance per the Manual of California Vegetation, second edition (Sawyer et al. 2009);
2) An analysis providing information on whether impacts to streams within the immediate project area could cause impacts downstream where there is hydrologic connectivity;
3) A hydrological evaluation of the 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions to provide information on how water and sediment is conveyed through the Project site;
4) A scour analysis demonstrating that stream banks, bed, and channel would not erode

[2] "Any river, stream, or lake" includes those that are dry for periods of time as well as those that flow year-round.

and be impaired (e.g., aggrade, incised) as a result of Project activities;
5) An analysis demonstrating that the Project would not impact stream underflow supporting riparian vegetation;
6) Identification, analysis, and discussion of potential impacts on streams and associated vegetation as a result of upland Project construction and activities (as alluded to in the Project's BIO-9 proposed in the DEIR);
7) Specific activities and actions Metro proposes to take to mitigate for impacts on streams and riparian vegetation, specifically, actions to control invasive plants and animals (as alluded to in BIO-8 in the DEIR) and reintroducing native biota (as alluded to in BIO-10 in the DEIR); and,
8) A complete description of routine maintenance activities that may be required for the life of the Project. If applicable, the LSA Notification include measures to avoid impacts on streams and riparian vegetation during routine maintenance activities occurring for the life of the Project.

1-12 (cont.)

Mitigation Measure #3: CDFW recommends Metro mitigate for impacts on streams and associated riparian plant community at no less than 2:1. Metro should provide additional mitigation for impacts on riparian plant communities that have a State Rarity Ranking of S1 and S2, and an additional ranking of 0.1 and 0.2.

Mitigation Measure #4: Prior to LSA Notification, CDFW recommends Metro retain a qualified biologist(s) to perform species specific surveys (see Comment #2, Mitigation Measure #1 and Comment #5, Mitigation Measure #1 and #2) and provide survey results, including negative findings, as part of the LSA Notification. Survey reports should also include information on habitat within the Project site and whether the Project would impact habitat supporting those species.

Recommendation #1: CDFW's issuance of an LSA Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from Metro for the Project. To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 et seq. and/or under CEQA, the CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement. As such, CDFW recommends Metro consider CDFW's comments and revise the DEIR by incorporating the mitigation measures and revisions recommended in this letter into the Project's final environmental document.

1-13

To compensate for any on- and off-site impacts to aquatic and riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: erosion and pollution control measures, avoidance of resources, protective measures for downstream resources, on- and/or off-site habitat creation, enhancement or restoration, and/or protection, and management of mitigation lands in perpetuity.

Recommendation #2: If the Project would require routine maintenance of the new rail line adjacent to streams and riparian vegetation at the Balboa Double Track Extension and Canyon Siding Extension sites, CDFW recommends Metro revise the DEIR to provide details of those routine maintenance activities. The DEIR should discuss potential impacts on biological resources during those routine maintenance activities and provide measures to mitigate those impacts.

1-14

Recommendation #3: CDFW recommends Metro revise BIO-8, BIO-9, and BIO-10 to provide more clarification on specific actions and success criteria that each measure would implement and seek to achieve. As to BIO-8, at a minimum, Metro should state what invasive plant and animal species would be controlled, using what means, and where those species would be controlled. As to BIO-9, at a minimum, Metro should state what specific actions would occur if a qualified biologists determined that disturbance in upland areas would impact riparian areas and wetlands. Finally, as to BIO-10, Metro should state what native biota would be reintroduced, using what means, where plants would be sourced, and where those species would be reintroduced. Following recommended revisions to those measures, CDFW recommends Metro recirculate the CEQA document for public review and commenting (see Comment #1, Recommendation #2). 1-15

Comment #5: Impacts on Fish – Santa Ana Sucker and Unarmored Threespine Stickleback

Issue: The Project could impact fish, including Santa Ana sucker (*Catostomus santaane*) and unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*). Unarmored threespine stickback is listed under both CESA and ESA. Also, the unarmored threespine stickleback is a California Fully Protected Species. The Santa Ana sucker is listed under ESA.

Specific impacts: Project construction and activities cause fish injury or mortality. Also, the Project could temporary or permanently impact habitat necessary to fish for spawning, breeding, feeding, or growth to maturity. This can lead to reduced reproductive capacity or population declines of fish species. Furthermore, Project construction and activities could impact fish and habitat supporting fish downstream of the Project site.

Why impacts would occur: Project construction and activities could impact fish and habitat supporting fish. According to page 18 in the Biological Resources Technical Report, Santa Ana sucker could occur at the Balboa Double Track Extension site and unarmored threespine stickleback could occur at the Canyon Siding Extension site. According to page 33 in the Biological Resources Technical Report, "restrictions and ROW [right-of-way] constraints made it difficult for our field biologists to gather all the information required, so they only did visual studies to determine if there was fish present. At the time of the site reconnaissance, March 9, 2021, no fish were located, but some habitats looked to be prime locations for fish […] A few of the T&E [threatened and endangered] species habitats are only located downstream of this project, and any disturbance to their habitats need to be documented." 1-16

Additionally, the mainstem, including Soledad Canyon of the Santa Clara River is occupied by unarmored threespine stickleback. Tributaries hydrologically connected to mainstem of the Santa Clara River could support also unarmored threespine stickleback. This may include tributaries located in the canyons and drainages on the hillside the Project proposes to cut into for the Canyon Siding Extension portion of the Project.

Work occurring in or adjacent to waterbodies supporting fish could impact fish. For example, crews working in streams may cause stream bank erosion, potentially resulting in crushing, burying, smothering, or displacing fish, fish fry, nesting burrows, and eggs, or microscopic flora and fauna food sources for fish and fry. Additionally, excessive sedimentation may degrade substrate and water conditions needed for reproduction, potentially causing reduced reproductive capacity and success. The Project may require vegetation removal within or

adjacent to waterbodies. This can potentially result in additional stream bank erosion. Flow regime changes or changes to streambed composition may affect the viability and reproductive capacity of fish.

Evidence impacts would be significant: The DEIR states that the Project could impact fish and fish habitat both within the Project site and downstream of the Project site. The DEIR, however, does not provide specific mitigation measures to address potential impacts on fish. The Project could impact fish that are listed under CESA and ESA. The Project may impact a California Fully Protected species. Finally, the Project could impact fish that are Species of Special Concern that have yet to be evaluated (see Comment #1).

Species of Special Concern: A California Species of Special Concern is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, is extirpated in its primary season or breeding role;
- is listed as ESA-, but not CESA-, threatened, or endangered; meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; and/or,
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for CESA threatened or endangered status (CDFW 2021e).

1-16 (cont.)

CEQA provides protection not only for CESA-listed species, but for any species including but not limited to SSC which can be shown to meet the criteria for State listing. These SSC meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). Therefore, take of SSC could require a mandatory finding of significance (CEQA Guidelines, § 15065).

CESA-listed Species and ESA-listed Species: CDFW considers adverse impacts to a species protected by CESA to be significant without mitigation under CEQA. As to CESA, take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). Take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting.

California Fully Protected Species: Take of any species designated as California Fully Protected under the Fish and Game Code is prohibited. CDFW cannot authorize the take of any California Fully Protected species as defined by State law. California Fully Protected species may not be taken or possessed at any time. No licenses or permits may be issued for take, except for collecting those species for necessary scientific research and relocation of the bird species for protection of livestock (Fish & G. Code, § 3511).

Impacts to any sensitive or special status species should be considered significant under CEQA unless they are clearly mitigated below a level of significance. Inadequate avoidance, minimization, and mitigation measures for impacts to sensitive or special status species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species by CDFW or USFWS. Take under ESA is more broadly defined than CESA. Take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. 1-16 (cont.)

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: At least one year prior to starting any Project construction and activities, CDFW recommends Metro retain a qualified biologist to conduct season appropriate pre-Project presence/absence fish surveys and habitat at the Balboa Double Track Extension site. The survey should include areas downstream of the project site that could be impacted. Surveys should be performed by a qualified biologists with appropriate Scientific Collecting Permit. Also, surveys should be performed in consultation and coordination with CDFW.

Mitigation Measure #2: At least one year prior to starting any Project construction and activities, CDFW recommends Metro retain a CDFW-approved biologist to conduct focused surveys for unarmored threespine stickleback where there is potential habitat at the Canyon Siding Extension site and any locations within the Canyon Siding Extension site that is hydrologically connected to the Santa Clara River. Surveys should be performed by a qualified biologists with appropriate Scientific Collecting Permit. Also, surveys should be performed in consultation and coordination with CDFW. Survey results, including negative findings, should be provided to CDFW.

Mitigation Measure #3: CDFW recommends Metro coordinate with CDFW if unarmored threespine stickleback is found. If unarmored threespine stickleback is found, Metro should fully avoid all impacts to unarmored threespine stickleback and habitat supporting this California Fully Protected species. No work should be performed when water is present in tributaries supporting unarmored threespine stickleback. Also, no dewatering of tributaries should be performed at any time as draining water and reducing water levels could strand, injure, or cause mortality of unarmored threespine stickleback. 1-17

Mitigation Measure #4: If a CESA and/or ESA-listed fish species is detected and impacts on those fish and habitat cannot be avoided, Metro should consult with CDFW and/or USFWS to obtain necessary permits for take of CESA and/or ESA-listed fish species. Metro should have a permit from CDFW prior to starting any Project construction and activities (See Comment #2, Recommendation #1 and #2).

Mitigation Measure #5: If a Species of Special Concern is detected and impacts on those fish and habitat cannot be avoided, Project construction and activities may only occur after fish are relocated in accordance with a CDFW-approved Fish Species Relocation Plan. Metro, in consultation with a qualified biologist should prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. Wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to adjacent appropriate habitat within the open space on site or in suitable habitat

adjacent to the Project site (either way, at least 200 feet from the work area). Special status wildlife should be captured only by a qualified biologist with proper handling permits (see Additional Comments: Scientific Collection Permit). 1-17 (cont.)

Recommendation: If the Project cannot avoid impacts on ESA-listed fish species, CDFW recommends Metro consult with USFWS to comply with ESA well in advance of any construction and activities where impacts to an ESA-listed species occur. 1-18

Comment #6: Impacts on Coastal California Gnatcatcher

Impacts: The Project could impact habitat supporting the California coastal gnatcatcher (*Polioptila californica californica*), which is an ESA-listed species and a California Species of Special Concern.

Specific impacts: The Project could result in the clearing of habitat supporting California coastal gnatcatcher.

Why impacts would occur: According to page 3.4-4 in the DEIR, critical habitat for the coastal California gnatcatcher is located adjacent to the Balboa Double Track Extension site and Canyon Siding Extension site. Coastal sage scrub may be cleared to accommodate the Project at the Balboa Double Track Extension site and Canyon Siding Extension site.

Metro has proposed mitigation measure BIO-7 to address impacts on California coastal gnatcatcher. BIO-7 states, "All native vegetation in California gnatcatcher habitat (coastal sage scrub) that must be cleared for project construction must be cleared outside of breeding season (February 15 to August 31). If construction activities must take place in gnatcatcher breeding season, a pre-construction survey will be conducted for active nests within 500 feet of the construction footprint. Surveys will continue weekly throughout the breeding season. If a nest is found within 250 feet of ongoing project activities, Proposed Project work will cease within those 250 feet until the nest has failed or fledged." 1-19

As it is currently proposed, BIO-7 does not propose to replace habitat that may be cleared. Habitat loss and fragmentation driven by development and agriculture continues to be a significant threat to the species. The temporary exclusion of Project activities within nesting buffers during nesting season does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss. California coastal gnatcatchers are residents in coastal sage scrub habitat. Therefore, removal of habitat would result in loss of nesting, breeding, and foraging habitat as well as cover for California coastal gnatcatchers.

Evidence impacts would be significant:

A California Species of Special Concern is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, is extirpated in its primary season or breeding role;
- is listed as ESA-, but not CESA-, threatened, or endangered; meets the State definition

of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; and/or,
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for CESA threatened or endangered status (CDFW 2021e).

CEQA provides protection not only for CESA-listed species, but for any species including but not limited to SSC which can be shown to meet the criteria for State listing. These SSC meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). Therefore, take of SSC could require a mandatory finding of significance (CEQA Guidelines, § 15065).

1-19 (cont.)

Additionally, CDFW considers adverse impacts to a species protected by ESA to be significant without mitigation under CEQA. Take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting.

Impacts to any sensitive or special status species should be considered significant under CEQA unless they are clearly mitigated below a level of significance.

Inadequate avoidance, minimization, and mitigation measures for impacts to sensitive or special status species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species by CDFW or USFWS.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends Metro retain a qualified biologist with a gnatcatcher survey permit. The qualified biologist should survey the Project site and adjacent areas to determine presence/absence of gnatcatcher. The qualified biologist should conduct surveys according to USFWS Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines (USFWS 1997). The survey protocol requires a minimum of six surveys conducted at least one week apart from March 15 through June 30 and a minimum of nine surveys at least two weeks apart from July 1 through March 14. The protocol should be followed for all surveys unless otherwise authorized by the USFWS in writing (USFWS 1997). CDFW recommends gnatcatcher surveys be conducted and USFWS notified (per protocol guidance) prior to staring any Project construction and activities within and adjacent to California coastal gnatcatcher habitat.

1-20

Mitigation Measure #2: Where Project construction and activities would occur within and/or adjacent California coastal gnatcatcher habitat, CDFW recommends Metro avoid work from February 15 through August 31.

Mitigation Measure #3: CDFW recommends Metro avoid clearing, removing, or cutting any California coastal gnatcatcher habitat.

Mitigation Measure #4: If Metro removes California coastal gnatcatcher habitat, CDFW recommends Metro mitigate for impacts at no less than 2:1 so that there is no net loss of habitat supporting an SSC and ESA-listed species. Mitigation lands should occur within the same watershed, and support California coastal gnatcatcher habitat of similar vegetation composition, density, coverage, and species richness and abundance. 1-20 (cont.)

Recommendation: If the Project cannot avoid impacts on ESA-listed species per Mitigation Measures #2 and #3, CDFW recommends Metro consult with USFWS to comply with ESA well in advance of any construction and activities where impacts to an ESA-listed species occur. 1-21

Comment #7: Impacts on Sensitive Plant Communities

Issue: The Project could impact sensitive plant communities.
Specific impacts: The Project could remove Southern California black walnut trees (*Juglans californica*) and California walnut groves (*Juglans californica* Forest and Woodland Alliance). The Project could also remove coast live oak trees (*Quercus agrifolia*) and coast live oak woodlands (*Quercus agrifolia* Woodland Alliance) (Sawyer et al. 2009).

Why impacts would occur: The Balboa Double Track Extension site has southern California black walnut trees and coast live oak trees. The Canyon Siding Extension site has coast live oak trees. Project construction and activities such as tree removal, grading; digging and trenching to install underground infrastructure (e.g., fiber optic cables); and construction of retaining walls could result in injury, mortality, and loss of individual trees as well as result in the loss of acres of a sensitive plant community. According to the *Tree Survey/Impacts Assessment Technical Memo*, "the improvements at the Balboa Double Track Extension and the Canyon Siding Extension sites include steep and undulating terrain within chapparal ecosystems. This could result in impacts to protected trees including Coast Live Oak and California Black Walnut." Also, these trees [at the Balboa Double Track Extension site] in particular (Coast Live Oaks and Southern California Black Walnut) exist on steep slopes that may be subject to grading in proposed construction activities." Lastly, "the greatest number of trees that could be impacted by the proposed railway improvements, are at the Canyon Siding Extension site (Appendix C), including Coast Live Oak saplings that were observed east of the Santa Clarita station platform." 1-22

The Project has provided mitigation measure BIO-13 to address impacts on native trees. BIO-13, as it is currently proposed, does not provide mitigation for impacts on sensitive plant communities. Furthermore, through the Project's BIO-16, native trees, which may include southern California black walnut trees and coast live oak trees, could be replaced with "native drought tolerant trees of comparable size to the impact trees." The Project could result in net loss of native trees and sensitive plant communities by not mitigating for impacts on sensitive plant communities and potentially replacing southern California black walnut trees and coast live oak trees with a different species of tree.

Evidence impacts would be significant: The southern California black walnut has a California Rare Plant Rank (CRPR) of 4.2 (Calflora 2021b). The southern California black walnut is a species of local significance; a species of limited distribution; and a species that is moderately threatened in California (CNPS 2021). CDFW considers California walnut groves to be a Sensitive Natural Communities with a State Rarity Ranking of S3 (CDFW 2021c; Sawyer et al. 2009). Southern California black walnut and California walnut groves meet the definition of endangered, rare, or threatened Species under CEQA (CEQA Guidelines, § 15380).

Accordingly, impacts on southern California black walnut trees and California walnut groves could be significant under CEQA [CEQA Guidelines, §§ 15002(g), 15065, 153820].
CDFW considers coast live oak woodlands to be a sensitive plant community. Oak woodlands serve several important ecological functions such as protecting soils from erosion and land sliding; regulating water flow in watersheds; and maintaining water quality in streams and rivers. Oak woodlands also have higher levels of biodiversity than any other terrestrial ecosystem in California (Block et al. 1990). Oak trees provide nesting and perching habitat for approximately 170 species of birds (Griffin and Muick 1990). For these reasons, CDFW recommends that impacts on oak woodlands be mitigated. Moreover, oak trees and woodlands are protected by the Oak Woodlands Conservation Act (pursuant under Fish and Game Code sections 1360-1372) and Public Resources Code section 21083.4 due to the historic and on-going loss of these resources.
Inadequate avoidance, minimization, and mitigation measures for impacts on southern California black walnut, California walnut groves, and coast live oak woodlands may result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW.

1-22 (cont.)

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends Metro replace no less than three trees for every one southern California black walnut and coast live oak tree that is removed. Mitigation at 3:1 would account for loss of large, heritage-sized trees, rare and sensitive tree species, and trees that are known to provide habitat value for wildlife.

Mitigation Measure #2: CDFW recommends Metro create or restore no less than one acre for every one acre of impact on a sensitive plant community. Metro should create or restore no less than two acres for impacts on a sensitive plant community that consists of heritage-sized trees, vigorous trees, or seedlings/saplings, the latter indicating a healthy, self-recruiting population/plant community. Mitigation should be provided on lands within the same watershed as the area impacted. The density of trees at the mitigation site should be at least the same as the density of trees in the habitat that was impacted. The mitigation site should also provide the same understory species as found in the impacted area.

1-23

Mitigation Measure #3: CDFW recommends Metro modify BIO-16 by including the underlined language and removing the language with strikethrough: "Replace impacted trees that cannot be saved with trees of ~~native drought tolerant trees of comparable size to the impacted trees~~ the same genus, species, and variety (if applicable) as the tree that is removed. Replacement trees shall be locally sourced from within the same watershed and not from a supplier. Replacement trees shall come from a local native plant nursery that implements Phytophthora/Clean Nursery Stock protocols."

Mitigation Measure #4: CDFW recommends that all tree material, especially tree material infected with pests, pathogens, and diseases, is left on site, chipping the material for use as ground cover or mulch.

Additional Recommendations

Scientific Collecting Permit. The Project may require capture, handling, and relocation of wildlife. Pursuant to the California Code of Regulations, title 14, section 650. Accordingly, Metro/qualified biologist must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. Please visit CDFW's Scientific Collecting Permit webpage for information (CDFW 2021f). An LSA Agreement may provide similar take or possession of species as described in the conditions of the Agreement (see Comment #4: Lake or Streambed Alteration). 1-24

CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003). Effective October 1, 2018, a Scientific Collecting Permit is required to monitor project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650).

Data. CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database [i.e., California Natural Diversity Database] which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special status species detected by completing and submitting CNDDB Field Survey Forms (CDFW 2021g). Metro should ensure the data has been properly submitted, with all data fields applicable filled out, prior to finalizing/adopting the environmental document. The data entry should also list pending development as a threat and then update this occurrence after impacts have occurred. Metro should provide CDFW with confirmation of data submittal. 1-25

Mitigation and Monitoring Reporting Plan. CDFW recommends Metro update the Project's proposed Biological Resources Mitigation Measures and condition the environmental document to include mitigation measures recommended in this letter. CDFW provides comments to assist Metro in developing mitigation measures that are specific, detailed (i.e., responsible party, timing, specific actions, location), and clear for a measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). Metro is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided Metro with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A). 1-26

Filing Fees

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Los Angeles County Metropolitan Transportation Authority and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required for the underlying Project approval to be operative, vested, and final (Cal. Code Regs., tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089). 1-27

Conclusion

We appreciate the opportunity to comment on the Project to assist the Los Angeles County Metropolitan Transportation Authority in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the Los Angeles County Metropolitan Transportation Authority has to our comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines, § 15073(e)]. If you have any questions or comments regarding this letter, please contact Ruby Kwan-Davis, Senior Environmental Scientist (Specialist), at Ruby.Kwan-Davis@wildlife.ca.gov or (562) 619-2230.

1-28

Sincerely,

DocuSigned by:
Erinn Wilson-Olgin
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Erinn Wilson-Olgin
Environmental Program Manager I
South Coast Region

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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

Attachment A: Draft Mitigation and Monitoring Reporting Plan

Biological Resources (BIO)			
Mitigation Measure (MM) or Recommendation (REC)		**Timing**	**Responsible Party**
MM-BIO-1 Impacts on Least Bell's Vireo-Surveys	Prior to Project construction and activities at the Balboa Double Track Extension site, a qualified biologist shall conduct protocol surveys for least Bell's vireo. All riparian areas and any other potential least Bell's vireo habitat shall be surveyed at least eight times during the period from April 10 to July 31. Survey results, including negative findings, shall be submitted to CDFW and USFWs within 45 calendar days following the completion of protocol-level surveys.	Prior to Project construction and activities at the Balboa Double Track Extension site	Los Angeles County Metropolitan Transportation Authority (Metro)
MM-BIO-2 Impacts on Least Bell's Vireo-Avoidance	If least Bell's vireo is detected no work shall occur during the least Bell's vireo nesting season (April 10 to July 31). This shall include staging, mobilization, and site preparation.	Before/ During construction and activities	Metro
MM-BIO-3 Impacts on Least Bell's Vireo-Avoidance	No habitat supporting least Bell's vireo shall be removed.	Before/ During construction and activities	Metro
MM-BIO-4 Impacts on Least Bell's Vireo-Incidental Take Permit	If least Bell's vireo is detected and work must occur during the least Bell's vireo nesting season for the duration of the Project, and/or if habitat supporting least Bell's vireo needs to be removed, Metro shall seek appropriate take authorization under CESA. Metro shall have a permit from CDFW prior to starting any Project construction and activities.	Prior to starting any Project construction and activities.	Metro

MM-BIO-5-Impacts on Western Joshua Tree-Avoidance	There shall be no impacts on western Joshua trees and seedbank. No access will be allowed from Yucca Ave/West Milling Street. No activities shall occur within a 290-foot radius of the western Joshua tree to avid impacts to the tree and potential seedbank. This shall include no site access, vehicle parking, staging areas, refueling, and any activities that may result in ground disturbance.	Before/ During construction and activities	Metro
MM-BIO-6-Impacts on Western Joshua Tree-CESA Incidental Take Permit	If necessary, Metro shall seek appropriate take authorization under CESA before starting any construction and activities where impacts to the western Joshua tree and seedbank will occur.	Before starting any construction and activities where impacts to western Joshua tree will occur	Metro
MM-BIO-7-Impacts on Streams and Riparian habitat-LSA Notification	Metro shall notify CDFW pursuant to Fish and Game Code section 1600 et seq. Metro shall obtain an LSA Agreement before starting any Project construction and activities where impacts on streams may occur.	Prior to starting any Project construction and activities where impacts on streams may occur	Metro
MM-BIO-8-Impacts on Streams and Riparian habitat-LSA Notification	The LSA Notification shall include the following information and analyses: 1) Quantification of the linear feet of streams and area of associated riparian vegetation that would be impacted. P 2) An analysis providing information on whether impacts to streams within the immediate project area could cause impacts downstream where there is hydrologic connectivity; 3) A hydrological evaluation of the 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions to provide information on how water and sediment is conveyed	Prior to starting any Project construction and activities where impacts on streams may occur	Metro

	through the Project site; 4) A scour analysis demonstrating that stream banks, bed, and channel would not erode and be impaired (e.g., aggrade, incised) as a result of Project activities; 5) An analysis demonstrating that the Project would not impact stream underflow supporting riparian vegetation; 6) Identification, analysis, and discussion of potential impacts on streams and associated vegetation as a result of upland Project construction and activities; 7) Specific activities and actions Metro proposes to take to mitigate for impacts on streams and riparian vegetation, specifically, actions to control invasive plants and animals and reintroducing native biota; and, 8) A complete description of routine maintenance activities that may be required for the life of the Project including measures to avoid impacts on streams and riparian vegetation during routine maintenance activities occurring for the life of the Project.		
MM-BIO-9-Impacts on Streams and Riparian habitat-Compensatory mitigation	Metro shall provide no less than 2:1 for impacts on streams and associated riparian plant community. Metro shall provide additional mitigation for impacts on riparian plant communities that have a State Rarity Ranking of S1 and S2 and an additional ranking of 0.1 and 0.2.	During Project construction and activities	Metro
MM-BIO-10-Impacts on Streams and Riparian habitat-Species surveys	Metro shall retain a qualified biologist(s) to perform species specific surveys as described under **Mitigation Measure #1, Mitigation Measure #11** and **Mitigation Measure #12** and provide survey results, including negative findings, as part of the LSA Notification. Survey reports shall include information on habitat within the Project site and whether the Project would impact habitat supporting those species.	Prior to LSA Notification Prior to starting any Project construction and activities where	Metro

Brian Balderrama
Los Angeles County Metropolitan Transportation Authority

		impacts on streams may occur	
MM-BIO-11-Impacts on Fish-Surveys	At least one year prior to starting any Project construction and activities, qualified biologist shall conduct season appropriate pre-Project presence/absence fish surveys and habitat at the Balboa Double Track Extension site. Surveys shall be performed by a qualified biologists with appropriate Scientific Collecting Permit. Also, surveys shall be performed in consultation and coordination with CDFW.	Prior to LSA Notification At least one year prior to starting any Project construction and activities	Metro
MM-BIO-12-Impacts on Fish-Surveys-unarmored threespine stickleback	At least one year prior to starting any Project construction and activities, a CDFW-approved biologist shall conduct focused surveys for unarmored threespine stickleback where there is potential habitat at the Canyon Siding Extension site and any locations within the Canyon Siding Extension site that is hydrologically connected to the Santa Clara River. Surveys shall be performed by a qualified biologists with appropriate Scientific Collecting Permit. Also, surveys shall be performed in consultation and coordination with CDFW. Survey results, including negative findings, shall be provided to CDFW.	Prior to LSA Notification At least one year prior to starting any Project construction and activities	Metro
MM-BIO-13-Impacts on Fish-unarmored threespine stickleback	Metro shall coordinate with CDFW if unarmored threespine stickleback is found. If unarmored threespine stickleback is found, Metro shall fully avoid all impacts to unarmored threespine stickleback and habitat supporting this California Fully Protected species. No work shall be performed when water is present in tributaries supporting unarmored threespine stickleback. Also, no dewatering of tributaries shall be performed at any time as draining water and reducing water levels could strand, injure, or cause mortality of unarmored threespine stickleback.	Prior to/During Project construction and activities	Metro
MM-BIO-14-Impacts on Fish-CESA and	If a CESA and/or ESA-listed fish species is detected and impacts on those fish and habitat cannot be avoided, Metro shall consult with CDFW and/or USFWS to obtain necessary permits for take of	Prior to starting any Project	Metro

ESA-listed species	CESA and/or ESA-listed fish species. Metro shall have a permit from CDFW and/or USFWS prior to starting any Project construction and activities.	construction and activities if a permit from CDFW and/or USFWS is needed	
MM-BIO-15-Impacts on Fish-Species of Special Concern	If a Species of Special Concern is detected and impacts on those fish and habitat cannot be avoided, Project construction and activities shall only occur after fish are relocated in accordance with a CDFW-approved Fish Species Relocation Plan. Metro, in consultation with a qualified biologist shall prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. Wildlife shall be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to adjacent appropriate habitat within the open space on site or in suitable habitat adjacent to the Project site (either way, at least 200 feet from the work area). Special status wildlife shall be captured only by a qualified biologist with proper handling permits.	Prior to starting any Project construction and activities After CDFW approval of a Fish Species Relocation Plan	Metro
MM-BIO-16-Impacts on California coastal gnatcatcher-Protocol Surveys	Metro shall retain a qualified biologist with a gnatcatcher survey permit. The qualified biologist shall survey the Project site and adjacent areas to determine presence/absence of gnatcatcher. The qualified biologist shall conduct surveys according to USFWS Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines. The protocol shall be followed for all surveys unless otherwise authorized by the USFWS in writing. Gnatcatcher surveys shall be conducted and USFWS notified (per protocol guidance) prior to staring any Project construction and activities within and adjacent to California coastal gnatcatcher habitat.	Prior to staring any Project construction and activities within and adjacent to California coastal gnatcatcher habitat.	Metro

MM-BIO-17-Impacts on California coastal gnatcatcher-Avoidance	Where Project construction and activities would occur within and/or adjacent California coastal gnatcatcher habitat, no work shall occur work from February 15 through August 31.	During Project construction and activities	Metro
MM-BIO-18-Impacts on California coastal gnatcatcher-Habitat	There shall be no clearing, removing, or cutting any California coastal gnatcatcher habitat.	During Project construction and activities	Metro
MM-BIO-19-Impacts on California coastal gnatcatcher-Compensatory mitigation	Metro shall mitigate for loss of any California coastal gnatcatcher habitat. at no less than 2:1 so that there is no net loss of habitat supporting an SSC and ESA-listed species. Mitigation lands shall occur within the same watershed, and support California coastal gnatcatcher habitat of similar vegetation composition, density, coverage, and species richness and abundance.	Before/ During Project construction and activities	Metro
MM-BIO-20-Impacts on Sensitive Plant Communities-Tree replacement	Metro shall replace no less than three trees for every one southern California black walnut and coast live oak tree that is removed.	During Project construction and activities	Metro
MM-BIO-21-Impacts on Sensitive Plant Communities	Metro shall create or restore no less than one acre for every one acre of impact on a sensitive plant community. Metro shall create or restore no less than two acres for impacts on a sensitive plant community that consists of that consists of heritage-sized trees, vigorous trees, or seedlings/saplings. Mitigation shall be provided on lands within the same watershed as the area impacted. The density of trees at the mitigation site shall be at least the same as the density of trees in the habitat that was impacted. The mitigation	During Project construction and activities	Metro

	site shall also provide the same understory species as found in the impacted area.		
MM-BIO-22-Impacts on Sensitive Plant Communities	Replace impacted trees that cannot be saved with trees of the same genus, species, and variety (if applicable) as the tree that is removed. Replacement trees shall be locally sourced from within the same watershed and not from a supplier. Replacement trees shall come from a local native plant nursery that implements Phytophthora/Clean Nursery Stock protocols.	During Project construction and activities	Metro
MM-BIO-23-Impacts on Sensitive Plant Communities	All tree material, especially tree material infected with pests, pathogens, and diseases, shall be left on site, chipping the material for use as ground cover or mulch.	During Project construction and activities	Metro
REC-1-Biological Assessment	Metro should provide a biological assessment analyzing and discussing the Project's potential impacts on the State's biological resources. The assessment should provide the following information supported by a thorough literature review: 1) A complete, recent, assessment of rare, threatened, and endangered, and other sensitive species on site and within the area of potential effect, including California Species of Special Concern and California Fully Protected Species. Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species. Seasonal variations in use of land around the three capital improvements should also be addressed. CDFW's California Natural Diversity Database in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat. At a minimum, CDFW recommends searching the following quadrangles: Balboa Double Track Extension (Oak Mountain and San Fernando quadrangles); Canyon Siding Extension (Newhall and Mint Canyon quadrangles);	Prior to finalizing CEQA document	Metro

	Lancaster Terminal Improvements (Lancaster East and Lancaster West quadrangles). 2) A thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Adjoining habitat areas should be included where Project construction and activities could lead to direct or indirect impacts off site. 3) Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at the Project site and within the neighboring vicinity. The Manual of California Vegetation, second edition, should also be used to inform this mapping and assessment. CDFW tracks plant communities and rare plant communities using the Manual of California Vegetation classification system only. Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts offsite. 4) A rare plant assessment using online databases for rare, threatened, and endangered plants, including the California Native Plant Society Online Inventory of Rare and Endangered Plants of California as well as the Calflora's Information on Wild California Plants database. 5) A complete assessment of potential impacts on California Terrestrial and Vernal Pool Invertebrates of Conservation Priority that may occur on site and within the area of potential effect.		
REC-2-Recirculate CEQA document	Metro should recirculate the Project's CEQA document after revising the CEQA document to provide more information as to the Project's impacts on the State's biological resources. Metro should provide measures to avoid, minimize, and/or mitigate for potentially significant effects on biological resources that were not previously identified.	Prior to finalizing CEQA document	Metro

REC-3-Impacts on Least Bell's Vireo	If the Project would impact least Bell's vireo, early consultation with CDFW is encouraged, as significant modification to a Project and mitigation measures may be required to obtain a CESA Permit. Appropriate authorization from CDFW may include an Incidental Take Permit or a Consistency Determination in certain circumstances, among other options [Fish & G. Code, §§ 2080.1, 2081, subds. (b) and (c)]. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an Incidental Take Permit unless the Project CEQA document addresses all Project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an Incidental Take Permit. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA Incidental Take Permit.	Prior to finalizing CEQA document Prior to Project construction and activities where impacts on least Bell's vireo may occur	Metro
REC-4-LSA Notification-Revise CEQA document	CDFW's issuance of an LSA Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from Metro for the Project. To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 et seq. and/or under CEQA, the CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement. As such, Metro should consider CDFW's comments and revise the DEIR by incorporating the mitigation measures recommended in this letter into the Project's final environmental document.	Prior to finalizing CEQA document	Metro
REC-5-Routine maintenance-Revise CEQA document	If the Project would require routine maintenance of the new rail line adjacent to streams and riparian vegetation at the Balboa Double Track Extension and Canyon Siding Extension sites, Metro should revise the DEIR to provide details of those routine maintenance	Prior to finalizing CEQA document	Metro

	activities. The DEIR should discuss potential impacts on biological resources during those routine maintenance activities and provide measures to mitigate those impacts.		
REC-6-Revise CEQA document	Metro should revise BIO-8, BIO-9, and BIO-10 to provide more clarification on specific actions and success criteria that each measure would implement and seek to achieve. As to BIO-8, at a minimum, Metro should state what invasive plant and animal species would be controlled, using what means, and where those species would be controlled. As to BIO-9, at a minimum, Metro should state what specific actions would occur if a qualified biologists determined that disturbance in upland areas would impact riparian areas and wetlands. Finally, as to BIO-10, Metro should state what native biota would be reintroduced, using what means, where plants would be sourced, and where those species would be reintroduced. Following recommended revisions to BIO-8, BIO-9, and BIO-10, CDFW recommends Metro recirculate the CEQA document for public review and commenting.	Prior to finalizing CEQA document	Metro
REC-7-Impacts on Endangered Species Act-listed species-fish	If the Project cannot avoid impacts on ESA-listed fish species, Metro should consult with USFWS to comply with ESA well in advance of any construction and activities where impacts to an ESA-listed species occur.	Before starting any construction and activities where impacts to an ESA-listed species occur	Metro
REC-8-Impacts on Endangered Species Act-listed species-California coastal gnatcatcher	If the Project cannot avoid impacts on California coastal gnatcatcher, Metro should consult with USFWS to comply with ESA well in advance of any construction and activities where impacts to an ESA-listed species occur.	Before starting any construction and activities where impacts to an ESA-listed	Metro

		species occur	
REC-9-Scientific Collecting Permit	Metro shall retain a qualified biologist with appropriate handling permits, or shall obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities.	Before starting any construction and activities During construction and activities	Metro
REC-10-Data	Metro should ensure sensitive and special status species data has been properly submitted to the California Natural Diversity Database with all data fields applicable filled out. Mero should provide CDFW with confirmation of data submittal.	Prior to/after Notification pursuant to Fish and Game Code section 1600 et seq.	Metro
REC-11-Mitigation and Monitoring Reporting Plan	Metro should update the Project's proposed Biological Resources Mitigation Measures and condition the environmental document to include mitigation measures recommended in this letter.	Prior to finalizing CEQA document	Metro

Letter No. 1

Erinn Wilson-Olgin
California Department of Fish & Wildlife
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

1-1. The comment provides an introduction to the letter, establishes California Department of Fish and Wildlife (CDFW) regulatory authority and role as a Responsible Agency, and provides a summary of the Proposed Project. Metro appreciates CDFW's input on the Proposed Project and assistance in developing the mitigation measures necessary to protect the State's biological resources.

1-2 The comment establishes that CDFW attended a site visit with Metro staff on September 8, 2021 and offers its comments and recommendations based on a review of the Draft EIR, supporting technical studies, and the September 8, 2021 site visit. The intent of the comments contained in the letter is to assist Metro in adequately identifying, avoiding, and/or mitigating the Proposed Project's significant, or potentially significant, direct, and indirect impacts on biological resources. Metro acknowledges CDFW's efforts to provide detailed comment on the Proposed Project's potential impacts on biological resources and recommended mitigation measures to address such impacts.

1-3 The comment states that the Draft EIR is missing information as the Proposed Project's potentially significant impacts on biological resources. The comment goes on to list animal and plant species that may be present in the project area identified through review of the California Natural Diversity Database (CNDDB) and states that the Draft EIR did not consider potential impacts to these species. The comment specifies various aspects of the Proposed Project's construction activities that could affect sensitive biological resources and identifies western spadefoot as a species known to occur in the hillside slopes along the Canyon Siding Extension site and identifies proposed grading activities as a potential cause for impacts to the species. Metro has conducted a review of the CNDDB and included the results of such review in the Final EIR. Further additional analysis to address CDFW concerns related to the information in the Draft EIR has been provided in the Final EIR, including description of potential impacts to a variety of species listed in the CNDDB review. Finally, while Metro acknowledges CDFW's concerns and has incorporated CDFW's various recommended mitigation measures into the Final EIR, the analysis contained in the Draft EIR determined that impacts on special status species were potentially significant and expressed that impacts on any state-listed endangered, threatened, rare, or candidate species, would require a permit from CDFW before the Proposed Project could proceed. Chapter 2.0, Corrections and Additions, of this Final EIR provides discussion of the CNDDB review, additional impact analysis, revisions to mitigation measures in the Draft EIR, as well as additional mitigation measures recommended in CDFW's comment letter.

1-4 The comment recommends that a biological assessment be completed with a description of the recommended contents of such an assessment. As discussed during the September 8 field visit and the comment, site access restrictions made a biological assessment difficult to perform, namely on-site species presence surveys or on-site floristic assessments. However, Metro has included Mitigation Measure **BIO-12**, as described in Chapter 2.0, Corrections and Additions and incorporated into Chapter 4.0, Mitigation Monitoring and Reporting Program, of this Final EIR, to ensure that a qualified biologist with access to the rail right-of-way (ROW) conducts a field assessment for the presence/absence of biological resources in the next phase of project planning. With Mitigation Measure **BIO-12,** in concert with additional mitigation measures recommended by CDFW, Metro believes the potential impacts to biological resources would be adequately mitigated or avoided.

1-5 The comment recommends that the Draft EIR be recirculated pursuant to Section 15088.5 of the CEQA Guidelines. As discussed in Chapter 1.0, Introduction, of the Draft EIR, the Proposed Project is exempt from the requirements of CEQA under Section 21080 (b)(10) of the California Public Resources Code (PRC) and this EIR has been prepared voluntarily by Metro. Metro intends to ensure that all Project-related impacts are adequately mitigated and has thus incorporated the other recommendations provided in CDFW's comment letter. As described previously, the Draft EIR did identify potentially significant impacts to biological resources under Impacts 3.4-1, 3.4-2, 3.4-3, 3.4-4, and 3.4-5 and identified mitigation measures to address said impacts. With the mitigation measures recommended by CDFW incorporated, Metro believes that that all potential impacts to biological resources would be adequately addressed.

1-6 The comment identifies the least Bell's vireo as a California Endangered Species Act (CESA) and federal Endangered Species Act (ESA) -listed species that could be potentially impacted by the Proposed Project. The comment goes on to describe known occurrence of the species in the vicinity of the Balboa Double Track site and describes aspects of the Proposed Project that may result in significant impacts to the species. Metro agrees that given the known occurrence of the least Bell's vireo in the vicinity of the Balboa Double Track site that there is potential for Project construction activities to result in significant impacts to the species or its habitat. Additional analysis describing these potential impacts has been added to the Final EIR and is included in Chapter 2.0, Corrections and Additions, of this Final EIR.

1-7 The comment recommends three mitigation measures to address potential impacts to least Bell's vireo. Metro has incorporated CDFW's recommended mitigation measures into Mitigation Measure **BIO-8** in this Final EIR and is included in Chapter 2.0, Corrections and Additions and incorporated into Chapter 4.0, Mitigation Monitoring and Reporting Program.

1-8 The comment recommends that Metro consult with USFWS to comply with the ESA in advance of any construction activities proposed for the Project. Metro agrees that early consultation with USFWS would be required if impacts to any ESA-listed species would result from the Proposed Project and such consultation would take place following implementation of Mitigation Measure **BIO-8** or any other mitigation identified in the Final EIR that results in identification of ESA species.

1-9 The comment states that the Proposed Project could impact the western Joshua tree identified at the Canyon Siding Extension site and lists potential construction activities that could result in such impacts. Current design does not indicate that any construction activities, including site access would occur in the vicinity of the identified western Joshua tree and the Final EIR has included additional discussion to this effect. See Chapter 2.0, Corrections and Additions for an updated discussion of the identified western Joshua tree

1-10 The comment recommends mitigation measures to ensure avoidance of the identified western Joshua tree near the Canyon Siding Extension site. To ensure that impacts to the identified western Joshua tree are avoided, Metro has incorporated CDFW's recommended mitigation measures into the Final EIR as Mitigation Measure **BIO-9.** See Chapter 2.0, Corrections and Additions for updated discussion of the identified western Joshua tree, including description of Mitigation Measures **BIO-9.**

1-11 The comment states that impacts to streams would be subject to a Lake and Streambed Alteration (LSA) agreement notification under Fish and Game Code Section 1602 et seq. The comment goes on to describe various potential impacts to streams identified in the Draft EIR and discusses how Draft EIR Mitigation Measures **BIO-8**, **BIO-9**, and **BIO-10** would be inadequate to address potential impacts to streams and riparian habitat. Metro agrees that diversion, obstruction, fill, or changes to the coarse, bed, or banks of a stream would require LSA notification. Mitigation Measure **BIO-12** (now BIO-19 in the Final EIR) was proposed in the Draft EIR to ensure compliance with this requirement. Additionally, Mitigation Measures **BIO-8** (now **BIO-15** in the Final EIR) and **BIO-9** (now **BIO-16** in the Final EIR) have been revised to address CDFW's concerns with the specificity of these mitigation measures. Additional analysis to address impacts to riparian vegetation and habitat has also been added to the Final EIR. Metro also agrees with CDFW's concerns related to Mitigation Measure **BIO-10** and this mitigation has been removed from the Final EIR with the intended purpose of restoring riparian habitat covered by CDFW recommended 2:1 mitigation for impacts on streams and riparian habitat described as Mitigation Measure **BIO-15** in this Final EIR. See Chapter 2.0, Corrections and Additions for revised analysis of impacts to riparian habitat and sensitive plant communities.

1-12 The comment provides recommended mitigation measures to address LSA notification and impacts to riparian communities including concurrence with Draft EIR Mitigation Measure **BIO-12**, additional description of LSA notification documentation, recommended mitigation ratio for impacts to riparian habitat and streams, and recommended additional biological surveys consistent with other comments CDFW's comment letter. Metro agrees with the comment's recommendations and has updated Draft EIR Mitigation Measure **BIO-12** (now **BIO-18** in the Final EIR) with additional LSA notification details. See Response 1-11 for a description of inclusion of CDFW's recommended mitigation ratio for impacted streams and riparian habitat.

1-13 The comment states that the LSA agreement may rely upon the EIR for the Proposed Project and encourages incorporation of the other mitigation recommendations contained in CDFW's comment letter while also acknowledging that additional mitigation may be conditioned in an LSA agreement. Metro intends to

incorporate CDFW's recommended mitigations to avoid impacts to biological resources and ensure LSA notification meets CDFW's requirements.

1-14 The comment states that routine maintenance activities proposed as part of the Proposed Project should be described and the impacts on biological resources posed by such activities should be disclosed in the EIR. The Draft EIR discusses operation of the Proposed Project, including routine maintenance throughout Chapter 3.4. As discussed, project operations, including routine maintenance would take place within the existing ROW in areas that are already disturbed and inhabited by the AVL track. Accordingly, operation of the Proposed Project would be similar to existing operations and impacts would be less than significant.

1-15 The comment recommends that Draft EIR Mitigation Measures **BIO-8**, **BIO-9**, and **BIO-10** be revised to provide greater specificity and clarification. Please see Response to Comment 1-11 for discussion of revisions to Draft EIR Mitigation Measures **BIO-8**, **BIO-9**, and **BIO-10.**

1-16 The comment states that the Proposed Project could impact fish, including CESA and ESA listed Santa Ana sucker and fully protected unarmored threespine stickleback. In addition, the comment references portions of the Biological Resources Technical Report that refers to the range of the Santa Ana sucker and unarmored threespine stickleback. Metro notes that the portions of the Biological Resources Technical Report referenced in the comment identifies the range of the Santa Ana sucker and the unarmored threespine stickleback and does not state that these species have potential to be located within any of the three capital improvement sites, nor are impacts to streams that support fish anticipated. However, in recognition that site access restrictions limited Metro biologist's ability to survey the capital improvement sites for potential fish habitat, Metro agrees that additional mitigation is required to determine if any fish species are present in or around the Balboa Double Track Extension and the Canyon Siding Extension sites. Additional analysis has been provided in this Final EIR related to presence of fish at the capital improvement sites. Please see Chapter 2.0, Corrections and Additions for updated analysis related to fish and CDFW identified special status species.

1-17 The comment recommends several mitigation measures including presence/absence fish surveys, focused surveys for Santa Ana sucker and unarmored threespine stickleback, avoidance in the event that special status fish species are detected, and special status fish species relocation. Metro has incorporated CDFW recommended mitigation measures into the Final EIR as Mitigation Measure **BIO-10.** The added Mitigation Measures is also described in Chapter 2.0 Corrections and Additions and incorporated into Chapter 4.0 Mitigation Monitoring and Reporting Program.

1-18 The comment recommends that Metro coordinate early with USFW in the event that impacts on ESA-listed fish species cannot be avoided. Metro agrees that early consultation with USFWS would be required if impacts to any ESA-listed species would result from the Proposed Project and such consultation would take place following implementation of Mitigation Measure **BIO-10** or any other mitigation identified in the Final EIR that results in identification of ESA species.

1-19 The comment states that impacts to the coastal California gnatcatcher may occur and that Draft EIR Mitigation Measure **BIO-7** does not address potential impacts resulting from removal of coastal California gnatcatcher habitat. Additional analysis related to potential impacts on coastal California gnatcatcher has been added to the Final EIR. The analysis includes discussion of potential habitat removal due to proposed grading activities. See Chapter 2.0, Corrections and Additions for additional discussion of potential impacts to coastal California gnatcatcher.

1-20 The comment recommends several mitigation measures to address potential impacts to coastal California gnatcatcher, including presence/absence surveys for coastal California gnatcatcher, restrictions on construction activities within or adjacent to identified coastal California gnatcatcher habitat during breeding season, restrictions on clearing vegetation within identified coastal California gnatcatcher habitat, and providing 2:1 ratio habitat replacement for any habitat removed. Metro has incorporated CDFW recommended mitigation measures into the Final EIR by updating Mitigation Measure **BIO-7.** The revised Mitigation Measure is also described in Chapter 2.0, Corrections and Additions and incorporated into Chapter 4.0, Mitigation Monitoring and Reporting Program.

1-21 The comment recommends that Metro coordinate early with USFW in the event that impacts on ESA-listed species cannot be avoided. Metro agrees that early consultation with USFWS would be required if impacts to any ESA-listed species would result from the Proposed Project and such consultation would take place following implementation of Mitigation Measure **BIO-7** or any other mitigation identified in the Final EIR that results in identification of ESA species.

1-22 The comment states that the Proposed Project may remove southern California black walnut trees and groves and coast live oak trees and woodlands. The Balboa Double Track Extension site contains both southern California black walnut trees and coast live oak trees while the Canyon Siding Extension site contains coast live oak trees. The comment goes on to state that Draft EIR Mitigation Measure **BIO-13** and **BIO-16** do not adequately mitigate impacts on sensitive plant communities. The analysis of impacts to sensitive plant communities has been updated in the Final EIR to provide clarification and specificity on the potential impacts to individual trees as well as sensitive plant communities. See Chapter 2.0, Corrections and Additions for additional discussion of potential impacts to southern California black walnut trees, coast live oak trees, and associated sensitive plant communities.

1-23 The comment recommends several mitigation measures to address potential impacts to sensitive plant communities, including replacement of removed black walnut trees and coast live oak trees at a 3:1 ratio, restoration of impacted sensitive plant communities with prescribed acreage ratios, reuse of plant material as mulch, and recommended text edits to Draft EIR Mitigation Measure **BIO-16**. Metro has incorporated CDFW recommended mitigation measures into the Final EIR as Mitigation Measures **BIO-16** and **BIO-17.** Recommended edits to Draft EIR Mitigation Measure **BIO-16** (now **BIO-23** in the Final EIR) have also been made as requested. The added and revised Mitigation Measures are also described in Chapter 2.0, Corrections and Additions and incorporated into Chapter 4.0, Mitigation Monitoring and Reporting Program.

1-24 The comment states that any required capture, handling, or relocation of wildlife would require qualified biologists to obtain appropriate handling permits prior to engaging in such activities. The comment also states that a Scientific Collecting Permit is required to monitor project impacts on wildlife resources. Metro understands the permit requirements associated with the monitoring, capture, handling, and/or relocation of wildlife and has included requirements for such permits in added/revised mitigation measures, as recommended by CDFW, as well as in Chapter 4.0, Mitigation Monitoring and Reporting Program.

1-25 The comment states that information developed in support of environmental documentation be incorporated into the CNDDB by reporting any special status species detected. Metro agrees and intends to provide any information gathered as part of the Proposed Project's mitigation program to CDFW for incorporation into the CNDDB.

1-26 The comment recommends that Metro update the Project's proposed Biological Resource mitigation measures and incorporate CDFW's recommendations into the Project's Mitigation Monitoring and Reporting Program. Metro has incorporated all recommended mitigation measures into the Final EIR as described in Chapter 2.0, Corrections and Additions. These mitigation measures have also been incorporated into Chapter 4.0, Mitigation Monitoring and Reporting Program.

1-27 The comment states that since the Proposed Project will result in potential impacts to fish and/or wildlife, filing fees are required for the CDFW staff assessment. Metro understands the required filing fees and will pay said fees when filing the Notice of Determination for the Project.

1-28 The comment provides a conclusion to CDFW's comment letter and expresses appreciation for the opportunity to comment. No further response to this comment is required.

COMMENT LETTER 2

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

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Governor's Office of Planning & Research

September 01 2021

STATE CLEARINGHOUSE

Making Conservation a California Way of Life.

August 31, 2021

Brian Balderrama, Senior Director
LA County Metropolitan Transportation Authority
One Gateway Plaza, Mail Stop 99-17-2
Los Angeles, CA 90012

RE: Antelope Valley Line Capacity and Service Improvement Program – Draft Environmental Impact Report (DEIR)
SCH# 2020109001
GTS# 07-LA-2020-03668
Vic. LA-5 PM R44.907

Dear Brian Balderrama:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The Proposed Project is intended to enable improved service along the Antelope Valley Line (AVL) by constructing three capital improvements at three locations strategically selected along the AVL corridor to provide the most operational flexibility possible for the level of investment available. These three capital improvements are the Balboa Double Track Extension in the City of Los Angeles, the Canyon Siding Extension in the City of Santa Clarita, and the Lancaster Terminal Improvements in the City of Lancaster.

The nearest State facility to the proposed project is Interstate 5. After reviewing the DEIR, Caltrans has the following comments: 2-1

- **Balboa Double Track Extension**: As stated in the DEIR, track realignments at this location will require encroachment upon Caltrans ROW. Extensive collaboration will be required with the Caltrans District 7's Office of Permits for all project work at this location and all concerns must be adequately addressed.

- **Canyon Siding Extension**. Based on the preliminary details provided, the Island Platform with Platform to Parking Lot Pedestrian Undercrossing Design Option would be the preferred design alternative. This design option provides more direct access for people walking and biking, and a single platform can also make navigation easier for first-time users. In addition to the more direct access to the platform, this design option also narrows Commuter Way, which results in fewer conflict points between pedestrians and cars when

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accessing the station. This design also maximizes the use of the existing roadway and parking lot, limiting potential impacts from expanding into the existing hillside to the south.

- **Lancaster Terminal Improvements**. Based on the preliminary details provided, the Island Platform with Pedestrian At-Grade Crossing Design Option would be the preferred design option. This design option provides easy single-platform navigation with the greatest level of simplicity and accessibility.

2-1 (cont.)

If you have any questions, please contact project coordinator Anthony Higgins, at anthony.higgins@dot.ca.gov and refer to GTS# 07-LA-2020-03668.

Sincerely,

Miya Edmonson

MIYA EDMONSON
IGR/CEQA Branch Chief
cc: State Clearinghouse

Letter No. 2

Miya Edmonson
California Department of Transportation
District 7 – Office of Regional Planning
100 South Main Street, Suite 100
Los Angeles, CA 90012

2-1. The comment identifies Interstate 5 as the nearest Caltrans facility to the Proposed Project and provides the following input on the three capital improvements:

Balboa Double Track Extension – Track realignment in the vicinity of I-5 will require extensive collaboration with the Caltrans District 7 Office of Permits.

Canyon Siding Extension – Caltrans states a preference for the Island Platform with Platform to Parking Lot Pedestrian Undercrossing Design Option as it would provide the most direct access for patrons and would result in improved circulation on Commuter Way.

Lancaster Terminal Improvements – Caltrans states a preference for the Island Platform with Pedestrian At-Grade Crossing Design Option as it provides easy single-platform navigation.

Metro has noted this comment and these comments will be forwarded to Metrolink to consider in the Final Design of the Proposed Project as well as the continued coordination with Caltrans District 7 Office of Permits on the anticipated encroachment permit required for the Balboa Double Track Extension work. Caltrans' preferences for station platform layouts will also be forwarded to Metrolink for consideration in the Final Design of the Project.

COMMENT LETTER 3

From: Canuela, Jonathan@DWR <Jonathan.Canuela@water.ca.gov>
Sent: Tuesday, August 3, 2021 1:23 AM
To: AVL <AVL@metro.net>
Cc: Cruz, Joseph@DWR <Joseph.Cruz@water.ca.gov>
Subject: Milepost 65.24 CA-Aqueduct Crossing

Mr. Balderrama,

The existing rail line crossing over the California Aqueduct at Milepost 65.24 (Page 3.1 of DEIR State Clearinghouse No. 2020109001) has no indication of improvement or modification as part of the proposed program. 3-1

Please confirm, or if you have detailed information about the California Aqueduct crossing please let me know.

Thank you.

Jonathan P. Canuela
Water Resources Engineering Associate (Spec.)
SWP Right-of-Way Management Section, Room 631
Division of Operations and Maintenance-HQ
Jonathan.canuela@water.ca.gov
(916) 653-5095

1

Letter No. 3

Jonathan P. Canuela
California Department of Water Services
P.O. Box 942836
Sacramento, CA 94236-0001

3-1. The comment asks for clarification as to whether the Proposed Project would provide any improvements or modifications to the California Aqueduct crossing at Milepost 65.24. Metro, in partnership with Metrolink, is considering key capital improvements along the existing Antelope Valley Line (AVL) corridor in order to enable incremental levels of commuter rail service up to 30 minutes bi-directional to Santa Clarita and hourly to Lancaster. Enhanced capital improvements at the Aqueduct crossing are not required for this proposed level of service for the Proposed Project and no modifications or other improvements are proposed at this location.

COMMENT LETTER 4

---------- Original Message ----------
From: Saunders, Joseph@CHP [jcsaunders@chp.ca.gov]
Sent: 9/3/2021, 1:33 PM
To: avl@metro.net
Cc: jonunez@chp.ca.gov; state.clearinghouse@opr.ca.gov; blanca.enciso@chp.ca.gov
Subject: 063 – BE – Environmental Document Review – SCH #2020109001 - Due to Lead Agency by 09/10/2021 - Southern Division Response

Good Afternoon,

No impact to any Southern Division Area local operations and/or public safety by SCH# 2020109001 was identified. 4-1

Thank you,

Joseph Saunders, Sergeant

Southern Division

Staff Services

411 N. Central Avenue, suite 410

Glendale, CA 91203

(818) 240-8200

(818) 240-1496 (fax)

Email: jcsaunders@chp.ca.gov

1

From: CHP-EIR <EIR@chp.ca.gov>
Sent: Tuesday, August 24, 2021 2:50 PM
To: Nunez, Jose@CHP <JONunez@chp.ca.gov>
Cc: Enciso, Blanca@CHP <Blanca.Enciso@chp.ca.gov>
Subject: 063 – BE – Environmental Document Review – SCH #2020109001 - Due to Lead Agency by 09/10/2021

Good afternoon,

Special Projects Section (SPS) recently received the referenced Notice of Environmental Impact document from the State Clearinghouse (SCH) outlined in the following Web site:

https://ceqanet.opr.ca.gov/2020109001/3

Due to the project's geographical proximity to Southern Division, please use the attached checklist to assess its potential impact to local Area/Section operations and public safety. If impact is determined, responses should be e-mailed directly to **Los Angeles County Metropolitan Transportation Authority (Lead Agency)** with cc to SCH, respective Division, and myself.

Please feel free to e-mail me if you have any questions.

Thank you!

Kind regards,

Blanca Enciso

Special Projects Section- 063

Transportation Planning Unit

California Highway Patrol

Office: (916) 843-3365

2

Letter No. 4

Joseph Saunders
California Highway Patrol
Southern Division
Staff Services
411 North Central Avenue, Suite 410
Glendale, CA 91203

4-1. The comment states that no impacts to any California Highway Patrol Southern Division Area operations or public safety were identified. Metro notes the comment and no further response is required.

COMMENT LETTER 5

STATE OF CALIFORNIA *Gavin Newsom, Governor*

PUBLIC UTILITIES COMMISSION
320 W 4th Street, Suite 500
Los Angeles, CA 90013

September 10, 2021

CORS 2021090001

Brian Balderrama
Los Angeles County Metropolitan Transportation Authority
Deputy Executive Officer
One Gateway Plaza, M/S 99-17-2
Los Angeles, CA 90012

Sent via email: AVL@metro.net

Re: Antelope Valley Line Capacity and Service Improvements Program
SCH 2020109001 — *Draft Environmental Impact Report*

Dear Mr. Balderrama:

The California Public Utilities Commission (Commission/CPUC) has jurisdiction over rail crossings (crossings) in California. CPUC ensures that crossings are safely designed, constructed, and maintained. The Commission's Rail Crossings Engineering Branch (RCEB) is in receipt of the *Draft Environmental Impact Report (DEIR)* for the proposed Antelope Valley Line Capacity and Service Improvements Program (Project). Los Angeles County Metropolitan Transportation Authority (Metro) is the lead agency. The Project is statutorily exempt from the California Environmental Quality Act (CEQA) under Section 21080 (b)(10) of the California Public Resources Code (PRC); the DEIR has been provided as an informational document to identify potential impacts that may result from the Project.

The Antelope Valley Line (AVL) right-of-way (ROW) is owned by Metro. Southern California Regional Rail Authority (SCRRA) operates Metrolink commuter rail service between Los Angeles Union Station and Lancaster and Union Pacific Railroad (UPRR) operates Class 1 freight service along the corridor. The route is Federal Railroad Administration (FRA) Track Class 4, with a maximum speed of 79 miles per hour (mph). There are up to 30 Metrolink commuter trains and on average five UPRR freight trains per day on the AVL. 5-1

The Project involves the construction of three capital improvements which would provide the capacity required to allow commuter rail service to increase along the AVL to 30-minute bi-directional headways between Los Angeles Union Station (LAUS) and the Santa Clarita Valley and up to 60-minute bi-directional headways between the Santa Clarita Valley and the Lancaster Terminal by the year 2028. The three capital improvements, described in DEIR Section 2.3, include the Balboa Double Track Extension located in the City of Los Angeles, the Canyon Siding Extension located in the City of Santa Clarita, and the Lancaster Terminal Improvements located in the City of Lancaster.

CPUC General Order (G.O.) 88-B establishes criteria for altering existing crossings, including (but not limited to) addition of one track within the existing railroad right-of-way, reconstruction of grade-separated structures, and changes in the type or addition of automatic signaling devices at crossings. Metro will be required to submit a G.O. 88-B request for alteration of each existing crossing included in 5-2

Brian Balderrama
SCH 2020109001
September 10, 2021

the Project. Requests to alter existing crossings may be approved by RCEB staff, provided completion of request as outlined in G.O. 88-B, Section 5 and consensus among parties.

G.O. 88-B also establishes cases for which the Authority must apply to the Commission for authorization, including construction of new highway-rail or rail-rail crossings. Refer to the CPUC Rules of Practice and Procedure (www.cpuc.ca.gov/rpp/), Rules 3.7–3.11 for new crossing application requirements. You may consult with RCEB staff to determine the need for authorization by G.O. 88-B or by application at each proposed crossing on the corridor. 5-2 (cont.)

Minimum vertical and horizontal clearance requirements are outlined in CPUC General Order (G.O.) 26-D, Section 2, Section 3, and Section 4. Clearance between parallel tracks is governed by G.O. 26-D, Section 5. Public roads, highways, and streets crossing under tracks and over tracks are subject to G.O. 26-D, Section 12 and Section 13, respectively.

A diagnostic meeting is required for each crossing alteration or construction. The diagnostic team consists of representatives from the railroads, roadway agencies, local government agencies, CPUC, and private stakeholders. You may contact RCEB staff to schedule diagnostic meetings, and to discuss preliminary designs of grade-separated structures. 5-3

Metro has initiated coordination meetings with CPUC RCEB and presented an overview of the three capital improvements within the Project. RCEB provides the following comments for each capital improvement.

Balboa Double Track
The Balboa Double Track Extension is proposed to begin at the existing Sylmar Siding at the Balboa Boulevard overpass and extend approximately 1.1 miles north to the Sierra Highway overpass, and includes three existing grade-separated. CPUC G.O. 26-D establishes minimum vertical and horizontal clearance requirements, though railroads standards may exceed these clearances. 5-4

Canyon Siding Extension
The proposed Canyon Siding Extension would add approximately 8,400 feet of new track between Bouquet Canyon and Golden Oak Road. The improvement includes proposed new crossings at Santa Clarita station and modification of the Golden Oak Road grade crossing.

New pedestrian grade crossings are proposed at Santa Clarita Station. The Commission's policy is to reduce the number of at-grade crossings, per G.O. 75-D. As such, CPUC recommends that Metro move forward with the undercrossing design alternatives. New public crossings require an application to the Commission; refer to the CPUC Rules of Practice and Procedure for details. 5-5

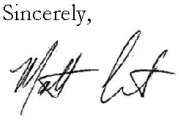
The proposed modification of the Golden Oak Road grade crossing will require CPUC authorization. This may be accomplished by G.O. 88-B request. Please contact CPUC to schedule a field diagnostic meeting with all stakeholders at the crossing.

Lancaster Terminal Improvements
The proposed Lancaster Terminal Improvements includes expansion of the existing layover facilities north of Lancaster Station and the Lancaster Boulevard crossing, with three additional storage tracks. CPUC supports the respective pedestrian undercrossing and pedestrian overcrossing design alternatives at Lancaster Station. The proposed modification of the Lancaster Boulevard grade crossing will require CPUC authorization. 5-6

Brian Balderrama
SCH 2020109001
September 10, 2021

Please continue to keep RCEB informed of the project's development. If you have any questions or require clarification on CPUC's role in rail crossings projects, you may contact Matthew Cervantes at matthew.cervantes@cpuc.ca.gov.

Sincerely,



Matthew Cervantes, PE
Senior Utilities Engineer
Rail Crossings and Engineering Branch
Rail Safety Division

CC: State Clearinghouse, state.clearinghouse@opr.ca.gov
Don Filippi, SCRRA, FilippiD@scrra.net
Peggy Ygbuhay, UPRR, pygbuhay@up.com

Letter No. 5

Matthew Cervantes, PE
California Public Utilities Commission
320 West 4th Street, Suite 500
Los Angeles, CA 90013

5-1. The comment summarizes the Proposed Project and rail operating conditions along the AVL. No further comment is provided and no response is required.

5-2 The comment establishes the requirements under CPUC General Order (G.O.) 88-B for the alteration of at-grade rail crossings and provides useful information related to CPUC Rules of Practice and Procedure and G.O. 26D which establishes vertical and horizontal clearances. Metro is aware of CPUC requirements for any alterations to grade crossings and intends to continue coordination with the CPUC on these requirements.

5-3 The comment identifies the requirement for a diagnostic meeting for each grade crossing alteration and establishes that Metro has initiated coordination meetings with CPUC staff. Metro is aware of CPUC requirements for any alterations to grade crossings and intends to continue coordination with the CPUC on these requirements.

5-4 The comment states that CPUC G.O. 26-D establishes minimum vertical and horizontal clearance requirements applicable to the Balboa Double Track Extension which crosses under three existing grade-separated crossings. Metro is aware of CPUC requirements for any alterations to grade crossings and intends to continue coordination with the CPUC on these requirements.

5-5 The comment summarizes the Canyon Siding Extension and states that the Commission's policy is to reduce the number of at-grade crossings with a recommendation that one of the undercrossing design options at the Santa Clarita Station be advanced consistent with G.O. 75-D. The comment also states that alterations to the Golden Oak Road at-grade crossing will require CPUC authorization. Metro is aware of CPUC requirements and intends to continue coordination with the CPUC on these requirements. Final decision on the design of the Santa Clarita Station will be determined through coordination with Metrolink, CPUC, and the City of Santa Clarita subject to funding agreements.

5-6 The comment states that alterations to the Lancaster Boulevard at-grade crossing is subject to CPUC authorization. Metro is aware of CPUC requirements and intends to continue coordination with the CPUC on these requirements.

COMMENT LETTER 6

September 2, 2021

Brian Balderrama, Director Senior
Metro One Gateway Plaza, M/S 99-17-2
Los Angeles, CA 90012

RE: Comments on the DEIR for the AVL Capacity and Service Improvements Program- City of Lancaster

Dear Mr. Balderrama:

On behalf of the City of Lancaster, we would like to thank you for the opportunity to review and comment on the Draft Environmental Impact Report (DEIR) for the Antelope Valley Line Capacity and Service Improvements Program.

We are fully supportive of this project and have the following comments on the DEIR:

1. The City of Lancaster is supportive of the proposed improvements within the city limits. 6-1
2. If funding becomes available for Island Platforms, the City would recommend the at-grade crossing design option, or ability to review and provide comments on any alternate designs and/or location. 6-2
3. The city would require that the proposed maintenance facility be designed to comply with the City's Design Guidelines and be submitted to the City for review and approval. 6-3
4. Grading and Encroachment Permit will be required for all work in the public right of way and within the City's jurisdiction. 6-4
5. The City would require that all agreements and property acquisition documentation related to the sites within the city limits, be obtained prior to the start of construction. 6-5

44933 Fern Avenue
Lancaster, CA 935534
661.723.6000
cityoflancasterca.org

Again, we thank you for the opportunity to review these documents. If you have any questions regarding the items above, please feel free to contact me at ldelacruz@cityoflancasterca.org or at (661) 723-6179.

Sincerely,

Larissa De La Cruz
Community Development Senior Manager

Cc: Trolis Niebla, Assistant City Manager
Matt Simons, Senior Engineer

Letter No. 6

Larissa De La Cruz
City of Lancaster
44933 Fern Avenue
Lancaster, CA 93534

6-1. The comment states that the City of Lancaster is supportive of the Proposed Project, specifically the Lancaster Terminal improvements. Metro notes the City's support and no further response is required.

6-2 The comment states that the City prefers the Island Platform with At-Grade Pedestrian Crossing Design Option and further requests opportunity to review and provide comments on any alternate designs and/or location. Metro has noted the City's requirements and these comments will be forwarded to Metrolink to consider in the Final Design of the Proposed Project. No further response is required.

6-3 The comment states that the City requires that the proposed layover facility be designed to comply with the City's Design Guidelines and be submitted to the City for review and approval. Metro has noted the City's requirements and these comments will be forwarded to Metrolink to consider in the Final Design of the Proposed Project.

6-4 The comment states that Grading and Encroachment Permits will be required for all work in the public ROW and within the City's jurisdiction. Metro has noted the City's requirements and these comments will be forwarded to Metrolink to consider in the Final Design of the Proposed Project and for the project permitting process.

6-5 The comment states that the City requires that all agreements and property acquisition documentation related to the sites within the city limits, be obtained prior to the start of construction. Metro has noted the City's requirements and these comments will be forwarded to Metrolink to consider in the Final Design of the Proposed Project and permitting process.

COMMENT LETTER 7

City of
SANTA CLARITA

23920 Valencia Boulevard • Santa Clarita, California 91355-2196
Phone: (661) 259-2489 • FAX: (661) 259-8125
www.santa-clarita.com

September 9, 2021

Mr. Brian Balderrama, Senior Director
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, Mail Stop 99-17-2
Los Angeles, CA 90012

Dear Mr. Balderrama:

Subject: Public Review and Comment for Draft Environmental Impact Report for Antelope Valley Line Capacity and Service Improvements Program

The City of Santa Clarita (City) is supportive of this valued project as it services three Metrolink stations with a fourth station at Vista Canyon soon to open. As a stakeholder in the Antelope Valley Line Capacity and Service Improvements Program, the City agrees that more frequent Metrolink service would be beneficial in achieving multiple regional and local transportation service goals. With projected growth in traffic and congestion along Interstate 5 and State Route 14, the Antelope Valley Line is an increasingly important link between North Los Angeles County and the rest of Los Angeles. 7-1

As a follow-up to our previous Notice of Preparation comments submitted on November 12, 2020, the City respectfully submits the following for consideration as part of this project's Draft Environmental Impact Report (EIR).

- *Traffic Congestion and Traffic Signal Coordination –*

  Local public polling consistently rates traffic congestion as a high priority issue to be addressed in the City. On page ES-13, vehicle delays beyond at-grade crossings should be noted in the Final EIR as there will be impacts and potential long-term traffic delays along all major roadways. Train frequencies disrupt traffic signal coordination especially for a non-grid network with limited or no alternate routes. The approximate doubling of Metrolink trips will result in increased ridership and corresponding vehicle trips to the City's anticipated four stations. The Final EIR should identify these local impacts and propose mitigation by identifying potential future non-motorized/ATP facilities and/or roadways and widenings that could accommodate these additional trips or alternate routes, independent of funding status for such mitigation. 7-2

The Final EIR should include a delay analysis for key at-grade crossing locations, considering the impact over the morning and evening peak hours, not just each individual pre-emption. Further, the City requests the Final EIR acknowledge potential funding to re-evaluate traffic signal timing and re-timing of traffic signals due to the traffic impacts of this project.

On page 3.1-14, the Roadway Network should also include the major corridors (such as Soledad Canyon Road, Bouquet Canyon Road, Newhall Avenue, Via Princessa, etc.) along the AVL as most of these local roads are part of the National Highway System.

7-2 (cont.)

The at-grade railroad crossing at Soledad Canyon Road and Golden Oak Road is limited to 90 feet between the adjacent signalized intersection and stop-controlled intersection. Currently, there are existing safety issues of gridlock occurrences at signalized intersections adjacent to the railroad crossings. Double-tracking will reduce vehicle storage for queuing between the intersections and increase unsafe gridlock occurrences at the adjacent intersections. The traffic study in the Final EIR should address these concerns. On page 2-9, the Final EIR should note that new striping and widening throughout the intersection will result in one additional northbound shared through/left and one additional southbound incoming lane.

- *Safety* – The Final EIR shall evaluate all railroad crossings in the City for potential safety enhancements due to additional train service increasing the potential for conflicts with pedestrians, similar to the evaluation for the crossing at Soledad Canyon Road and Golden Oak Road, already included in the Draft EIR.

  The Final EIR should also review future safety enhancements as appropriate mitigation at the midblock crossing on Canyon Park Boulevard as well as the intersection of Railroad Avenue and Drayton Street. The Canyon Park Boulevard location is proximate to a number of multifamily housing developments and is scheduled to include a Class III bike route. The crossing there is approximately 4,000 feet from Via Princessa Metrolink station and 7,700 feet from Vista Canyon station. The crossing time is likely to be longer here where trains are in the process of accelerating or decelerating. The Drayton Street crossing is adjacent to a homeless shelter currently under development with Drayton Street being the sole access to the property.

  7-3

  On pages ES-40, 41 the Final EIR should evaluate traffic safety during construction as a potential impact with associated proposed mitigations.

- *Editorial Comments*

  On page 2-11, the western crosswalk leg has since been removed.

  Page 83 mentions no change to weekend service for operational characteristics but on page 84 table 2-1 mentions the proposed project would increase Saturday round trips from 6 to 14.

  7-4

Clarification on what statement is true as this could further impact traffic/signal synchronization on Saturdays.

7-4 (cont.)

Thank you in advance for your commitment to see that the Final EIR reviews these issues appropriately.

Sincerely,

Joel Bareng
Assistant City Engineer

JB:JS:as
T:\Division\Transporation Planning\AVL\Correspondences\DEIR Comment Sept 2021

cc: Robert Newman, Director of Public Works

Letter No. 7

Joel Bareng
City of Santa Clarita
23920 Valencia Boulevard
Santa Clarita, CA 91355

7-1. The comment serves as an introduction to the City of Santa Clarita's comment letter and states the City's support for the Proposed Project and associated service improvements. Metro appreciates the City's support and no further response is required.

7-2 The comment states that traffic congestion is a concern to the City and its residents noting that increased train frequency disrupts traffic signal coordination and that additional ridership generated by the Proposed Project will result in increased activity at the City's four Metrolink Stations. The 2020 CEQA Guidelines do not require traffic congestion analyses. Metro is not required to consider traffic congestion in the CEQA process. Although, it may be considered by the Board of Directors during the decision-making process. Metro will provide the comments to Metrolink for consideration in the Final Design process and assist with the facilitation of ongoing coordination with the City on traffic signal timing and other non-motorized/ATP improvements that could be incorporated into the Proposed Project or separately.

The comment goes on to identify several corridors within the City that should be included in the discussion of the Roadway Network in Section 3.1 of the Draft EIR. See Chapter 2.0, Corrections and Additions for added text.

Finally, the comment states that the Golden Oak Road rail crossing has existing safety issues associated with gridlock and queuing and that the EIR should address concerns associated with additional queuing at the intersection. Page 3.1-28 of the Draft EIR addresses safety design considerations at the Golden Oak Road rail crossing. As discussed, safety associated with the crossing would be improved by the Proposed Project. The comment's recommended text additions have been included in Chapter 2.0, Corrections and Additions.

7-3 The comment states that the EIR should evaluate all at-grade crossings within the City of Santa Clarita for potential safety enhancements given the increase in train frequency. The comment also lists several "midblock" crossings that the City requests be reviewed for safety enhancements. Safety improvements afforded to the Golden Oak Road rail crossing are the result of physical alternations to the crossing proposed as part of the Proposed Project. No other physical alterations at any other rail crossings within the City of Santa Clarita are proposed. Increased train activity along the AVL poses no increased safety concerns as Metrolink operators are required to adhere to FRA and CPUC requirements governing operating speed, horn soundings, and general rail safety. Likewise, at-grade rail crossings are governed by the CPUC and all existing crossings have been designed in accordance with SCRRA's engineering standards as well as FHWA's Crossing Handbook. Any concerns about safety at any particular rail crossing should be directed to CPUC's Rail Safety Division.

7-4 The comment provides two editorial comments seeking clarification and/or revision to the Draft EIR. Regarding the western crosswalk leg, depicted in Figure 2-5, of the Draft EIR, there is no available aerial imagery that shows the change in conditions expressed by the commenter. See Chapter 2.0, Corrections and Additions which includes a note for Figure 2-5. Regarding discussion of weekend service, the Proposed Project would not enable additional weekend trips as there is already adequate capacity to provide additional weekend trips. Metrolink, through its service planning, may increase the number of weekend trips along the AVL to meet service demand and provide improved service.

COMMENT LETTER 8

METROLINK.
SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY
900 Wilshire Blvd. Suite 1500 Los Angeles, CA 90017
metrolinktrains.com

September 10, 2021

Mr. Brian Balderrama
Senior Director
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, Mail Stop: 99-17-2
Los Angeles, CA 90012

RE: Comments on Antelope Valley Line Capacity and Service Improvements Program - Draft EIR

Dear Mr. Brian Balderrama:

The Southern California Regional Rail Authority (SCRRA) has received and reviewed the Draft Environmental Impact Report (EIR) for the Antelope Valley Line Capacity and Service Improvements Program. We appreciate the opportunity to share the issues of concern to SCRRA that will need to be considered in the Final EIR. SCRRA will continue to work collaboratively with Los Angeles County Metropolitan Transportation Authority to ensure our areas of concern are adequately addressed for this and all subsequent EIR documents.

The Metrolink currently operates passenger service and maintains the Antelope Valley Line between Los Angeles Union Station and Lancaster Terminal. The Draft EIR specifically addresses three projects along the AVL: Balboa Double Track Extension, Canyon Siding Extension, and Lancaster Terminal Improvements. 8-1

As a project partner in the AVL Capacity and Service Improvements program, SCRRA requests that Metro address the comments provided from our previous review of the plans during the development of the Final EIR and associated design packages.

Thank you again for providing us with the opportunity to comment on the Draft EIR. We look forward to our continued participation with Los Angeles County Metropolitan Transportation Authority on this important transportation project that will provide many regional benefits.

Should you have any questions, please feel free to contact me at (213) 452-0345 or via e-mail at HackettA@scrra.net or Roderick Diaz at (213) 452-0455 or via e-mail at DiazR@scrra.net.

Sincerely,

Arnold Hackett

Arnold Hackett
Interim Chief Strategy Officer

Letter No. 8

Arnold Hackett
Metrolink
Southern California Regional Rail Authority
900 Wilshire Boulevard, Suite 1500
Los Angeles, CA 90017

8-1. The comment states that Metrolink is committed to partnering with Metro on the design and development of the Proposed Project and requests that Metro address internal comments provided to Metro outside of the CEQA process. Metro appreciates Metrolink's ongoing support and assistance with the development of the Proposed Project. Metro anticipates that all comments submitted by Metrolink will be addressed and resolved prior to approval of the Proposed Project.

3.4 RESPONSES TO GROUPS/ORGANIZATION

COMMENT LETTER 9

ACTON TOWN COUNCIL
1887
P.O.Box 810, Acton CA 93510

September 10, 2021

Brian Balderrama, Senior Director
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, Mail Stop: 99-17-2
Los Angeles, CA 90012
Electronic Transmission of fourteen (14) pages to:
AVL@metro.net

Subject: Comments on the Antelope Valley Line Project Submitted by the Acton Town Council.

Reference: Notice of Completion and Availability of a Draft Environmental Impact Report Issued July 28, 2021.

Dear Mr. Balderrama;

The Acton Town Council ("ATC") appreciates the opportunity to review the Draft Environmental Impact Report ("DEIR") prepared by the Los Angeles County Metropolitan Transportation Authority ("METRO") pursuant to the California Environmental Quality Act ("CEQA") for the "Antelope Valley Line Project" ("AVL Project"), and we respectfully offer the following comments pursuant thereto.

INTRODUCTION

The ATC has taken every opportunity to comment on the AVL Project because it will significantly affect the residents of Acton. Specifically, the AVL Project will increase the number of train trips through our community from approximately 20 per day to more than 40 per day, which means that it will also increase the number of exceedingly loud train "passby" horn events that occur in our community to more than 40 per day. This is no small thing; noise data provided in the DEIR demonstrates that the residents of Acton are already exposed to frequent and earsplitting train "passby" horn events exceeding 95 decibels ("dBA") which occur throughout the night and the day and substantially interfere with sleeping and living patterns. These are not theoretical noise levels or hypothetical noise calculations; they are *actual* noise exposure events measured in actual residential areas of Acton at all hours (including 3 o'clock in the

9-1

"Our lives begin to end the day we become silent about things that matter" Martin Luther King, Jr.

morning[1]). Because the AVL Project will substantially increase the number and frequency of these already excessive "passby" horn events in Acton, it will create a direct physical change to Acton's existing noise environment and result in significant adverse effects on Acton residents. Nonetheless, the DEIR concludes that AVL Project operations will not create any significant noise impacts.

The DEIR draws this seemingly implausible conclusion based on a calculation methodology developed by the Federal Transit Administration ("FTA") which "averages" all noise events over a specified period of time (usually 24 hours) and thereby reduces their magnitude by "spreading them out" over a long interval of time. With this methodology, the DEIR nimbly converts all of the frequent 95+ dBA noise events that AVL Project operations will bring to Acton into a negligibly small 0.3 dBA "average" noise increase that is dismissed as insignificant. It is based on this ingenious "averaging" methodology that the DEIR concludes that AVL Project operations will not result in any significant noise impacts in Acton. However, and as discussed in detail below, the ATC has noted several deficiencies in the noise impact assessment presented in the DEIR which render it insufficient for the purposes of CEQA. The ATC has also noted other problems and inconsistencies in the DEIR, including the manner in which METRO allocates the construction of "Quiet Zone" infrastructure along the AVL Project Route; these and other concerns are presented in the following sections.

9-1 (cont.)

THE DEIR IMPROPERLY ALLOCATES "QUIET ZONE" INFRASTRUCTURE ALONG THE AVL PROJECT

The ATC and Acton residents have expended considerable time and effort to demonstrate to METRO that AVL Project operations will create significant adverse noise impacts in the Community of Acton because it will increase the number of trains (and the number of train "passby" horn events) in our community from approximately 20 to more than 40; this will substantially increase sleep disruption and learning interruptions in the Community and add considerably to residents' general stress and anxiety levels. To mitigate these adverse impacts, the ATC and numerous Acton residents requested that METRO construct "Quiet Zone" infrastructure at the public "at-grade" crossings in Acton as part of the AVL Project[2] and thereby facilitate the designation of a "Quiet Zone" overlay for our community. Once the "Quiet Zone"

9-2

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[1] According to page 146 of the "Noise Technical Report" provided in Appendix I of the DEIR, noise measurement data for site LT-20 (located adjacent to the residence at 3511 Soledad Canyon Road in Acton) demonstrate that train "passby" horn events can exceed 95 dBA and they occur at all hours, including after midnight and 3 AM.

[2] See public comments offered by the ATC and residents of Acton that re summarized in the AVL Project Scoping Report provided in an Appendix of the DEIR.

overlay is established, commuter and freight trains will traverse Acton without deploying their horns. According to the AVL Project Scoping Report, only the Community of Acton and the City of Santa Clarita requested "Quiet Zone" infrastructure; nonetheless, the DEIR establishes that only the City of Santa Clarita and the City of Lancaster will receive "Quiet Zone" infrastructure; Acton will not.

The DEIR does not explain why the City of Lancaster will receive "Quiet Zone" infrastructure as part of the AVL Project (though no such infrastructure was requested by the Lancaster community) or why Acton will not receive "Quiet Zone" infrastructure (though it was requested by the Acton community). In fact, the DEIR does not discuss or explain the "Quiet Zone" infrastructure at all. Notably, trains do not arrive at, or depart from, Lancaster without also passing through Acton; this means that Lancaster and Acton will experience the same increase in train trips and horn noise events as a result of AVL Project operations. Accordingly, if AVL Project operations warrant the construction of "Quiet Zone" facilities in Lancaster, then they also warrant the construction of "Quiet Zone" facilities in Acton. Because there is nothing special or unique about the needs of Lancaster residents compared to Acton residents, there is no justification for the AVL Project to provide "Quiet Zone" facilities in the City of Lancaster but not in the Community of Acton.

9-2 (cont.)

What is particularly noteworthy about the "at-grade" crossing locations in Lancaster and Santa Clarita where the AVL Project includes construction of "Quiet Zone" facilities is that existing sound levels measured in the vicinity of these locations are actually ***less*** than existing sound levels measured in the vicinity of at-grade crossings in Acton[3]. In other words, noise data provided by the DEIR conclusively show that there is a greater need for "Quiet Zones" in Acton than in either of the locations proposed for "Quiet Zone" facilities in Santa Clarita and Lancaster; yet, the AVL Project will not provide "Quiet Zone" facilities in Acton. The inexplicable conclusion that AVL Project operations warrant the construction of "Quiet Zone" facilities in Lancaster and Santa Clarita but not in Acton defies logic and is completely unsupported by substantial evidence. This error must be corrected in the Final EIR by clarifying that the AVL Project will include construction of "Quiet Zone" facilities in Lancaster, Santa Clarita, ***and*** Acton.

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[3] According to the DEIR, the measured 1-hour average (L_{eq}) sound levels at location LT-27 in Santa Clarita and at location ST-26 in Lancaster (near the locations of proposed "Quiet Zone" infrastructure that will be constructed as part of the AVL Project) were 69 dBA and 71 dBA, respectively. Both of these measured noise levels are ***less*** than the 72 dBA 1-hour L_{eq} measurement taken at location LT-20 in Acton near the "Crown Valley" at-grade crossing. These data indicate that "Quiet Zone" facilities are even more warranted in Acton than they are in Lancaster and Santa Clarita; yet, and contrary to the evidence provided in the DEIR, METRO does not propose to construct any "Quiet Zone" infrastructure in Acton.

THE NOISE IMPACT ANALYSIS PRESENTED IN THE AVL PROJECT DEIR IS DEFICIENT AND DOES NOT COMPLY WITH CEQA.

The DEIR provides an extensive "Noise Technical Report" in Appendix I (referred to hereafter as "the Report"), however it fails to address the "direct" noise effects of AVL Project operations in a manner that complies with CEQA; it also fails to address noise impacts on many "sensitive receptors" within the Community of Acton. The Report also ignores all noise reduction goals and policies adopted by the Los Angeles County General Plan which, when taken into account, demonstrate that AVL Project operations will have significant adverse noise impacts on the Community of Acton. Additionally, the Report does not properly apply the "Noise Impact Criteria" established by the Federal Transit Administration's "Transit Noise and Vibration Impact Assessment Manual"(referred to hereafter as "the Manual"); when the FTA criteria are correctly applied, the only conclusion that can be drawn is that AVL Project operations will create significant adverse noise impacts on the Community of Acton. All of these material conclusions are supported by substantial evidence as demonstrated in the following paragraphs. 9-3

The DEIR Does not Properly Address "Direct" Noise Effects of AVL Project Operations.

CEQA requires that a Lead Agency assess the "environmental effects" of a project, and Section 15358 of the CEQA Guidelines establishes that "effects" include both "direct" effects (defined as those primary effects caused by the project which occur at the same time and place) and "indirect" effects (defined as secondary effects that occur later in time and are "foreseeable" because they are induced by the project). In other words, CEQA requires that both the "direct" effects and foreseeable "indirect" effects of a project be evaluated.

As indicated previously, the DEIR assesses noise impacts of AVL Project operations based on a "time-weighted average" methodology recommended by the FTA. With this methodology, noise effects are quantified by "blending" together primary noise effects that are directly caused by the project (and thus occur "at the same time and place" as the Project) with non-project noise events that occur at a different time. These "blended" results are typically reported for 1-hour and 24-hour time frames. And, because FTA's "blended" noise assessment methodology incorporates noise events that occur at a different "time and place" than the project, it does not properly represent the "primary" noise effects of a project. Accordingly, METRO cannot rely upon the FTA methodology to satisfy CEQA's requirement that METRO assess the "direct" noise effects of AVL Project operations (though it could perhaps be utilized to assess the "indirect" noise effects of AVL Project operations). 9-4

Unfortunately, the only noise impact assessment of AVL Project operations that is provided by the DEIR for the Community of Acton relies on the FTA methodology; this means that the DEIR is deficient because it analyzes only "indirect" noise effects of AVL Project operations on the Community of Acton and fails to address "direct" noise effects as required by CEQA.

Fortunately, this deficiency is easily overcome; there is sufficient measurement data provided by the DEIR to properly assess "direct" noise effects of AVL Project operations on the Community of Acton. Specifically, the data presented in Figure LT-EH on page 150 of the Report reveals that existing train "passby" horn events occur more than 20 times per day in Acton and generate noise exposure levels that typically exceed 95 dBA (and at 3 AM, they can actually exceed 105 dBA). These measurements were taken approximately 100 feet from the centerline of the rail right-of-way ("ROW"), and they provide *actual* noise levels recorded at the time and location of train "passby" horn events in Acton. Therefore, the values reported in Figure LT-EH provide an accurate basis for the following "direct" noise impact assessment of the 20 additional train "passby" horn events that AVL Project operations will permanently add to the Acton environment:

1. According to Figure LT-EH, train "passby" horn events in Acton result in noise levels exceeding 100 dBA at 100 feet from the rail ROW; this is consistent with data provided by the FTA manual showing that the reference sound exposure level for commuter rails horns at 50 feet from the rail ROW is 110 dBA (see page 40).

2. Reconciling the 100+ dBA sound exposure level at 100 feet from the train ROW presented in Figure LT-EH of the Report with the "Exposure v Distance" data provided in Figure 4-6 and equation 4-19 of the FTA Manual provides the "direct" noise effects (in dBA) at specific distances from the tracks that is caused by the additional train "passby" horn events in Acton resulting from AVL Project operations. This methodology yields very conservative results because Figure 4-6 and Equation 4-19 in the FTA Manual assume "acoustically soft" ground beyond a distance of 50 feet (meaning that they implicitly presume significant sound attenuation); since the Community of Acton is not an "acoustically soft" area (it is characterized by little vegetation cover, hard-packed natural surfaces and low-density development patterns), calculating "direct" noise effects based on the Figure 4-6 and Equation 4-19 will provide conservative (and thus reliable) results.

By applying this two-step methodology, the ATC projects the following "Direct" noise effects will occur within the Community of Acton as a result of AVL Project operations:

9-4 (cont.)

- Every residence in Acton that is located within 200 feet of a "passby" horn event will directly and permanently experience at least twenty additional 95+ dBA noise insults per day; this is louder than a pile driver operated 50 feet away[4]. Data provided by the DEIR demonstrates that this ATC projection of "direct" noise effects of AVL Project operations is accurate: for instance, page 146 of the Report provides noise measurement data collected at an Acton residence located approximately 260 feet from the rail ROW (a location LT-20) and shows that "passby" horn events at this distance from the track causes noise exposure levels of 95 dBA or more.

- Every residence in Acton that is located within 400 feet of a "passby" horn event will directly and permanently experience at least twenty more 91+ dBA noise insults per day; this is louder than a rail saw operated 50 feet away[5].

- Every residence in Acton that is located within 800 feet of a "passby" horn event will directly and permanently experience at least twenty more 87+ dBA noise insults per day; this is equivalent to a jack hammer operated 50 feet away[6].

- Every residence in Acton that is located within 1600 feet of a "passby" horn event will directly and permanently experience at least twenty more 82+ dBA noise insults per day; this is louder than an air compressor operated 50 feet away[7].

9-4 (cont.)

Significant train "passby" horn events already happen in Acton more than 20 times per day; they occur throughout the night and the day and interrupt sleep patterns, disrupt learning in school, and contribute to general stress and anxiety. With the AVL Project, these significantly adverse "passby" horn noise events will ***permanently double*** in frequency; this is prima facia evidence that AVL Project operations will create new and significantly adverse "direct" noise effects on the Community of Acton. Accordingly, the DEIR materially and legally errs in concluding that AVL Project operations pose "less than significant" noise impacts. To rectify this error, the DEIR must be revised to include a legitimate analysis of "direct" noise effects of AVL Project operations similar to that presented above and thereby conclude that AVL Project operations will result in significantly adverse noise effects on the Community of Acton.

The ATC further points out that CEQA compels lead agencies to implement feasible mitigation measures to substantially lessen the significant environmental effects of a project [CEQA Statute §21002]. Because AVL Project operations will result in direct,

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4 FTA "Noise and Vibration Impact Assessment Manual" issued September, 2018. (Table 7-1).

5 Ibid.

6 Ibid.

7 Ibid.

permanent, and significantly adverse noise effects on the Community of Acton (as shown above), noise impact mitigation measures are required. An important noise mitigation measure that METRO has construction authority over within the Community of Acton involves the installation of infrastructure that will facilitate future "Quiet Zone" designations for the public grade-crossings in the community; once a "Quiet Zone" overlay is established by the Federal Department of Transportation, trains will no longer deploy their horns and future "passby" horn events will be eliminated. The most critical "first step" in securing "Quiet Zones" in Acton to mitigate AVL Project noise impacts is for METRO to construct "Quiet Zone" infrastructure at the public "at-grade" crossings in Acton. There is no question that the construction of "Quiet Zone" facilities is "feasible" as that term is contemplated in CEQA because METRO already intends to construct such facilities in Lancaster and Santa Clarita as part of the AVL Project. Accordingly, the Final EIR issued for the AVL Project must identify the construction of "Quiet Zone" infrastructure within the Community of Acton as a feasible means to mitigate the significant direct noise impacts that AVL Project operations will create.

9-4 (cont.)

The DEIR Does Not Properly Implement FTA Noise Impact Criteria.

As discussed above, the DEIR assesses noise impacts of AVL Project operations based on an "averaging" methodology established by the FTA and set forth in the "Transit Noise and Vibration Impact Assessment Manual" released in 2018. Specifically, the FTA methodology estimates 1- hour and 24-hour "time-weighted average" noise levels under existing conditions at specific "receptor locations" and then compares these values to 1-hour and 24-hour estimated "time weighted average" noise levels that are projected to occur when the AVL Project is fully operational. The DEIR refers to these "time weighted average" noise levels as "1-hour L_{eq}" (or "L_{eq}") and "24-hour L_{dn}" (or "L_{dn}") measurements. The Manual also precisely defines "noise impact criteria" that are used to determine whether railway projects have "no noise impact", "moderate noise impact", or "severe noise impact". The thresholds for these criteria are set forth in Figure 4-2, and for residential "receptors", the criteria are based on the 24-hour average L_{dn} value. The ATC considers the criteria thresholds established by Figure 4-2 to be reasonable to the extent that they can be relied upon to assess "indirect" noise impacts of the AVL Project.

9-5

Although the AVL Project traverses more than 10 miles in the Community of Acton, the DEIR only identifies 36 residential "receptors" in the Community[8]. The DEIR also reports that, under existing conditions (without the AVL Project), nearly half of the residential receptors identified in Acton currently experience 24-hour L_{dn} noise levels of 70 dBA or more. Reconciling these existing L_{dn} noise exposure levels with the "noise

[8] Appendix I at 236-237.

Impact criteria" presented in Figure 4-2 of the FTA Manual reveals that *any* increase in L_{dn} which occurs at these receptor locations as a result of AVL Project operations must be deemed a "severe noise impact". Notably, the DEIR does report that AVL Project operations will increase L_{dn} levels at the receptor locations in Acton (see pages 236-237); therefore, and in accordance with the FTA Manual, the DEIR should conclude that AVL Project operations will result in significantly adverse noise impacts on the Community of Acton. Nonetheless, the DEIR draws a contrary conclusion by stating on page 3.10-28 that AVL Project operations will pose "less than significant" noise impacts. To resolve these completely contradictory conclusions, the ATC conducted a close inspection of how the DEIR applied the FTA's "noise impact criteria"; the results of this inspection reveal that the DEIR does not properly implement the FTA's methodologies (as explained in detail below).

According to the FTA Manual, the "Noise Impact Criteria" established by Figure 4-2 are applicable "for evaluating existing noise independently to project noise" [page 26]; these are precisely the circumstances presented by AVL Project operations because existing noise levels can be (and have already been) fully evaluated and clearly established independently of the project noise that will result from the addition of 20 more train "passby" horn events when the AVL Project is fully operational. Yet, and despite the clear direction provided by the FTA Manual, the DEIR does not rely on the "Noise Impact Criteria" established by Figure 4-2 and instead applies substantially higher "Cumulative Noise Impact Criteria" which (according to FTA Manual directives) are wholly inappropriate. Specifically, page 29 of the FTA Manual establishes that "Cumulative Noise Impact Criteria" are only applicable in circumstances where "it is not possible to define project noise separately from existing noise"; such circumstances include process changes (such as replacing diesel locomotives with electric trains), modification of track alignments, and facility changes [see page 28]. None of these circumstances are presented by AVL Project operations; to the contrary, there is a "bright line" distinction between the existing noise profile (which has been evaluated and characterized by the DEIR) and the independently determined new noise profile that will result from AVL Project operations.

9-5 (cont.)

Accordingly, the DEIR materially errs in applying the "Cumulative Noise Impact Criteria" to assess noise impacts of AVL Project operations on the Community of Acton. This error will not withstand judicial review, thus the Final EIR must be revised to correctly apply the "Noise Impact Criteria" presented in Figure 4-2 as required by the FTA Manual. When this and the other corrections noted above are made, the Final EIR will assert that AVL Project operations will result in significantly adverse "direct" and "indirect" noise impacts in the Community of Acton.

The DEIR Ignores adopted "Local" Noise Standards, Goals, and Policies.

To assess whether a project will result in significantly adverse noise impacts, Lead Agencies are required to determine if the project will result in the generation of a substantial temporary or permanent increase in ambient noise levels that are in excess of standards established in the local general plan. The only "local" standards that are considered in the DEIR noise analysis of AVL Project operations are those set forth by the City of Los Angeles (referred to as "L.A. CEQA Criteria"). The DEIR applies these "L.A. CEQA Criteria" to the entire 76-mile route (including the 10+ mile section located in Acton) even though most of the AVL Project is not even located in the City of Los Angeles. Odder still, the DEIR completely ignores other "local" noise standards and policies (including those set forth in the Los Angeles County General Plan). Evaluating AVL Project operations through the lens of these more applicable "local" noise standards and policies reveal that AVL Project operations are indeed inconsistent with local noise policies and within the Community of Acton, AVL Project operations will result in ambient noise levels in excess of General Plan standards. Therefore, AVL Project operations will result in significantly adverse noise impacts in the Community of Acton. These standards are discussed in more detail below, and the DEIR's failure to consider them renders the DEIR materially deficient and thus inadequate for the purposes of CEQA compliance.

9-6

The DEIR does not address any of the noise policies expressed in the Noise Element of the adopted Los Angeles County General Plan (County Plan); it also does not demonstrate that AVL Project operations are consistent with the noise standards, goals and policies that are established by the County Plan. Specifically, the County Plan Noise Element affirms that transportation systems (including rail networks) are the major source of noise concerns in unincorporated areas like Acton[9]; it also establishes that "coordinated transportation and land use planning plays a critical role in the prevention and mitigation of excessive noise impacts" and that local governments (i.e., METRO) can address these noise problems through "noise abatement measures"[10]. The plain language of the County Plan demonstrates just how detrimental rail noises are to unincorporated communities like Acton, thus is it inexcusable for the DEIR to simply *ignore* the entire County General Plan Noise Element while it contemporaneously considers the operation of a new rail project that ***doubles*** rail traffic through the community. Yet, and incredibly, that is precisely what the DEIR does. To address this horrendous error and fill this inexcusable "gap" in the DEIR, the ATC offers the following assessment of AVL Project operations and the extent to which they conflict with the standards, goals and policies of the County Plan Noise Element:

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9 Los Angeles County General Plan at 190.

10 Id. at 196.

The County Plan Noise Standard: The maximum noise standard established by the County Plan for residential land use areas "at any time" is 65 dBA between the hours of 10 PM and 7 AM and 70 dBA between the hours of 7 AM to 10 PM (see Table 11.2). Based on the noise measurements provided in the DEIR and using the "exposure v distance" curve from the FTA Manual (discussed above), the ATC has determined that every residence within 3,000 feet of a train "passby" horn event resulting from AVL Project operations will experience noise levels exceeding 78 dBA; and residents as far away as two miles away will experience noise levels of at least 70 dBA. Because the AVL project will double the number of train trips (and the number of "passby" horn events) through Acton, it will subject Acton residents living within two miles of the tracks to new noise insults that exceed the County General Plan noise standard. This is no small effect; in fact, all of downtown Acton is located within 3,000 feet of the Crown Valley grade crossing which means that AVL Project operations will expose all the residents in that area to significantly more noise events that substantially exceed General Plan noise standards. *By definition*, this means that AVL Project operations pose significant noise impacts on the Community of Acton.

Goal N 1 "The reduction of excessive noise impacts". The AVL Project conflicts with this adopted County Plan Goal because AVL Project operations ***increase*** excessive noise impacts by increasing the number of "passby" horn events in the Community of Acton. The AVL Project does not include any measures to achieve "reductions" in the "excessive noise impacts" that it will create. Because the AVL Project conflicts with this adopted County Plan Goal, it poses significantly adverse noise impacts to the Community of Acton. 9-6 (cont.)

Policy N 1.1: "Utilize land uses to buffer noise-sensitive uses from sources of adverse noise impacts". The AVL Project conflicts with this adopted County Plan Policy because it omits infrastructure to buffer noise-sensitive uses from the increase in adverse "passby" horn noise events that will result from AVL Project operations. METRO is aware that the construction of "Quiet Zone" infrastructure at public "at-grade" crossings in Acton will facilitate implementation of "Quiet Zone" operation within the community and thereby fully mitigate all the noise impacts created by "passby" horn events. As discussed above, the construction of "Quiet Zone" infrastructure is certainly a technically "feasible" measure because the AVL Project incorporates such infrastructure at various locations along the project route. Installing "Quiet Zone" infrastructure is also a fiscally "feasible" mitigation measure because METRO is implementing it elsewhere as part of the AVL Project (even in a community that did not request it[11]), The installation of "Quiet Zone" infrastructure in Acton is reasonably feasible, and provides the only option to ensure the AVL project conforms with General Plan Policy N 1.1.

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[11] According to the DEIR "Scoping Report" the only communities requesting "Quiet Zone" facilities were the City of Santa Clarita and the Town of Acton; the City of Lancaster did not request "Quiet Zone" facilities, but they are being provided anyway by the AVL project.

Policy N 1.2: "Reduce exposure to noise impacts by promoting land use compatibility". The AVL Project conflicts with this adopted County Plan Policy because it increases residents' exposure to already unhealthful noise levels within the Community of Acton and deliberately withholds construction of the "Quiet Zones" facilities within the Community that are necessary to reduce exposure to noise impacts in the manner set forth by General Plan Policy N 1.2.

Policy N 1.3: "Minimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering". The AVL Project directly contradicts this adopted County Plan Policy because it intentionally avoids the use of any engineering controls or site design considerations (such as "Quiet Zone" infrastructure) that will minimize the significant noise impacts that the project will create on noise-sensitive land uses within the Community of Acton. Installing "Quiet Zone" infrastructure in Acton is the only means by which the AVL project can be brought into conformance with General Plan Policy N 1.3.

Policy N 1.4: "Enhance and promote noise abatement programs in an effort to maintain acceptable levels of noise as defined by the Los Angeles County Exterior Noise Standards and other applicable noise standards." The AVL Project directly conflicts with this adopted County Noise Policy because it omits infrastructure necessary to "enhance and promote noise abatement programs in an effort to maintain acceptable levels of noise" within the Community of Acton. The AVL Project fails to "enhance and promote noise abatement programs" by withholding "Quiet Zone" facilities from the Community of Acton and it materially degrades noise quality within the Community by increasing the number of daily "passby" horn events from approximately 20 to more than 40, thereby exposing residents to noise levels that exceed the County's Exterior Noise Standards. Installing "Quiet Zone" infrastructure in Acton is the only means by which the AVL project can be brought into conformance with General Plan Policy N 1.4.

9-6 (cont.)

Policy N 1.6: "Ensure cumulative impacts related to noise do not exceed health-based safety margins". The AVL Project explicitly violates this policy. According to the DEIR "Noise Technical Report", existing 24-hour (L_{dn}) noise measurements in the residential areas along the rail corridor in Acton already exceed 70 dBA which means that noise levels in Acton's residential areas already exceed "health-based" standards[12] and FTA "severe impact" thresholds[13]. Unless the AVL Project is revised to provide "Quiet Zone" facilities in Acton, AVL Project operations will violate Police N 1.6 by further increasing already unhealthy noise levels in Acton and driving them well beyond any conceivable "health-based safety margin"

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[12] According to the Noise Element of the County Plan, an L_{dn} of 70 is "the maximum safe level that the U.S. EPA has identified to protect against the risk of hearing loss" (at 192).

[13] FTA's "Transit Noise and Vibration Impact Assessment Manual" establishes that areas with existing L_{dn} levels exceeding 70 dBA already experience "Severe Noise Impacts" (see Figure 4-2).

Policy N 1.7: "Utilize traffic management and noise suppression techniques to minimize noise from traffic and transportation systems". The AVL Project utterly contradicts this adopted County Noise Policy because it deliberately refrains from utilizing any "noise suppression techniques" in Acton even though the DEIR provides compelling evidence that AVL Project operations will exacerbate already unhealthful noise conditions along the railway corridor in Acton. Installing "Quiet Zone" infrastructure in Acton is the only means by which the AVL project can be brought into conformance with General Plan Policy N 1.7.

Policy N 1.9: "Require construction of suitable noise attenuation barriers on noise sensitive uses that would be exposed to exterior noise levels of 65 dBA CNEL and above, when unavoidable impacts are identified". Nothing about the AVL Project is consistent with this adopted County Plan Policy. The DEIR demonstrates that "noise sensitive" residential uses within the Community of Acton already experience exterior noise levels exceeding 65 dBA CNEL (see for example the noise measurement results collected at "Site LT-20" in a residential area adjacent to the residence at 3511 Soledad Canyon Road). These already unhealthful noise levels will increase when the AVL Project becomes fully operational, yet the AVL Project does not consider noise attenuation or equivalency measures (such as the construction of "Quiet Zone" facilities) to protect noise sensitive uses in Acton. 9-6 (cont.)

The DEIR Does not Properly Address AVL Project Noise Impacts on the Community of Acton Because it Omits "Sensitive Receptors" Located Near "At-Grade" Rail Crossings in Acton.

Noise measurement data provided by the DEIR "Technical Report" reveal that "train passby" horn events significantly influence existing noise levels in residential areas adjacent to "at-grade" crossings. For instance, consider the noise measurements provided on page 146 that were collected at location LT-20 (which is in a residential area and is approximately 260 feet from the track and 650 feet from the Crown Valley Road "at-grade" crossing). The measurements at LT-20 reveal that L_{eq} values increase significantly in this residential area whenever a "passby" horn event occurs; they also reveal that the passby horn events frequently expose residents in the area to noise levels approaching 100 dBA (even at 3 AM). It is reasonable to infer from these data that residences located in the vicinity of "at grade" crossings in Acton should be identified in the DEIR as "sensitive receptors" and evaluated for potential noise impacts posed by AVL Project operations. However, the AVL Project DEIR does not identify any "sensitive receptors" in the vicinity of the Crown Valley Road "at-grade" crossing. In fact, the closest "sensitive receptor" to the Crown Valley Road "at grade" crossing that is identified by the DEIR is 3555 Seclusion Place which is located more than 1,000 feet south of the crossing. The DEIR does not even identify the residence located adjacent to site LT-20 (at 3511 Soledad Canyon Road) as a "sensitive receptor" though the residents 9-7

at this address will ***clearly*** be affected by AVL Project operations since they will increase the number of 95+ dBA noise events that these residents experience from approximately 20 per day to more than 40 per day. The DEIR also omits from the list of "sensitive receptors" all the downtown residences located north, east, and west of the Crown Valley Road "at-grade" crossing. The magnitude of this omission is demonstrated in Figure 1 which depicts the location of LT-20 and downtown Acton residences in relation to the Crown Valley Road "at-grade" crossing; it also depicts the location of the nearest "sensitive receptor" identified by the DEIR (at 3555 Seclusion Place). As shown in this figure, the DEIR omitted numerous sensitive receptors located north, east, and west of the Crown Valley Road crossing. Similar omissions were made in the vicinity of the Aliso Canyon Road "at-grade" crossing[14]. This analysis demonstrates that the DEIR substantially underreports the number of sensitive receptors that will be significantly affected by AVL Project operations in Acton, and thus substantially misrepresents significant noise impacts on the Community of Acton.

Figure 1. Residential areas adjacent to the Crown Valley Road Crossing that were Excluded as "Sensitive Receptors" in the DEIR.

9-7 (cont.)

[14] The DEIR identifies some receptors located south and east of the Aliso Canyon Road "at-grade" crossing, but it omits from the list of "sensitive receptors" residences located north and west of the crossing.

CONCLUSION

For all the reasons set forth above, the Acton Town Council respectfully requests that METRO:

1. Incorporate the recommendations set forth herein;
2. Revise the Final EIR to conclude that the AVL Project will cause significantly adverse direct and indirect noise impacts on the Community of Acton;
3. Include the construction of "Quiet Zone" infrastructure at the public "at-grade" crossings in Acton to mitigate significantly adverse noise impacts of the AVL Project.

9-8

Sincerely,

Jeremiah Owen, President
The Acton Town Council

Letter No. 9

Jeremiah Owen
Acton Town Council
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9-1. The comment provides an introduction to the letter identifying the Town of Acton's two notable concerns, first that the Proposed Project would double the number of trains through the Town of Acton resulting in noise impacts from an increase in the frequency of pass-by horn events, and second, that the FTA's noise impact methodology improperly underestimates noise impacts by averaging all noise events over a 24-hour period.

The noise analysis was prepared in compliance with the FTA Transit Noise and Vibration Impact Assessment guidance, which is intended to provide an objective analysis of potential noise impacts resulting from transit projects. The definition of a significant impact is determined by the FTA noise impact criteria and the Proposed Project considered noise levels reaching the "severe" criteria as a significant impact under CEQA.

The Day-Night (Ldn) noise level utilized in the Proposed Project's noise analysis, as directed by the FTA Transit Noise and Vibration Impact Assessment guidance, is a weighted average of noise levels over a 24-hour period. Noise events between 10:00 p.m. and 7:00 a.m. are increased by 10 dB to account for humans' greater nighttime sensitivity to noise. This noise metric does not "spread out" noise levels to reduce noise levels. The Ldn noise level accounts for a typical day, which includes all transit events, and allows for a comparison of the existing base line 24-hour noise condition to the 24-hour future noise condition with implementation of the Proposed Project. This is the designated noise metric of choice of FTA and other Federal Agencies (U.S Department of Housing and Urban Development, Federal Aviation Administration, and Environmental Protection Agency) for analysis of project noise at residential sensitive receptors. The use of the Ldn noise metric for the Proposed Project's noise analysis is appropriate.

Train pass-by events result in noise levels of approximately 96 dBA Lmax at 100 feet. These are instantaneous noise levels which only occur when the horn is being sounded. The Proposed Project does not propose to alter the maximum noise level of train warning horns and an instantaneous noise analysis to compare existing horn noise levels and future maximum horn noise levels is not warranted. The analysis is to determine the incremental change from the increase in frequency of trains over time and accounts for the number of train-pass by events, which includes the increase in frequency of horn noise. In order to prepare this comparison, the analysis must consider noise levels over the entirety of the day for Category 2 residential land use receptors or for a typical 1-hour period for Category 3 institutional land use receptors. This is the appropriate methodology per the FTA Transit Noise and Vibration Impact Assessment guidance.

The proposed increase in trains volumes for the segment from Santa Clarita to Palmdale would be from 10 trains to 24 trains between 7:00 a.m. and 7:00 p.m., four to seven trains between 7:00 p.m. and 10:00 p.m., and six to nine trains between 10:00 p.m. and 7:00 a.m. Although the total increase in train frequency would be from 20 trains a day to 40 trains a day, the majority of train frequency increase would be during less sensitive daytime hours (7:00 a.m. to 7:00 p.m.). Therefore, the majority of train events would not receive the extra 10 dBA penalty which is applied for the hours of 10:00 p.m. to 7:00 a.m. in the calculation of the Ldn noise level. Train trips that would occur during these hours were appropriately applied to the nighttime hours with the 10 dB penalty applied to account for nighttime sensitivity.

The comment letter asserts that the 95 dBA noise events have been averaged to make project operational noise seem less impactful. The 95 dBA noise events have not been converted into a 0.3 dBA "average" noise increase. Train pass-by events, including horn noise, were used to calculate either a project 1-hour equivalent noise level (Leq) or a 24-hour (Ldn) using formulas provided by the FTA Transit Noise and Vibration Impact Assessment guidance, as shown on pages 31 and 33 of the Noise Technical Report (Appendix I of the Draft EIR). The formula on page 31 was used to calculate noise from train operations, which calculates an operational noise level using a reference noise level with adjustments to the noise level based on speed, type of locomotive, and number of trains during the day and night, or during one hour, and the distance of the source to the sensitive receptor. The formula on page 33 was used to calculate noise from audible warnings using a reference noise level for the horn and adjustments for the number of events during the day and night, or during one hour, and the distance of the source to the sensitive receptor. The allowable increase in noise is dependent on the existing noise level of the particular sensitive receptor. The allowable increase in noise and FTA impact criteria was calculated using the existing noise level. No operational noise impacts were identified in the DEIR and mitigation, including "Quiet Zones" was not warranted.

9-2 The comment asserts that "Quiet Zone" ready infrastructure is improperly allocated along the AVL corridor and there is no basis for its installation in the City of Santa Clarita or the City of Lancaster while also claiming that the Town of Acton should receive "Quiet Zone" improvements due to perceived noise impacts the commenter identifies. Inclusion of "Quiet Zone" infrastructure in the City of Santa Clarita and the City of Lancaster was not in response to noise impacts identified in these jurisdictions but rather a matter of thoughtful infrastructure investment. The Canyon Siding Extension would include a second track through the Golden Oak Road crossing requiring a reconfiguration of the crossing as well as new crossing infrastructure to be installed. Likewise, the Lancaster Terminal Improvements would extend a tail track through the Lancaster Boulevard crossing requiring similar reconfiguration of the crossing and associated crossing infrastructure. Operational noise impacts have not been identified in either of these cities and existing noise levels are not the driving factor behind installation of the "Quiet Zone" infrastructure. During the planning and design of the Proposed Project, Metro determined that investment in "Quiet Zone" ready infrastructure at these two locations was warranted since if either jurisdiction applied for a Quiet Zone in the future, the infrastructure installed as part of the Proposed Project would be removed and replaced if not already "Quiet Zone" ready. Since no physical improvements in the Town of Acton are proposed as part of the Proposed Project, no associated Quiet Zone ready infrastructure is proposed in the Town of Acton. Although no potential impacts were

found in the Proposed Project's noise analysis, it is recommended that the Acton Town Council (ATC) address their rail noise concerns through the Quiet Zone application process. Metro provides information on Quiet Zones here: https://metrolinktrains.com/community-main/quiet-zones/. Metro also provides a link to the Federal Railroad Administration site that describes how to create a Quiet Zone: https://railroads.dot.gov/elibrary/how-create-quiet-zone.

9-3 The comment states that the noise impact analysis presented in the Draft EIR does not comply with CEQA and that the Proposed Project's noise analysis does not address noise impacts on "many 'sensitive receptors' within the Community of Acton." The noise assessment assessed the Appendix G CEQA Threshold questions for noise and vibration. The methodology and criteria were appropriate, methodically applied, and consistent with analyses prepared and approved for other similar Metro Projects. Sensitive receptors were not omitted and all sensitive receptors within the FTA screening distances of 750 feet for commuter rail mainlines and 1,600 feet for rail crossing with horns and bells were assessed. Further detail is provided in subsequent responses.

9-4 The comment letter asserts that the direct noise effects of the Proposed Project's operations were not addressed. The noise assessment does consider the "direct" effects of the Proposed Project after project implementation. The analysis included a comprehensive survey of existing noise conditions in the AVL corridor and utilized these noise levels, per the FTA methodology, to assign the appropriate FTA Noise impact criteria and allowable increase for each sensitive receptor. The model assumptions and calculations include the proposed increase in operational frequency of trains along the AVL corridor and accounts for horn noise at crossings. The analysis provides a comparison of existing noise levels and the predicted increase in noise resulting from the Proposed Project, which illustrates the "direct" effect of the Proposed Project. The analysis includes predicted increases for each sensitive receptor and the "direct" effect of the Proposed Project on each of these uses. The FTA methodology complies with CEQA. A CEQA noise analysis must evaluate an increase in ambient noise and represent the all-encompassing sound at a given place, as defined by ANSI-ASA S1.1 (Acoustical Terminology). An L_{max} value does not represent ambient noise; it represents an instant in time. "Direct effects" in CEQA does not indicate that an L_{max} is warranted for the Proposed Project's noise analysis.

The 1-hour L_{eq} and 24-hour L_{dn} noise metrics do not blend non-project noise events occurring at a different time and place, as suggested by the comment letter. The analysis considers the existing noise levels along the AVL corridor, which are presented in the form of L_{eq} or L_{dn} depending on the type of land use of the sensitive receptor. These existing noise levels include all sources of noise currently along the project corridor, as noted in Table 3.10-3 on page 3.10-7 of the Draft EIR. Existing noise sources in the Santa Clarita to Palmdale section of the alignment includes existing Metrolink AVL and freight operations and their associated horns and bells at crossing, freeway and local road traffic, and occasional aircraft flyovers. The existing noise condition provided the baseline for the noise assessment and was used to establish the allowable noise increase before an impact would occur, per the FTA Transit Noise and Vibration Impact Assessment guidance. The predicted noise increase over the existing condition was then calculated by creating a noise model, which included the operational modifications associated with the Proposed Project. These predicted noise levels were not "blended" with other sources of noise and only

include the noise resulting from operational modifications due to the Proposed Project.

The comment letter suggests that "soft ground" noise attenuation formulas were utilized for the analysis when "hard ground" should have been used in its place. The letter asserts because of this, the "direct" noise effects of the Proposed Project have been underestimated. The noted "Equation 4-19" is for distance adjustment of noise effects and not ground type. Ground factor formulas can be found on page 86 of the FTA Transit Noise and Vibration Impact Assessment guidance. As noted on page 31 of the Noise Technical Report (Appendix I of the Draft EIR), "Also included in the noise prediction calculations are adjustments for ground type (for this proposed project, hard ground is assumed)…". The correct and most conservative ground type was used for the calculations, as was requested in the comment letter.

9-5 The comment letter notes that the FTA Noise Impact Criteria have been incorrectly applied and does not match Figure 4-2 of the FTA Transit Noise and Vibration Impact Assessment guidance. The FTA Transit Noise and Vibration Impact Assessment guidance allows two options for noise criteria: Option A (Project Noise Impact Criteria Presentation) utilizes the criteria shown in Figure 4-2, which is intended for independent evaluation of project noise for new transit projects in an area without transit; and Option B (Cumulative Noise Impact Criteria Presentation) is intended for evaluating noise for existing transit systems where a Proposed Project intends to make changes to operations, such as modification to track alignments or changes in frequency of transit trips. Option B was determined to be appropriate for the Metro AVL project as the Proposed Project includes operational modifications to an existing transit line within an existing transit corridor. The allowable increases in cumulative noise levels presented in Figure 4-3, Figure 4-4, and Table 4-6 of the FTA's Transit Noise and Vibration Impact Assessment guidance are the appropriate criteria to use for the Proposed Project. The appropriate noise metrics have been used for Category 2 Residential sensitive land uses (L_{dn}) and Category 3 Institutional sensitive land uses (L_{dn}) per Table 4-3 of the FTA Transit Noise and Vibration Impact Assessment guidance. The FTA methodology and criteria for transit noise assessment have been correctly applied.

9-6 Local noise standards are typically not appropriate for assessing transit noise because they are often "brightline" thresholds which do not account for existing conditions. Oftentimes the noise standards are already being exceeded under existing conditions, which is unrelated to transit projects. For instance, Chapter 12.08 of the County of Los Angeles Municipal Code includes enforceable noise standards and limits which are "brightline" thresholds. The noise standards for residential properties are 45 dB for nighttime hours (10:00 p.m. to 7:00 a.m.) and 50 dB for daytime hours (7:00 a.m. to 10:00 p.m.). As noted by the commenter, several sensitive receptors currently are exposed to existing noise levels in excess of 70 dBA or in some areas lower than the County noise standards. The maximum noise standard established by the County Plan for residential land use areas "at any time" (65 dBA between the hours of 10:00 p.m. and 7:00 a.m. and 70 dBA between the hours of 7:00 a.m. to 10:00 p.m.) are also being exceeded in many areas under existing conditions. As such, this is the reason the FTA criteria uses a "sliding scale" for its noise impact criteria, which is based on the existing noise condition.

Similarly, the City of Los Angeles uses a threshold that functions in much the same manner. Therefore, it was determined that applying the City of Los Angeles, *L.A. CEQA Thresholds Guide* would provide a more even assessment of project noise by examining the incremental increase of noise and comparing it to a 5 dBA Community Noise Equivalent Level (CNEL) allowable increase in consideration of local standards. This allows for a more accurate assessment of incremental increases in noise in areas with both high and low levels of existing noise that are currently above or below the County of Los Angeles noise standards. The *L.A. CEQA Thresholds Guide* thresholds are more stringent than the FTA noise limits in rural areas that have less background noise than a typical urbanized setting. Therefore, for the Proposed Project, the thresholds guide have been applied along the entire AVL corridor to help evaluate noise impacts for areas with generally lower levels of existing noise. Additionally, the CNEL noise metric utilized for the *L.A CEQA Thresholds Guide* includes an additional 5 dB noise penalty for events occurring during the hours of 7:00 p.m. to 10:00 p.m. which accounts for increased sensitivity to noise during these hours. Therefore, it is more conservative than the FTA analysis and the County of Los Angeles thresholds.

Regarding the County of Los Angele's General Plan Noise Element noise goals and policies, Metro seeks to comply with the guidelines listed to limit noise impacts on sensitive uses. However, the significance threshold for determination if an impact would occur under CEQA are the FTA noise impact criteria and the *L.A. CEQA Thresholds Guide* criteria. Based on these impact criteria, which rely on existing noise conditions for their establishment, and the comprehensive noise analysis prepared for the Proposed Project, no operational impacts would occur, and mitigation measures are not required for operational noise. Notably, the Los Angeles County General Plan Noise Element points to the Los Angeles County Code for Community Noise Criteria, listed in the General Plan Noise Element in Table 11.2. The Los Angeles County Code specifically states in Section 12.08.570 that the following activities are exempt from the criteria: train horns and railroad activities. As such, applying the Noise Element requirements citing County Code criteria is not warranted for the Proposed Project. A description of applicable County General Plan Noise Element goals and policies has been included in Chapter 2.0, Corrections and Additions, of the Final EIR.

9-7 The comment states that sensitive receptors were omitted near the Crown Valley Road Grade at-grade crossing and Aliso Canyon Road at-grade crossing. Sensitive receptors within 750 feet of the tracks and 1,600 feet of grade crossings where horns would be sounded were included in the noise assessment. The noted omitted sensitive receptors near the Crown Valley Road at-grade crossing are shown in Figure 52 on page 113 of the Noise Technical Report. The noted omitted sensitive receptors near the Aliso Canyon Road at-grade crossing are shown in Figure 53 on page 114 of the Noise Technical Report. The noted sensitive receptors were not omitted and were included in the noise assessment. Metro has identified that multiple addresses listed in Table 22 of the Noise Technical Report were inaccurate or otherwise missing information which may address the commenter's assertion that sensitive receptors were omitted from the analysis. A corrected table is included in Chapter 2.0, Corrections and Additions, of the Final EIR.

9-8 The comment concludes the letter by reiterating the Acton Town Council's request that the EIR conclude that the Proposed Project would result in significant noise impacts and to mitigate said impacts by constructing "Quiet Zone" infrastructure within the Town of Acton. Unfortunately, this request cannot be accepted since this technical study did not identify significant noise impacts that warrant mitigation along the entire AVL corridor. Metro's responses to the Town of Acton's concerns are detailed in Comments 9-1 through 9-7.

COMMENT LETTER 10

---------- Original Message ----------
From: Brian Yanity [brian@railpac.org]
Sent: 8/22/2021, 6:25 PM
To: avl@metro.net
Cc: steve@railpac.org
Subject: RailPAC Comment Letter on Draft EIR for the Antelope Valley Line Capacity and Service Improvements Program

Dear Mr. Balderrama,

The Rail Passenger Association of California and Nevada (RailPAC) is a two-state organization with membership throughout California and Nevada. RailPAC is a strong advocate for an expanded comprehensive public transportation network serving the entire state of California as well as Nevada. RailPAC is an all-volunteer non-profit passenger rail advocacy group, founded in 1978.

RailPAC fully supports the three capital projects in Antelope Valley Line (AVL) Capacity and Service Improvements Program Draft Environmental Impact Report (EIR):

- Balboa Double Track Extension located in the City of Los Angeles
- Canyon Siding Extension located in the City of Santa Clarita
- Lancaster Terminal Improvements located in the City of Lancaster

10-1

The three projects assessed in the EIR will provide the capacity required to allow Metrolink to increase AVL service to all-day 30-minute bi-directional headways between Los Angeles Union Station and the Santa Clarita Valley and up to 60-minute bi-directional headways between the Santa Clarita Valley and the Lancaster Terminal by the year 2028.

Upon completion, these three projects will benefit thousands of rail passengers each day on the Metrolink AVL- enabling a safer, more reliable and more frequent passenger train service, improving on-time performance and operational flexibility, while reducing the risk of train delays and operational shutdowns during routine maintenance and incidents on the AVL.

Sincerely,

Brian Yanity

Vice President- South and Board Member,
Rail Passenger Association of California and Nevada (RailPAC)
Fullerton, California

[pdf of this letter attached]

1

Letter No. 10

Brian Yanity
Rail Passenger Association of California and Nevada (RailPAC)
Fullerton, California

10-1. The comment expresses support for the Proposed Project and identifies the need for increased Metrolink service along the AVL. Metro appreciates the support and has noted the comment. No further response is required.

COMMENT LETTER 11

NORTH LOS ANGELES COUNTY
Transportation Coalition JPA

September 10, 2021

Metro Antelope Valley Line Capacity and Service Development Program DEIR Comment Letter Submitted via avl@metro.net

Thank you for the opportunity to comment on the Metro Antelope Valley Line Capacity and Service Development Program Draft EIR. On behalf of the North Los Angeles County Transportation Coalition JPA (NCTC) member agencies Los Angeles County 5th Supervisorial District, the Cities of Lancaster, Palmdale, and Santa Clarita located in North Los Angeles County, I am pleased to **submit this letter strongly supporting the Metro Antelope Valley Line Capacity and Service Development Program.**

With the voter approval of Measure R in 2008, Measure M in 2016, and CA SB1 in 2018, North Los Angeles NCTC Subregion was able to receive funding for critical transportation mobility projects stuck in a funding bottleneck.

Following the Northridge Earthquake in 1994, total trip time on Metrolink rail service to/from the Antelope and Santa Clarita Valley's has seen little improvement. The AVL Study clearly demonstrated that with modest investment, Metrolink service can provide the frequent transit trip to compete with the car trip on the freeway (*Metro AVL Study Metro Report, July 17,2019 Metro Planning & Programming Committee*). The Capacity and Service Development Program is vital for North Los Angeles connectivity to the greater Southern California region and beyond. 11-1

The Program will implement four strategic capital infrastructure improvements along the AVL that will unlock Metrolink's ability to run faster and more frequent service along the 76-mile alignment between the City of Lancaster in North Los Angeles County and Union Station in Downtown Los Angeles, serving rural, suburban, and urban communities including the Cities of Lancaster, Palmdale, Santa Clarita, Sylmar, San Fernando, Burbank, Glendale and Los Angeles and unincorporated communities such as Acton and Agua Dulce. Many of these areas offer important concentrations of workforce and affordable housing and include disadvantaged communities with higher-than-average transit dependency. The Program will improve service to major employment centers and other regional destinations, including Hollywood Burbank Airport, while accommodating the population and employment growth that is forecast to occur in the decades ahead.

NORTH LOS ANGELES COUNTY
Transportation Coalition JPA

The 76.6-mile long AVL is composed of 12 stations and has the third highest ridership in Metrolink's commuter rail system with approximately 7,000 passengers per weekday. Metrolink's AVL also has the longest average trip length system-wide at 42.2 miles. It is the only Metrolink route that operates entirely within LA County and it is the only high-capacity transit corridor that connects the cities of Lancaster, Palmdale, Unincorporated LA County 5th District, Santa Clarita, Burbank, Glendale and Los Angeles. The Metrolink corridor runs parallel to the 5 and 14 Freeways, providing critical congestion relief and avoiding single occupancy vehicle trips.

Due to the mountainous terrain of the northern portion of the AVL, the average speed for this line is approximately 40mph with passenger rail travel time of approximately two hours between Lancaster and LA Union Station (LAUS).

In many ways, the AVL is a model for the current regional rail system and it will play a critical role in unlocking regional mobility, as outlined in the State Rail Plan and Metrolink's SCORE program. It also faces serious physical constraints that limit its optimal performance.

The NCTC JPA members **have allocated over $116.35M in Measure M tax-payer funds toward the AVL service improvements implementation** and Metro and Metrolink jointly submitted the Antelope Valley Line (AVL) Capital and Service Improvements SB1 Transit and Intercity Rail Capital Program (TIRCP) and was awarded $110 million for the four capital projects with a total budget of $220.85M. The proposed AVL capacity increases will accelerate the timeline for higher frequency, more reliable and convenient rail transit to attract more Metrolink ridership on the AVL and provide relief for the severely congested Interstate 5 and State Route 14 corridors. 11-1 (cont.)

Demographics in North Los Angeles County

The recent Covid Pandemic highlights how all of Los Angeles County relies on the NCTC Subregions first responders and essential workers—on 24/7 shifts throughout Los Angeles County. We appreciate and are proud of our north Los Angeles County neighbors for the work they have done during the pandemic to provide essential services to keep us healthy, safe, and secure, while stocked with essential goods. Thank You!

The corridor goes through Equity Focus Communities (EFC) that based on US Census Bureau statistics and Metro demographic maps show the need for improved mobility options.

- One in three in the Antelope Valley live in Equity Focus Communities—yet Lancaster and Palmdale appear to have no projects listed in the Draft LRTP.
- Black/African American population: Lancaster 21.8 %, Palmdale 12.5%

NORTH LOS ANGELES COUNTY
Transportation Coalition JPA

- Asian population: Santa Clarita 11%
- Hispanic or Latino: Lancaster 39.7%, Palmdale 60.2%, Santa Clarita 33.5%
- Persons in Poverty: Lancaster 23.8%, Palmdale 17.3%, Santa Clarita 8.6%
- School Free/Reduced Lunch Program, Lancaster K-6 eligible: 75%
- Veterans average population in AV & SCV is 6.1%, above LA County 3.5% & CA 5.4% avg.
- Veterans average population: Lancaster 7.5%, Palmdale 5.8%, Santa Clarita 4.9%
- Persons without Health Insurance, under age 65: Lancaster 7.5%, Palmdale 10%, Santa Clarita 7.5%
- Persons 65 years and over: Lancaster 9.8%, Palmdale 18.9%, Santa Clarita 11.3%

11-1 (cont.)

In closing, on behalf of the North Los Angeles County Transportation Coalition JPA member agencies, I am pleased to **submit this letter strongly supporting the Metro Antelope Valley Line Capacity and Service Development Program.**

Sincerely,

Arthur V. Sohikian
Executive Director

Letter No. 11

Arthur V. Sohikian
North Los Angeles County Transportation Coalition JPA (NCTC)

11-1. The comment provides a statement of support on behalf of the NCTC outlining various aspects of the Proposed Project's benefit to north Los Angeles County residents. The comment goes on to state that the AVL Study demonstrates that the modest investment associated with the Proposed Project allows Metrolink to provide frequent transit service to compete with the car trips on the freeway while improving Metrolink speeds and providing improved service to major employment centers and other regional destinations in Los Angeles County. Metro appreciates the support and partnership with NCTC on the Proposed Project and associated improvement program and funding agreements. No further response is necessary.

COMMENT LETTER 12

BUILDING AMERICA®

October 15, 2021

Via email: avl@metro.net
BalderramaB@metro.net

Brian Balderrama, Director Senior
Metro One Gateway Plaza, M/S 99-17-2
Los Angeles, CA 90012

RE: Los Angeles County Metropolitan Transportation Authority Draft Environmental Impact Report: Antelope Valley Line Capacity and Service Improvements Program

Dear Mr. Balderrama:

Union Pacific Railroad Company (UPRR) submits these comments in response to the Los Angeles County Metropolitan Transportation Authority's (Metro) Draft Environmental Impact Report (DEIR): Antelope Valley Line Capacity and Service Improvements Program (Project). Metro's Project proposes the construction of three capital improvements – Balboa Double Track Extension, Canyon Siding Extension, and Lancaster Terminal Improvements – along the Antelope Valley Line (AVL) to support enhanced commuter train service between Los Angeles Union Station and the City of Lancaster. UPRR has a direct interest in the Project because it holds freight rights and operates freight service, both local and through, as a tenant railroad on the route and because it owns right-of-way in the City of Lancaster identified in the DEIR as potentially necessary for the Project.

UPRR owns and operates a common carrier freight railroad network in the western two thirds of the United States, including the State of California. Specifically, UPRR owns and operates rail main lines connecting the San Francisco Bay Area to Sacramento and points east and north, and to Los Angeles and points east and southeast. UPRR is the largest rail carrier in California in terms of both mileage and train operations. UPRR also has a multitude of public private partnerships across the state, including active and planned projects with various state agencies and passenger rail partners. UPRR's network in California is vital to the economic health of the state and the nation as whole, and its rail service to California customers is crucial to the current and future success and growth of those customers. 12-1

The Project Objectives in the DEIR are stated as:

- Provide regular and more frequent Metrolink services to improve regional connectivity and accessibility through the enabling of 30-minute bi-directional passenger rail service to the Santa Clarita Valley and 60-minute bi-directional service to Lancaster along the AVL corridor.
- Improve passenger service reliability and efficiency on the AVL rail corridor.

UNION PACIFIC RAILROAD
1400 Douglas Street, Stop 1120
Omaha, Nebraska 68179

Peggy Harris
General Director
Network Development

P 402-544-5448
C 402-968-6589
E peharris@up.com

The discreet projects described in the DEIR – Balboa Double Track Extension, Canyon Siding Extension, and Lancaster Terminal Improvements – are the same as those Metro originally presented to UPRR, and no additional infrastructure has been proposed to address UPRR's concerns. UPRR is therefore obligated to point out again that the three projects alone are insufficient to protect the fluidity, efficiency, and reliability of freight movement as commuter train volumes increase. 12-5 (cont.)

The Project seeks to use UPRR owned right of way to accommodate the expansion of the layover facility in Lancaster, CA. This proposal raises several operating, engineering, real estate and commercial franchise challenges. Except where UPRR has, following negotiation with the appropriate agencies, implemented significant capacity improvements and other mitigation measures to address adverse impacts to its franchise, UPRR will not allow any part of the Project to impact current or future freight service or be located on UPRR-owned property. 12-6

Acknowledging its status, while also asserting its rights, as a tenant on the majority of the route included in the DEIR, UPRR strongly encourages incorporation of the following principles: 12-7

- All Project facilities that may cross above or below AVL right of way should clear-span the property and be constructed a sufficient distance away to permit UPRR's full utilization of its freight rights.
- Any new facilities that cross the AVL right of way in relation to the Project, including new or realigned roads, should be grade-separated. 12-8
- Pedestrian crossings at station locations along the proposed shared AVL right of way should be grade separated. 12-9
- Depending on the design and proximity of the Project facilities to the AVL right of way, special conditions such as safety barriers may be required. 12-10
- It is not clear whether the DEIR has examined the impact that construction of the Program alignment may have on the future ability of cities or other road authorities to grade-separate roads that cross the AVL tracks along the route. State and federal policies encourage the elimination of railroad grade crossings for the benefit of safety and the efficient movement of trains and vehicular traffic. The design of the Project along AVL right of way under the Preferred Alternative may permanently prevent roads that currently cross the freight tracks at grade from being grade-separated in the future. UPRR recommends that an analysis be completed to determine the extent of these potential impacts and that the results be formally communicated to the respective roadway authorities who might be impacted and to UPRR. 12-11

Considering the potentially serious and detrimental impacts to UPRR operations under the Preferred Alternative, it is imperative that Metro continue working with UPRR to develop a 12-12

Project scope that addresses the concerns identified in this letter or that have yet to be identified. If Metro does select the Preferred Alternative, then Metro must provide solutions to overcome the impacts to UPRR noted above and any others UPRR identifies as the designs of the Preferred Alternative project elements are developed in more detail.

12-12 (cont.)

Thank you for considering our comments.

Sincerely,

Peggy Harris

Peggy Harris
General Director Network Development

Letter No. 12

Peggy Harris
Union Pacific Railroad

12-1 The comment provides an introduction to the letter, describes Union Pacific Railroad's (UPRR's) interests in the AVL corridor, and describes the Proposed Project objectives. No comment on contents of the EIR is provided and no further response is required.

12-2 The comment states that the AVL corridor is critical to UPRR operations and UPRR's ability to continue to move goods through the AVL corridor must be preserved during planning for the Proposed Project. Specifically, the comment states that Metro has failed to demonstrate that proposed passenger rail service increases would not significantly damage the performance of freight operations and that Metro has failed to demonstrate that the proposed schedule left sufficient time in a 24-hour period to perform routine inspection and maintenance. Metro acknowledges UPRR's interests in maintaining its operations. The rail modelling developed for the 2019 AVL Study demonstrated that the Proposed Project's service improvements could accommodate UPRR operations in designated time slots throughout the day. In addition, it is important to note that the Proposed Project would only enable the proposed service increase and ultimate schedule planning would be the responsibility of Metrolink which intends to add time slots throughout the day based on demand. Finally, UPRR still holds freight operating rights and a freight easement pursuant to the Shared Use Agreement between Southern Pacific Transportation Company and Los Angeles County Transportation Commission, dated December 16, 1992. Metrolink's service planning must accommodate these existing agreements and operating rights. Metro anticipates further coordination with UPRR and Metrolink to ensure that service planning and scheduling maintains UPRR's operating interests through implementation of the Proposed Project. Similarly, Metrolink service planning must accommodate routine inspection and maintenance activities.

12-3 The comment states that while some early engagement was conducted, UPRR was not notified by Metro of the availability of the Draft EIR despite its interests as a holder of operating rights on the corridor and owner of ROW required for implementation of the Lancaster Terminal Improvements. Metro acknowledges that since early engagement, the overall project schedule and upcoming deliverables were communicated to UPRR with a full public engagement leading up to the project scoping and release of the Draft EIR. Regardless, given UPRR's interests in the Proposed Project and status as a stakeholder with operating rights, Metro gladly accepts UPRR's comments on the Draft EIR.

12-4 The comment states that Section 3.1, Transportation, of the Draft EIR does not identify potential impacts to freight operations and does not include UPRR in Mitigation Measure **TR-2**. Metro has updated Section 3.1, Transportation, in the Final EIR to include discussion of UPRR operations, potential impacts to UPRR operations, and inclusion of UPRR in Mitigation Measure **TR-2**. Metro notes that operational impacts to UPRR are discussed in Table 3.1-12 related to the Proposed Project's consistency with the State Rail Plan.

12-5 The comment describes one of the goals of the State Rail Plan related to supporting improvements to the state rail network to help move both people and goods and states that the Proposed Project has not proposed any additional improvements to address UPRR's concerns. The capital improvements included in the Proposed Project would allow for improved performance for both commuter rail and freight operations by adding additional rail capacity. While planning for the Proposed Project assumed existing freight service levels, opportunities for future capacity and train operations on the AVL will be preserved in anticipation of UPRR potentially increasing their level of freight traffic in the future, which is consistent with state and regional objectives for shifting goods movement in favor of rail and away from over-the-road trucking. However, Metro acknowledges that with implementation of the Proposed Project, as passenger operations transition to a service plan with defined slots at regular "clockface" intervals that repeat every hour, the operating and dispatching procedures for freight trains on the AVL will need to change and freight operations will be assigned off-peak slots.

12-6 The comment states that the Proposed Project's intention to use UPRR-owned ROW presents operating, engineering, real estate and commercial franchise concerns for UPRR. The comment goes on to suggest that use of UPRR-owned ROW will not be allowed without further negotiation inclusive of additional capacity enhancements and mitigation for UPRR operations. Metro intends to continue coordinating with UPRR on the use of their ROW, service planning, as well as future improvements along the AVL. UPRR's concerns have been noted by Metro.

12-7 The comment states that UPRR asserts its rights as a tenant and encourages Metro to implement several principals, the first of which requests that any project facilities that cross above or under the AVL should clear span the ROW to allow UPRR full use of its operating rights. No project facilities that would cross above or under the AVL tracks are proposed other than potential station access at the Santa Clarita Station and the Lancaster Terminal. Under any of the station-related design options, pedestrian access would clear span the AVL tracks.

12-8 The comment requests that any project-related facilities that cross the AVL ROW, including realigned roads, should be grade separated. The Proposed Project does not include realignment of any roads or other facilities crossing the AVL ROW. The Proposed Project would make modifications to the existing Golden Oak Road and Lancaster Avenue crossings related to placement of new track through these crossings. No grade separated crossings are proposed as part of the Proposed Project other than the aforementioned potential pedestrian access design options at the Santa Clarita Station and the Lancaster Terminal.

12-9 The comment requests that pedestrian crossings at station locations should be grade separated. As mentioned, there are several design options proposed for grade separated pedestrian access at the Santa Clarita Station and Lancaster Terminal. Metro notes UPRR's request and this comment will be provided to the Metro Board of Directors for their consideration.

12-10 The comment states that special safety considerations may be required such as barriers dependent upon proximity of Proposed Project facilities to the AVL ROW. Design of the Proposed Project has not identified any locations where safety barriers may be required other than the I-5 bridge where bridge pier protection is proposed.

12-11 The comment states that the Proposed Project may result in limits on local jurisdictions' ability to grade separate rail crossings in the future. As discussed, the only crossings affected by the Proposed Project are at Golden Oak Road and Lancaster Avenue. These proposed crossings have been coordinated with the City of Santa Clarita and the City of Lancaster, respectively. There are no plans to grade separate these roadways. Grade separations on other rail crossings along the AVL would not be prohibited by the Proposed Project and infrastructure associated with the Proposed Project would be installed at discreet locations consisting of the Balboa Double Track Extension site, the Canyon Siding Extension site, and the Lancaster Terminal Improvements site.

12-12 The comment provides a conclusion to the letter and reiterates a need for Metro to continue coordination with UPRR to address the concerns identified in the comment letter. Metro looks forward to the continued coordination with UPRR. No further comment on the contents of the EIR is provided and no response is required.

3.5 RESPONSES TO INDIVIDUALS

COMMENT LETTER 13

---------- Original Message ----------
From: Wufoo [no-reply@wufoo.com]
Sent: 8/20/2021, 11:04 AM
To: avl@metro.net
Subject: AVL Service Improvements Program Comment Form [#83]

Name * Adam Spieckermann
Email *
Address Santa Clarita, CA 91355
United States

Comments

As a Santa Clarita homeowner and Metrolink user:

I support the Balboa double track extension

I support the Canyon siding extension and prefer the island platform option.

I support both the Lancaster storage track additions.

I support the Lancaster island platform with a grade crossing.

Having used other Metrolink station island platforms, I do not think a grade separated crossing is necessary to access an island platform, these proposed grade separations are a waste of money that could be better allocated to additional double track projects.

These proposed grade separations are also a waste of time, as they unnecessary delay the implementation of needed improvements with the much longer construction schedules of grade separations

13-1

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Metrolink should provide a calculation of the cumulative monetary harm imposed on the AV riders and communities by the delays caused by the longer construction schedules of these grade separations and should provide an explanation of why this monetary harm is necessary.

I approve of all the double track and siding extensions proposed in phase two of the Antelope Valley line improvements.

I strongly disapprove that this Environmental Impact Report is being performed on the antelope valley line improvements for phase one. This EIR is not required under current California law, and forcing this EIR process on these improvements delays the implementation of these improvements unnecessarily.

Delaying these improvements by doing an unnecessary and optional EIR creates a disparate impact on all Metrolink riders and future riders and negatively impacts the entire community along the AV line by needlessly delaying and denying these improvements.

13-1 (cont.)

Metrolink MUST acknowledge the negative financial disparate impacts on the communities and ridership of the AV line by deliberately delaying and denying these improvements with unnecessary and unneeded environmental reviews.

Metrolink MUST provide both a monetary calculation and a time calculation of the cumulative harms caused to the communities and riders by the unnecessary and unneeded Environmental Reviews.

Metrolink MUST provide an explanation for why they are imposing these hardships on the antelope valley line riders and communities by denying and delaying these needed improvements with unnecessary and unneeded environmental reviews.

Metrolink MUST provide an explanation for why they are taking on the legal risk of creating a disparate impact on the affected communities and groups by forcing these financial harms on these communities and groups. And Metrolink should explain how they account for the potential costs of the legal risks created by performing these unnecessary and unneeded environmental reviews that are not required under current California Law.

Letter No. 13

Adam Spieckermann

13-1. The comment expresses support for the Proposed Project and identifies the island platform design options with at-grade crossings at both the Canyon Siding Extension and Lancaster Terminal Improvements as the preferred design options. The comment continues to express that grade separated pedestrian crossings are a waste of money and unnecessarily add to construction time and costs. Metro appreciates the support for the project and notes the commenter's preference for island platforms and at-grade crossing at the Santa Clarita Station and Lancaster Station.

COMMENT LETTER 14

---------- Original Message ----------
From: Wufoo [no-reply@wufoo.com]
Sent: 7/28/2021, 10:54 PM
To: avl@metro.net
Subject: AVL Service Improvements Program Comment Form [#81]

Name * Dylan Giliberto

Email *

- Please add to email list

Address

Burbank, CA 91501
United States

Comments

Hello,

Being that this project is mainly adding double track to some sections of the existing line, I don't think there is anything of concern or to oppose in the draft EIR.

I fully support increasing service to bring trains every 30 minutes between Santa Clarita and Downtown Los Angeles. As a Burbank resident, the easiest and most convenient way to go downtown is Metrolink.

Though this is not mentioned in the EIR (as far as I can tell), I believe Metro and Metrolink should go further and add trains every 15 minutes between Burbank Airport and Downtown Los Angeles. Nearly that entire route is already double tracked, and a 15 minute frequency would make this section operate almost like a metro line. Every 30 minutes is a huge and welcome improvement over existing service already, but 15 minute service would mean you could arrive at the station without needing to check a timetable or worry about missing your train. I believe that this kind of service would attract even more riders, and would take even more cars off of the heavily congested 5 freeway that runs parallel to this section of the Antelope Valley Line. 14-1

Thank you!

Dylan Giliberto

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Letter No. 14

Dylan Gilberto

14-1. The comment supports increased service along the AVL and states that service between the Burbank Airport and Los Angeles Union Station should be increased further to 15-minute bidirectional service. The Proposed Project is only intended to enable 30-minute bi-directional service between Los Angeles Union Station and 60-minute bi-directional service between Santa Clarita and Lancaster consistent with Metro Board of Directors Motion 2019-0571. The Proposed Project's capital improvements only provide enough capacity for this level of service and more frequent service along the AVL would only be enabled by additional capital improvements which are currently not under consideration. Metro and Metrolink will continue to study and pursue ways to improve service on the AVL.

COMMENT LETTER 15

---------- Original Message ----------
From: Wufoo [no-reply@wufoo.com]
Sent: 8/17/2021, 6:14 PM
To: avl@metro.net
Subject: AVL Service Improvements Program Comment Form [#82]

Name * Numan Parada

Email *

Address

Sylmar, CA 91342

United States

Comments

To whom it may concern,

Thank you for providing this opportunity to provide input regarding improvements to the Metrolink Antelope Valley line.

I would like to provide the following suggestions:

1. Please consider building a second tunnel through the Newhall Pass. Though I believe the existing proposals will make frequent service a reality with just one tunnel, a second tunnel would provide future capacity for regional trains. 15-1

2. Add additional AV train runs in such a way that they provide synchronized transfers with Amtrak Pacific Surfliners originating and ending in San Diego, especially the final Surfliner trips for the day. The proposed infrastructure must make this possible.

Thank you once again. I look forward to seeing these much needed improvements.

-Numan Parada

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Letter No. 15

Numan Parada

15-1. The comment suggests construction of a second tunnel through the Newhall Pass to provide future regional rail capacity. The Proposed Project does not contemplate construction of a new tunnel at this location or other improvements to any tunnels along the AVL. The intent of the Proposed Project is to provide additional capacity to enable 30-minute bi-directional service between Los Angeles Union Station and Santa Clarita, and 60-minute bi-directional service between Santa Clarita and Lancaster.

15-2 The comment suggests that AVL trains should be scheduled to synchronize transfers with Amtrak Pacific Surfliner trains at Los Angeles Union Station. One of the benefits of the Proposed Project is improved on-time performance and enabling clock-face train schedules that can be better synchronized with other regional rail services. The ultimate scheduling of AVL trains after proposed service improvements are enabled would be done by Metrolink. This comment along with all comments on the Draft EIR will be provided to Metrolink for their consideration during subsequent phases of the Proposed Project's development.

COMMENT LETTER 16

From: Robert Frampton <rvframpton@hotmail.com>
Sent: Sunday, August 22, 2021 7:40 PM
To: Brian Yanity <yanityak@gmail.com>
Subject: Re: RailPAC comment letter on AVL capacity/service improvements DEIR?

Brian,

My notes indicate that there are 4 parts to this project. I will read the DEIR to see whether it includes the Brighton to McGinley Double track.
Here are my notes:

Metrolink Antelope Valley Line, SCRRA. The draft EIR was released in July, 2021, The major capital projects that will be funded through this USDOT TIRCP grant include: 16-1

- Balboa Double Track Extension, just south of I-5/SR-14 Interchange, which will allow for additional capacity and passing;
- Lancaster Terminal Improvements, including new layover and light maintenance facilities;
- Canyon Siding Extension, which allows for additional passing in the Santa Clarita Valley area; and
- Brighton to McGinley Double Track, a key segment of the critical Brighton-to-Roxford Double Track project, which will add capacity and additional passing between Sylmar and Burbank.

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Letter No. 16

Robert Frampton

16-1. The comment summarizes the Proposed Project elements and notes the inclusion of the Brighton to McGinley Double Track segment included in the funding agreement. No further comment was provided and no response is required.

COMMENT LETTER 17

---------- Original Message ----------
From: Robert Frampton [rvframpton@hotmail.com]
Sent: 8/30/2021, 3:40 PM
To: avl@metro.net
Cc: valentinod@metro.net
Subject: Re: comment on AVL capacity/service improvements DEIR?
From: Robert Frampton <rvframpton@hotmail.com>
Sent: Wednesday, August 25, 2021 5:31 PM
To: avl@metro.net <avl@metro.net>
Cc: Brian Yanity <info@calelectricrail.org>
Subject: comment on AVL capacity/service improvements DEIR?

To: Brian Balderrama, Senior Director
Los Angeles County Metropolitan Transportation Authority

Brian,

This paragraph on pg 20 of the AVL DEIR answers the question on the Brighton to McGinley double track extension. It reads:

To achieve these service scenarios the AVL Study identified four capital improvements which were recommended for their combination of operational benefits and cost effectiveness. These capital improvements are identified in the study as the Balboa Double Track Extension, Canyon Siding Extension, Lancaster Terminal Improvements, and the Brighton to McGinley Double Track. The Brighton to McGinley Double Track improvement was approved separately as part of the Brighton to Roxford Double Track Project. This EIR assesses the three remaining capital improvements required for implementation of Service Scenarios 1, 2 and 3, as presented in the AVL Study and supported by the Metro Board. Cumulative impacts are also assessed. 17-1

Could you send me a copy of the DEIR for the Brighton to Roxford Double Track Project?

Thanks

Robert Frampton, Pasadena

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Letter No. 17

Robert Frampton

17-1. The comment reiterates the relationship between the Proposed Project and the Brighton to Roxford Double Track Project as stated in the Draft EIR and requests a copy of the Draft EIR for the Brighton to Roxford Double Track Project. The Brighton to Roxford Double Track Project received a statutory exemption under CEQA in 2020 as environmental approval. There is no EIR on record for the Brighton to Roxford Double Track Project. Additional information on the Brighton to Roxford Double Track Project can be found at https://www.metro.net/projects/brighton-to-roxford-double-track-regional-rail/.

3.6 RESPONSES TO PUBLIC HEARING COMMENTS

Public Hearing and Questions and Answers on August 18, 2021

David Hardy

PH1-1 The comment asks when the Metrolink Vista Canyon Station will open and when the existing Via Princessa Station will close. Neither the opening of the Vista Canyon Station nor the closing of the Via Princessa Station are part of the Proposed Project. Currently, the Vista Canyon Station is anticipated to open in early 2022. The City as owners of the station in partnership with Metrolink will coordinate on the possibility of station closures based on their operational needs and system planning. The Draft EIR assumed the Vista Canyon Station would be operational prior to the start of Proposed Project construction.

Andrew Buenko

PH1-2 The comment asks if there are plans to extend the AVL to Reno, Nevada. The Proposed Project does not contemplate any extension of the AVL beyond its northern terminus in Lancaster. Beyond the Proposed Project, there are no current plans to extend the AVL to Reno, Nevada

David Hardy

PH1-3 The comment states that improvements to the San Fernando Tunnel are needed, specifically adding new double track through the tunnel. The Proposed Project does not include any improvements to the San Fernando Tunnel as the capital improvements associated with the Proposed Project are intended to enable 30-minute bi-directional service between Los Angeles Union Station and Santa Clarita, and 60-minute bi-directional service between Santa Clarita and Lancaster.

Andrew Buenko

PH1-4 The comment asks how the Proposed Project would affect the new Vista Canyon Station. The Proposed Project would have no physical impacts to the new Vista Canyon station and AVL service would include a station stop at the new Vista Canyon Station similar to Metrolink operations anticipated following completion of the Vista Canyon Station construction.

Bart Reed

PH1-5 The comment asks whether the Proposed Project includes any community betterments such as pedestrian bridges in the Balboa Double Track or Canyon Siding Extension sites. The Proposed Project does not include any pedestrian bridges or other crossings other than those associated with station access at the Santa Clarita Station and Lancaster Terminal. The design of the Golden Oak Road rail crossing has included some community-serving improvements, including pedestrian and bicycle safety improvements and high visibility crosswalks. For additional detail on proposed improvements see Chapter 2.0, Project Description of the Draft EIR.

Anjie Preston

PH1-6 The comment asks if the presentation slides from the Public Hearings would be available to review outside of the Public Hearing. The Public Hearing presentations

have been made available on the Project website at https://www.metro.net/projects/avl/#documents.

Michael Bertell

PH1-7 The comment asks if construction of the Proposed Project would be 24 hours a day. This question was answered live during the August 18th Public Hearing. At this stage of design, it is unknown what the exact construction schedule will be. As the Proposed Project proceeds through final design, additional detail on the duration and construction hours will be developed and provided to the affected communities. It is anticipated that a majority of project-related construction would be conducted during daytime work hours. There may be times when nighttime construction work would be required to avoid affecting Metrolink operations; however, the timing of such work is not known at this time.

David Hardy

PH1-8 The comment asks if there are plans to extend the AVL to Bakersfield, California. The Proposed Project does not contemplate any extension of the AVL beyond its northern terminus in Lancaster. Beyond the Proposed Project, there are no current plans to extend the AVL to Bakersfield.

Bart Reed

PH1-9 The comment requests contact information for the staff of Los Angeles County Supervisor Kathryn Barger, City of Los Angeles Mayor Eric Garcetti, and Los Angeles County Supervisor Sheila Kuehl. Contact information was provided to Mr. Reed separately. No further response is required.

Anjie Preston

PH1-10 The comment asks whether the AVL schedule would be coordinated with AVTA schedules. One of the benefits of the Proposed Project is improved on-time performance and enabling clock-face train schedules that can be better synchronized with other regional transit services. The ultimate scheduling of AVL trains after proposed service improvements are enabled would be done by Metrolink. This comment along with all comments on the Draft EIR will be provided to Metrolink for their consideration during subsequent phases of the Proposed Project's development.

Jose Ubaldo

PH1-11 The comment asks when the Proposed Project will be presented to the Metro Board of Directors for approval. This question was answered live during the August 18 Public Hearing. Metro staff presented the Proposed Project to the Metro Board in July 2019. Metro staff will go back to the Board in December 2021 with environmental findings and recommendations.

Jacqueline Ayer

PH1-12 The comment states that the noise analysis in the Draft EIR does not mention quiet zones, particularly in the Town of Acton. The Proposed Project does not propose establishment of any quiet zones along the AVL corridor, and no quiet zone infrastructure is proposed within the Town of Acton.

The comment states that the Draft EIR noise analysis ignores the Los Angeles County General Plan requirements that establish noise limits for residential uses in

the County. Please see Response to Comment 9-6 for discussion of the Los Angeles County General Plan requirements and associated daytime and nighttime noise levels discussed in the Draft EIR.

Bart Reed

PH1-13 The comment asks what the funding status is of the Proposed Project as well as the Brighton to Roxford Double Track Project. This question was answered live during the August 18 Public Hearing. As discussed, the Proposed Project is fully funded with $220 million from a combination of State grant funds and Measure M contributions from the North County Transportation Coalition. In addition, a portion of the Brighton to Roxford Double Track Project, Segment 1 Brighton to McGinley, will also be funded through this funding agreement.

Frances Sereseres

PH1-14 The comment expresses a need for improved station amenities at the Lancaster Terminal, namely new seating and additional shade structures. Though the base design does not include any changes to the Lancaster Terminal platform or station, as described in the Draft EIR's Chapter 2.0, Project Description, the three design options at the Lancaster Terminal all propose a new island platform which would include new seating and shade structures consistent with the Southern California Regional Rail Authority Design Criteria Manual.

Jacqueline Ayer

PH1-15 The comment details some of the County of Los Angeles noise standards and states that the Proposed Project exceeds the noise standards. Please see response to comment 9-6 for response to County of Los Angeles noise standards.

The comment states that the Proposed Project's noise analysis misapplies the FTA methodology by using the cumulative noise analysis methodology and that significant impacts to sensitive receivers in the Town of Acton would be identified if project noise impact criteria were used. Please see response to Comment 9-5 for discussion of FTA methodology and associated impact determinations pertaining to the Town of Acton.

The comment states that the Proposed Project would result in significant impacts in the Town of Acton and requests mitigation in the form of quiet zone establishment. Please see Response to Comment 9-2 for discussion of quiet zones.

Jacqueline Ayer

PH1-16 The comment asks for clarification on the location of any quiet zones infrastructure proposed as part of the Proposed Project. This question was answered live during the August 18 Public Hearing. As discussed during the public hearing and described in the Draft EIR, the Proposed Project does not include the establishment of quiet zones. Quiet zone-ready infrastructure would be installed at the Golden Oak Road rail crossing in the City of Santa Clarita, and the Lancaster Boulevard rail crossing in the City of Lancaster to improve the safety of a crossing where existing rail infrastructure would be affected by the Proposed Project.

Bart Reed

PH1-17 The comment asks for clarification on the size of the proposed tail tracks in the Lancaster Terminal and asks how many train sets would be accommodated by these

tracks. This question was answered live at the August 18 Public Hearing. As described in Chapter 2.0 Project Description of the Draft EIR, the proposed layover facility consists of two 500-foot tail tracks and one 1,000-foot tail track. The intent is to allow Metrolink to store up to four additional train sets at the proposed Lancaster Terminal layover facility.

Jacqueline Ayer

PH1-18 The comment asks for the location of any quiet zones proposed as part of the Proposed Project. This question was answered live during the August 18 Public Hearing. As discussed during the public hearing and described in the Draft EIR, the Proposed Project does not include the establishment of quiet zones. Quiet zone-ready infrastructure would be installed at the Golden Oak Road rail crossing in the City of Santa Clarita, and the Lancaster Boulevard rail crossing in the City of Lancaster to improve the safety of a crossing where existing rail infrastructure would be affected by the Proposed Project.

Bart Reed

PH1-19 The comment asks for clarification on train storage and mobilization discussed during the August 18 Public Hearing. This question was answered live during the August 18 Public Hearing. As discussed, mobilization of trains out of either the proposed layover facility in Lancaster or any of Metrolink's other storage facilities will be dependent upon Metrolink's scheduling, which has not been determined at this time. As discussed during the August 18 Public Hearing, Metrolink is currently engaged in modelling future service on the AVL, which includes determining the storage and mobilization schedule for future service.

Jacqueline Ayer

PH1-20 The comment asks whether impacts associated with the proposed layover facility in Lancaster are addressed in the Draft EIR. This question was answered live during the August 18 Public Hearing. As discussed, impacts associated with the proposed layover facility in Lancaster are addressed in various chapters of the EIR.

PH1-21 The comment asks for clarification on train storage and mobilization discussed during the August 18 Public Hearing. This question was answered live during the August 18 Public Hearing. As discussed, mobilization of trains out of either the proposed layover facility in Lancaster or any of Metrolink's other storage facilities will be dependent upon Metrolink's scheduling, which has not been determined at this time. As discussed during the August 18 Public Hearing, Metrolink is currently engaged in modelling future service on the AVL, which includes determining the storage and mobilization schedule for future service.

Marsha McLean

PH1-22 The comment thanks the Metro team for providing the presentation during the August 18 Public Hearing. No further comment is provided and no response is required.

Bart Reed

PH1-23 The comment asks for clarification on the extent of the Proposed Project and whether the Proposed Project includes the Town of Acton. This question was answered during the August 18 Public Hearing. As discussed, the Proposed Project includes the entire length of the AVL, including the Town of Acton to account for

impacts associated with the proposed service increase. Construction activities and associated impacts would only occur at the three capital improvement sites; Balboa Double Track Extension, Canyon Siding Extension, and Lancaster Terminal Improvements.

Jacqueline Ayer

PH1-24 The comment asks for clarification as to whether the number of trains through the Town of Acton would double. This question was answered during the August 18 Public Hearing. As stated during the hearing, the Project enables 60-minute bi-directional service along the portion of the AVL within the Town of Acton. Based on current Metrolink service levels providing 60-minute bi-directional service would double the number of roundtrip trains through the Town of Acton at full build out; however, express train trips and other train operators such as Union Pacific Railroad would maintain existing train volume and frequency.

Anjie Preston

PH1-25 The comment asks whether Metrolink will be providing express train service on the AVL anytime soon. Metrolink as service operator determines express train schedules based on demand. Inquiries can be sent to Metrolink through their online feedback form at https://metrolinktrains.com/customer-service/feedback-form/ or Call or Text: 800-371-5465.

Fred Boehnert

PH1-26 The comment asks whether end-to-end run time will decrease significantly as a result of the Proposed Project. This question was answered during the August 18 Public Hearing. As discussed, the Proposed Project is intended to improve service reliability and frequency rather than any substantial improvement in end-to-end travel time. However, it is anticipated that some travel time savings would be experienced from the additional track capacity afforded by the Proposed Project as trains would spend less time idling during an end-to-end trip

Public Hearing and Questions and Answers on August 21, 2021

Ian Pari

PH2-1 The comment asks whether the EIR includes discussion of transportation impacts to local roads associated with increased Metrolink service and traffic signal pre-emptions. The 2020 CEQA Guidelines do not require traffic congestion analyses. Metro is not required to consider traffic congestion in the CEQA process, although traffic signal coordination will continue in final design. For information purposes, and as it pertains to emergency vehicle access, Section 3.1 Transportation of the Draft EIR, discusses typical delays associated with signal preemption at at-grade rail crossings along the AVL.

Matthew Pearson

PH2-2 The comment states that since the Proposed Project is exempt from CEQA other similar projects should forego preparing EIRs. Metro has noted the comment. No further response is required.

The comment states that Metrolink should consider use of diesel-multiple units for the proposed increased service. Metro has noted the comment. Use of diesel-multiple units throughout Metrolink's fleet has been a topic of study. The Proposed

Project does not preclude use of diesel-multiple units or any other locomotive propulsion technology and the ultimate fleet Metrolink employs on the AVL will be determined at a later point.

Jacqueline Ayer

PH2-3 The comment provides clarification that the Acton Town Council contacted a local engineer to conduct a separate noise analysis used in the Town's comments on the Draft EIR. No response is required.

Perias Pillay

PH2-4 The comment simply identifies the commenter as a Metro rider and occasional Metrolink rider with a general interest in transit. No response is required.

Jacqueline Ayer

PH2-5 The comment provides additional detail on the Town of Acton's separate noise assessment of the Proposed Project and reiterates the Town's assertion that the Proposed Project exceeds County of Los Angeles general plan noise standards. Please see Response to Comment 9-5 regarding FTA noise assessment methodology and Response to Comment 9-6 regarding County of Los Angeles noise standards.

4. Mitigation Monitoring and Reporting Program

4.1 INTRODUCTION

Section 21081.6 of the 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). As lead agency for the Proposed Project, Metro is responsible for administering and implementing the Mitigation Monitoring and Reporting Program (MMRP). The decisionmakers must define specific monitoring requirements to be enforced during project implementation prior to final approval of the Proposed Project. The primary purpose of the MMRP is to ensure that the mitigation measures identified in the Draft and Final EIR are implemented, effectively minimizing the identified environmental effects.

4.2. PURPOSE

Table 4-1 has been prepared to ensure compliance with all mitigation measures identified in the Draft EIR and this Final EIR which would lessen or avoid potentially significant adverse environmental impacts resulting from implementation of the Proposed Project. Each mitigation measure is identified in **Table 4-1** and is categorized by environmental topic and corresponding number, with identification of:

- Monitoring Action: The criteria that would determine when the measure has been accomplished and/or the monitoring actions to be undertaken to ensure the measure is implemented.
- Responsible Party for Implementing Mitigation: The entity accountable for the action.
- Enforcement Agency and Monitoring Phase: The agencies responsible for overseeing the implementation of mitigation and when the implementation is verified.

Table 4-1 – Mitigation Monitoring and Reporting Program

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
AESTHETICS				
AES-1	During construction in the City Santa Clarita, the perimeter of construction areas, including but not limited to, staging and laydown areas, shall be screened to shield views of construction activities from the residential neighborhood north of Santa Clara River and the Santa Clara River Trail.	Incorporate visual screening into applicable construction documents. Provide visual screening around the Canyon Siding Extension site	Construction Contractor	1. Metro 2. During Construction
AES-2	In areas where the slope ratio of the soil/rock cut slopes permits vegetation growth, plants shall be placed on the soil/rock cut slopes. The type of vegetation to be planted shall be consistent with the natural vegetation that is generally associated with the undeveloped hillsides adjacent to the rail right-of-way.	Incorporate revegetation requirements into applicable construction documents. Plant vegetation along south side of Canyon Siding Extension site following grading activities	Construction Contractor	1. Metro 2. During Construction
AES-3	During construction, nighttime construction lighting shall be directed toward the interior of the construction area and shielded with temporary construction screening to limit light spillover into adjacent areas.	Incorporate lighting, screening, and glare requirements into applicable construction documents. Direct nighttime construction lighting away from residents and provide screening as appropriate.	Construction Contractor	1. Metro 2. During Construction
BIOLOGICAL RESOURCES				
BIO-1	Vegetation removal shall be conducted outside of the bird nesting season (nesting typically occurs between February 1 through September 30) to the extent feasible. If vegetation removal cannot be conducted outside of the nesting season, a Metro-approved qualified bird biologist shall conduct preconstruction surveys to locate active nests within seven days prior to vegetation removal in each area with suitable nesting habitat. If nesting birds are found during preconstruction surveys, an exclusionary buffer (150 feet for	Incorporate contractor responsibilities into applicable construction documents. Retain a qualified bird biologist. Conduct preconstruction surveys. Implement exclusionary buffer around identified nests. Conduct nest removal in the	Metrolink/Metro Construction Contractor	1. Metro 2. Pre-Construction/ Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	passerines and 500 feet for raptors) suitable to prevent nest disturbance shall be established by the biologist. The buffer may be reduced based on species-specific and site-specific conditions as determined by the qualified biologist. This buffer shall be clearly marked in the field by construction personnel under the guidance of the biologist, and construction or vegetation removal shall not be conducted within the buffer until the biologist determines that the young have fledged or the nest is no longer active. If work occurs on existing bridges with potential nest sites that will be removed or will have modifications to the substructure, these should be conducted between February 1 and September 30. All bird nests shall be removed prior to February 1. Immediately prior to nest removal, a qualified biologist shall inspect each nest for the presence of torpid bats, which are known to use old swallow nests. Nest removal shall be conducted under the guidance and observation of a qualified biologist. Removal of nests on bridges that are under construction shall be repeated as frequently as necessary to prevent nest completion unless a nest exclusion device has already been installed. Nest removal and exclusion device installation shall be monitored by a qualified biologist. Such exclusion efforts shall be continued to keep the structures free of birds until October or the completion of construction. A biological monitor shall be present during all ground-disturbing activities to ensure no impacts occur to nesting birds during nesting bird season (mid-March to mid-May), if applicable, as well as to ensure minimal impacts to other plant and animal species	event that nests are identified in the I-5 bridge substructure Monitor construction during nesting season		
BIO-2	To avoid impacts to nesting birds, Metro/ Metrolink shall submit to the California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife Service (USFWS) a Nesting Bird Management, Monitoring, and Reporting Plan for review and approval prior to commencement of Proposed Project construction activities during the breeding season (February 1	Incorporate contractor responsibilities into applicable construction documents. Retain a qualified bird biologist.	Metrolink/Metro Construction Contractor	1. Metro 2. Pre-Construction/ Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	to August 31, and as early as January 1 for some raptors). The Nesting Bird Management, Monitoring, and Reporting Plan should include the following: • Nest survey protocols describing the nest survey methodologies including the following: o A management plan describing the methods to be used to avoid nesting birds and their nests, eggs, and chicks; o A monitoring and reporting plan detailing the information to be collected for incorporation into a regular Nest Monitoring Log (NML) with sufficient details to enable USFSW and CDFW to monitor Metro's compliance with California Fish and Game Code Sections 3503, 3503.5, 3511, and 3513; o A schedule for the submittal (usually weekly) of the NML; o Standard buffer widths deemed adequate to avoid or minimize significant project related edge effects (disturbance) on nesting birds and their nests, eggs, and chicks; o A detailed explanation of how the buffer widths were determined; and o All measures the applicant will implement to preclude birds from utilizing project related structures (i.e., construction equipment, facilities, or materials) for nesting. • Preconstruction nesting bird surveys shall be completed within 72 hours of construction-related activities and implement appropriate avoidance measures for identified nesting birds. To determine the presence of nesting birds that the project activities may affect, surveys should be conducted beyond the Project Area - 300 feet for passerine birds and 500 feet for raptors. The survey protocols should include a detailed description of methodologies utilized by CDFW-approved avian biologists to search for nests and describe avian behaviors that indicate active nests. The protocols should include but	Prepare Nesting Bird Management, Monitoring, and Reporting Plan. Conduct pre-construction surveys		

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	are not limited to the size of the Project Area being surveyed, method of search, and behavior that indicates active nests. Each nest identified in the Project Area should be included in the NML. The NMLs should be updated daily and submitted to the CDFW weekly. Since the purpose of the NMLs is to allow the CDFW to track compliance, the NMLs should include information necessary to allow comparison between nests protected by standard buffer widths recommended for the Proposed Project (300 feet for passerine birds, 500 feet for raptors) and nests whose standard buffer width was reduced by encroachment of project-related activities. The NMLs should provide a summary of each nest identified, including the species, status of the nest, buffer information, and fledge or failure data. The NMLs will allow for tracking the success and failure of the buffers and will provide data on the adequacy of the buffers for certain species. The applicant(s) will rely on its avian biologists to determine the appropriate standard buffer widths for nests within the Project Area to employ based on the sensitivity levels of specific species or guilds of avian species. The determination of the standard buffer widths should be site- and species-/guild-specific and data-driven and not based on generalized assumptions regarding all nesting birds. • The determination of the buffer widths should consider the following factors: o Nesting chronologies; o Geographic location; o Existing ambient conditions (human activity within line of sight—cars, bikes, pedestrians, dogs, noise); o Type and extent of disturbance (e.g., noise levels and quality—punctuated, continual, ground vibrations—blasting-related vibrations proximate to tern colonies are known to make the ground-nesting birds flush the nests); o Visibility of disturbance;			

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	o Duration and timing of disturbance; o Influence of other environmental factors; and o Species' site-specific level of habituation to the disturbance. Application of the standard buffer widths should avoid the potential for project-related nest abandonment and failure of fledging, and minimize any disturbance to the nesting behavior. If project activities cause or contribute to a bird being flushed from a nest, the buffer must be widened.			
BIO-3	Prior to tree removal or demolition activities, Metro/ Metrolink shall retain a qualified biologist to conduct a focused survey for bats and potential roosting sites within buildings to be demolished or trees to be removed. The surveys can be conducted by visual identification and can assume presence of hoary and/or pallid bats or the bats can be identified to a species level with the use of a bat echolocation detector such as an "Anabat" unit. If no roosting sites or bats are found, a letter report confirming absence shall be sent to the CDFW and no further mitigation is required. If roosting sites or hoary bats are found, then the following monitoring and exclusion, and habitat replacement measures shall be implemented. If bats are found roosting outside of nursery season (nursery season typically occurs between May 1 through October 1), then they shall be evicted as described below. If bats are found roosting during the nursery season, then they shall be monitored to determine if the roost site is a maternal roost. This could occur by either visual inspection of the roost bat pups, if possible, or monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats shall be evicted as described below. Because bat pups cannot leave the roost until they are mature enough, eviction of a maternal roost cannot occur during the nursery season. A 250-foot (or as determined in consultation with CDFW) buffer zone shall be established around the roosting site within which no construction or tree removal shall occur.	Incorporate contractor responsibilities into applicable construction documents. Retain a qualified bat biologist. Conduct pre-construction bat roost surveys Perform bat roost eviction in the event roosts are identified.	Metrolink/Metro Construction Contractor	1. Metro 2. Pre-Construction/ Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	Eviction of bats shall be conducted using bat exclusion techniques, developed by Bat Conservation International (BCI) and in consultation with CDFW that allow the bats to exit the roosting site but prevent re-entry to the site. This would include, but not be limited to, the installation of one-way exclusion devices. The devices shall remain in place for seven days and then the exclusion points and any other potential entrances shall be sealed. This work shall be completed by a BCI-recommended exclusion professional. The exclusion of bats shall be timed and carried concurrently with any scheduled bird exclusion activities. Each roost lost (if any) will be replaced in consultation with the California Department of Fish and Game and may include construction and installation of BCI-approved bat boxes suitable to the bat species and colony size excluded from the original roosting site. Roost replacement will be implemented before bats are excluded from the original roost sites. Once the replacement roosts are constructed and it is confirmed that bats are not present in the original roost site, the structures may be removed or sealed.			
BIO-4	A revegetation plan will be developed by a qualified biologist to guide the restoration of native vegetation temporarily or permanently impacted by project implementation.	Incorporate contractor responsibilities into applicable construction documents. Retain a qualified biologist. Prepare revegetation plan.	Metrolink/Metro Project Engineer	1. Metro 2. Final Design
BIO-5	Limits of disturbance will be staked during construction activities to ensure that impacts to the Project Area are minimized, and staking will stay in place until final site stabilization.	Incorporate contractor responsibilities into applicable construction documents. Periodic site check as needed.	Metrolink/Metro Construction Contractor	1. Metro 2. Pre-Construction/ Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
BIO-6	If construction must occur during nighttime hours, lighting that produces a green colored beam with an automatic sensor shall be utilized.	Incorporate contractor responsibilities into applicable construction documents.	Metrolink/Metro Construction Contractor	1. Metro 2. Pre-Construction/ Construction
BIO-7	Metro/ Metrolink shall retain a qualified biologist with a gnatcatcher survey permit. The qualified biologist shall survey the Project site and adjacent areas to determine presence/absence of gnatcatcher. The qualified biologist shall conduct surveys according to USFWS Coastal California Gnatcatcher (Polioptila californica californica) Presence/Absence Survey Guidelines. The protocol shall be followed for all surveys unless otherwise authorized by the USFWS in writing. Gnatcatcher surveys shall be conducted and USFWS notified (per protocol guidance) prior to starting any Project construction and activities within and adjacent to California coastal gnatcatcher habitat. Where Project construction and activities would occur within and/or adjacent to California coastal gnatcatcher habitat, no work shall occur from February 15 through August 31. There shall be no clearing, removing, or cutting any California coastal gnatcatcher habitat. If California coastal gnatcatcher habitat is identified within the construction footprint of any of the capital improvement sites, Metro/ Metrolink shall provide compensatory mitigation for loss of any California coastal gnatcatcher habitat at no less than a 2:1. Mitigation lands shall occur within the same watershed, and support California coastal gnatcatcher habitat of similar vegetation composition, density, coverage, and species richness and abundance.	Incorporate contractor responsibilities into applicable construction documents. Retain a qualified biologist. Conduct Coastal California Gnatcatcher protocol survey Provide survey notification to USFWS Provide compensatory mitigation in the even that California coastal gnatcatcher habitat is identified within the construction footprint	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Permitting

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
BIO-8	Prior to Project construction activities at the Balboa Double Track Extension site, a qualified biologist shall conduct protocol surveys for least Bell's vireo. All riparian areas and any other potential least Bell's vireo habitat shall be surveyed at least eight times during the period from April 10 to July 31. Survey results, including negative findings, shall be submitted to CDFW and USFWs within 45 calendar days following the completion of protocol-level surveys. If least Bell's vireo is detected no construction work including staging, mobilization, and site preparation, shall occur during the least Bell's vireo nesting season (April 10 to July 31). No habitat supporting least Bell's vireo shall be removed at any time. If least Bell's vireo is detected and work must occur during the least Bell's vireo nesting season for the duration of the Proposed Project, and/or if habitat supporting least Bell's vireo needs to be removed, Metro/Metrolink shall seek appropriate take authorization under the California Endangered Species Act. Metro/ Metrolink shall obtain a permit from California Department of Fish and Wildlife prior to starting any Project construction and activities.	Incorporate contractor responsibilities into applicable construction documents. Retain a qualified biologist. Conduct least Bell's vireo protocol survey. Report survey results to CDFW and USFW. In the event that least Bell's vireo is present, project construction would take place during nesting season, and/or habitat would be removed, obtain CESA take authorization permit from CDFW.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Permitting
BIO-9	There shall be no impacts on western Joshua trees and seedbank. Access to the Lancaster Terminal Improvements site shall not be allowed from Yucca Avenue/West Milling Street. No activities shall occur within a 250-foot radius of the western Joshua tree to avoid impacts to the tree and potential seedbank. This shall include no site access, vehicle parking, staging areas, refueling, and any activities that may result in ground disturbance. If necessary, Metro/Metrolink shall seek appropriate take authorization under the California Endangered Species Act before starting any construction and activities where impacts to the western Joshua tree and seedbank cannot be avoided.	Incorporate contractor responsibilities into applicable construction documents. In the event that, project construction must remove the western Joshua tree, obtain CESA take authorization permit from CDFW.	Metrolink/Metro Construction Contractor	1. Metro 2. Pre-construction/ Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
BIO-10	At least one year prior to starting any Project construction and activities, qualified biologist shall conduct season appropriate pre-Project presence/absence fish surveys and habitat at the Balboa Double Track Extension site. Surveys shall be performed by a qualified biologists with appropriate Scientific Collecting Permit. Also, surveys shall be performed in consultation and coordination with CDFW. If a California Endangered Species Act (CESA) and/or Endangered Species Act (ESA)-listed fish species is detected and impacts on those fish and habitat cannot be avoided, Metro/ Metrolink shall consult with CDFW and/or USFWS to obtain necessary permits for take of CESA and/or ESA-listed fish species. Metro/ Metrolink shall have a permit from CDFW and/or USFWS prior to starting any Project construction and activities. If a Species of Special Concern is detected and impacts on those fish and habitat cannot be avoided, Project construction and activities shall only occur after fish are relocated in accordance with a CDFW-approved Fish Species Relocation Plan. Metro/ Metrolink, in consultation with a qualified biologist shall prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. Wildlife shall be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to adjacent appropriate habitat within the open space on site or in suitable habitat adjacent to the Project site (either way, at least 200 feet from the work area). Special status wildlife shall be captured only by a qualified biologist with proper handling permits.	Incorporate contractor responsibilities into applicable construction documents. Retain a qualified biologist. Conduct fish surveys in consultation with CDFW. In the event that CESA species are identified and impacts on habitat cannot be avoided, obtain CESA take authorization permit from CDFW. In the event that Species of Special Concern are detected, prepare and implement Fish Species Relocation Plan in consultation with CDFW.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design, at least one year prior to construction.
BIO-11	At least one year prior to starting any Project construction and activities, a CDFW-approved biologist shall conduct focused surveys for unarmored threespine stickleback where there is potential habitat at the Canyon Siding Extension site and any locations within the Canyon Siding Extension site that is hydrologically connected to the Santa Clara River. Surveys shall be performed by a qualified biologists with appropriate Scientific Collecting Permit. Also, surveys shall be performed in	Incorporate contractor responsibilities into applicable construction documents. Retain a qualified biologist. Conduct protocol surveys in	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design, at least one year prior to construction.

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	consultation and coordination with CDFW. Survey results, including negative findings, shall be provided to CDFW. Metro/ Metrolink shall coordinate with CDFW if unarmored threespine stickleback is found. If unarmored threespine stickleback is found, Metro/ Metrolink shall fully avoid all impacts to unarmored threespine stickleback and habitat supporting this California Fully Protected species. No work shall be performed when water is present in tributaries supporting unarmored threespine stickleback. Also, no dewatering of tributaries shall be performed at any time as draining water and reducing water levels could strand, injure, or cause mortality of unarmored threespine stickleback.	consultation with CDFW. In the event that unarmored threespine stickleback are detected, incorporate full avoidance measures into contractor responsibilities into applicable construction documents.		
BIO-12	During final design and at least one year prior to construction, a qualified biologist with access to the rail right-of-way, shall conduct a field assessment within the Balboa Double Track Extension and Canyon Siding Extension sites. The assessment shall include an inventory of observable plant and animal species, mapping and characterization of on-site habitats, and an evaluation of each site's potential to support special status species. Presence/absence surveys shall be conducted for special status plants, San Diego desert woodrat, coastal whiptail, western spadefoot toad, arroyo toad, silvery legless lizard, coast horned lizard, as well as small mammals, and bats. Results of the field assessment shall be provided to CDFW. In consultation with CDFW, the qualified biologist shall make recommendations for the avoidance of any identified species including but not limited to additional preconstruction surveys, capture and relocation of terrestrial species by a qualified biologist with proper scientific collection and handling permits, additional restrictions on construction equipment and/or means, and application for appropriate take authorization.	Incorporate contractor responsibilities into applicable construction documents. Retain a qualified biologist. Conduct field assessment within capital improvement site ROW. Provide field assessment results to CDFW. Recommend additional avoidance measures as applicable.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design, at least one year prior to construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
BIO-13	Riparian zones within the three capital improvement sites shall be protected through control of invasive plant species. All construction vehicles and heavy equipment shall be washed (including treads, wheels, and undercarriage) prior to delivery to the Project site to minimize weed seeds entering the construction area via vehicles. Slope stabilization and replanting materials used during construction shall be certified as weed-free. Invasive plant species (such as giant reed) located on the Proposed Project site shall be removed during construction. Invasive plan species shall be removed using best management practices that contain and properly dispose of the species' seeds and plant materials (which may reproduce asexually). Transport of any invasive plant material offsite shall be stored in securely covered containers or vehicles and disposed of at facilities that shall properly eliminate the ability of these materials to grow or colonize new areas.	Incorporate contractor responsibilities into applicable construction documents.	Metrolink/Metro Construction Contractor	1. Metro 2. Construction
BIO-14	In areas where riparian features are below upland features, a qualified biologist shall determine if any disturbance would occur in upland areas such that runoff could affect wetlands or riparian habitat. If riparian features are identified in locations that may be subject to construction-related runoff, the qualified biologist shall identify these areas, clearly delineate sensitive site conditions on-site, and recommend best management practices for the control of runoff including but not limited to • Minimizing the extent of disturbed areas and duration of exposure; • Stabilizing and protecting disturbed areas; • Keeping runoff velocities low; • Retaining sediment within the construction area; • Use of silt fences or straw wattles; • Temporary soil stabilization; • Temporary drainage inlet protection; • Temporary water diversion around the immediate work area; and • Minimizing debris from construction vehicles on roads providing construction access	Incorporate contractor responsibilities into applicable construction documents. Retain a qualified biologist. Implement run-off controls, as needed.	Metrolink/Metro Construction Contractor	1. Metro 2. Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
BIO-15	Metro shall provide no less than 2:1 ratio for direct impacts on streams and associated riparian plant community. Metro shall provide additional mitigation for impacts on riparian plant communities that have a State Rarity Ranking of S1 and S2 and an additional ranking of 0.1 and 0.2 to be determined through consultation with California Department of Fish and Wildlife and/or Department of Fish and Wildlife, as applicable.	Consult with CDFW and/or USFW on direct impact areas in streams and associated riparian plant communities. Provide compensatory mitigation in consultation with CDFW and/or USFW as applicable.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Permitting
BIO-16	Metro/ Metrolink shall replace no less than three trees for every one southern California black walnut and coast live oak tree that is removed.	Incorporate contractor responsibilities into applicable construction documents. Determine number of southern California black walnut and coast live oak trees to be removed. Replace trees as applicable.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Permitting
BIO-17	Metro/ Metrolink shall create or restore no less than one acre for every one acre of impact on a sensitive plant community. Metro/ Metrolink shall create or restore no less than two acres for impacts on a sensitive plant community that consists of heritage-sized trees, vigorous trees, or seedlings/saplings. Mitigation shall be provided on lands within the same watershed as the area impacted. The density of trees at the mitigation site shall be at least the same as the density of trees in the habitat that was impacted. The mitigation site shall also provide the same understory species as found in the impacted area.	Incorporate contractor responsibilities into applicable construction documents. Determine sensitive plant community impact acreage. Provide restoration or replacement vegetation, as applicable.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Permitting

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
BIO-18	To prevent inadvertent disturbance to areas outside the limits of grading, all grading shall be monitored by a biologist. A Metro-approved Project Biologist shall be contracted to perform biological monitoring during all grading, clearing, grubbing, trenching, and construction activities. The following shall be completed: • The Project Biologist shall perform the monitoring duties before, occasionally during, and after construction. The Project Biologist shall perform the following duties: ○ Attend the preconstruction meeting with the contractor and other key construction personnel prior to clearing, grubbing, or grading to reduce conflict between the timing and location of construction activities and other mitigation requirements (e.g., seasonal surveys for nesting birds); ○ Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas prior to clearing, grubbing, or grading; ○ Discuss procedures for minimizing harm to or harassment of wildlife encountered during construction with the contractor and other key construction personnel prior to clearing, grubbing, or grading; ○ Review and/or designate the construction area in the field with the contractor in accordance with the final grading plan prior to clearing, grubbing, or grading; ○ Conduct a field review of the staking to be set by the surveyor, designating the limits of all construction activity prior to clearing, grubbing, or grading; ○ Be present during initial vegetation clearing, grubbing, and grading; ○ Flush special-status species (i.e., avian or other mobile species) from occupied habitat areas immediately prior to brush-clearing and earthmoving activities; and ○ To address hydrology impacts, the Project Biologist shall verify that grading plans include a Stormwater Pollution Prevention Plan.	Incorporate contractor responsibilities into applicable construction documents. Retain a qualified biologist. Monitor grading, clearing, grubbing, and trenching activities.	Metrolink/Metro Construction Contractor	1. Metro 2. Pre-construction/ Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
BIO-19	To comply with the state and federal regulations for impacts to "waters of the United States and state," the following agency permits are required, or verification that they are not required shall be obtained. • The following permit and agreement shall be obtained, or provide evidence from the respective resource agency that such an agreement or permit is not required: ○ A Clean Water Act, Section 401/404 permit issued by the California Regional Water Quality Control Board (RWQCB) and the USACE for all project-related disturbances of waters of the United States and/or associated wetlands. ○ A Section 1602 Streambed Alteration Agreement (LSA) issued by the CDFW for all project related disturbances of any streambed. If required, the Streambed Alteration Agreement notification shall include the following information and analyses: 1. Quantification of the linear feet of streams and area of associated riparian vegetation that would be impacted. 2. An analysis providing information on whether impacts to streams within the immediate project area could cause impacts downstream where there is hydrologic connectivity; 3. A hydrological evaluation of the 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions to provide information on how water and sediment is conveyed through the Project site; 4. A scour analysis demonstrating that stream banks, bed, and channel would not erode and be impaired (e.g., aggrade, incised) as a result of Project activities;	Coordinate with applicable regulatory agency(s). Prepare regulatory permit applications including LSA notification requirements. Obtain regulatory permits. Incorporate contractor responsibilities related to regulatory permit conditions into applicable construction documents.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Permitting

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	5. An analysis demonstrating that the Project would not impact stream underflow supporting riparian vegetation; 6. Identification, analysis, and discussion of potential impacts on streams and associated vegetation as a result of upland Project construction and activities; 7. Specific activities and actions Metro proposes to take to mitigate for impacts on streams and riparian vegetation, specifically, actions to control invasive plants and animals and reintroducing native biota; 8. A complete description of routine maintenance activities that may be required for the life of the Project including measures to avoid impacts on streams and riparian vegetation during routine maintenance activities occurring for the life of the Project; and, 9. Protocol survey results (see Mitigation Measures BIO-7 through BIO-11), including negative findings, shall be included as part of the LSA Notification. Survey reports shall include information on habitat within the Project site and whether the Project would impact habitat supporting those species. • Documentation: Metro/Metrolink shall consult each agency to determine if a permit or agreement is required. Upon completion of the agency review of this project, the applicant shall provide a copy of the permit(s)/agreement(s), or evidence from each agency that such an agreement or permit is not required for compliance. • Timing: Prior to approval of any grading and or improvement plans and issuance of any Grading or Construction Permits.			

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	• Monitoring: Metro shall review the permits/agreement for compliance with this condition. Copies of these permits should be implemented on the grading plans.			
BIO-20	Preconstruction surveys for protected trees (native trees four inches or more in cumulative diameter, as measured at 4.5 feet above the ground level, that are subject to protection under any relevant tree protection ordinance, shall be conducted by a registered consulting arborist with the American Society of Consulting Arborists at least 120 days prior to construction. The locations and sizes of all protected trees shall be identified prior to construction and overlaid on project footprint maps. The registered consulting arborist shall prepare a Protected Tree Report and shall submit three copies to the relevant local jurisdiction. Any protected trees that must be removed due to project construction shall be replaced at a 2:1 ratio (or up to a 4:1 ratio for protected trees on private property) except when the protected tree is relocated on the same property, the relevant local agency has approved the tree for removal, and the relocation is economically reasonable and favorable to the survival of the tree. Each replacement tree shall be at least a 15-gallon specimen, measuring one inch or more in diameter, one foot above the base, and shall be at least seven feet in height measured from the base.	Incorporate contractor responsibilities into applicable construction documents. Retain a qualified arborist. Conduct preconstruction tree survey. Prepare Protected Tree Report and submit to applicable local jurisdiction. Provide replacement trees consistent with recommendations of the Protected Tree Report.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Permitting/ Post-construction
BIO-21	Protect trees that will possibly receive impacts to the root system by restricting root cuts to the outer region of the roots using a distance formula recommended by the International Society of Arboriculture. Adjust utility relocations to avoid as many tree trunks and root clusters as possible and eliminate direct impacts/removal of trees. Hand digging the root protection zones will reduce indirect impacts to the root systems.	Incorporate contractor responsibilities into applicable construction documents. Consult on utility relocation plan set to adjust design to avoid impacts on trees.	Metrolink/Metro Project Engineer	1. Metro 2. Final Design/ Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
BIO-22	Provide temporary supplemental irrigation to existing trees during construction, as necessary.	Incorporate contractor responsibilities into applicable construction documents. Provide supplemental irrigation.	Metrolink/Metro Construction Contractor	1. Metro 2. Construction
BIO-23	Replace all impacted trees that cannot be saved with trees of the same genus, species, and variety (if applicable) as the tree that is removed. Replacement trees shall be locally sourced from within the same watershed and not from a supplier. Replacement trees shall come from a local native plant nursery that implements Phytophthora/Clean Nursery Stock protocols.	Incorporate contractor responsibilities into applicable construction documents. Replace and/or avoid trees as applicable.	Metrolink/Metro Construction Contractor	1. Metro 2. Construction
BIO-24	Determine proven methods of stabilizing the existing landscape to minimize disturbances beyond the area of cut and fill.	Incorporate contractor responsibilities into applicable construction documents. Implement site stabilization methods.	Metrolink/Metro Construction Contractor	1. Metro 2. Construction
BIO-25	Consider “Geo-cell” type planted retaining wall stabilization structures if they can be planted with native chaparral seed.	Incorporate contractor responsibilities into applicable construction documents. Review retaining wall design and determine locations where Geo-cell plantings can be incorporated into design.	Metrolink/Metro Project Engineer	1. Metro 2. Final Design
BIO-26	Provide compost to hold moisture in the soil. Utilize watering bags for the establishment period.	Incorporate contractor responsibilities into applicable construction documents. Use compost and watering bags during revegetation establishment	Metrolink/Metro Construction Contractor	1. Metro 2. Construction/ Post-Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
BIO-27	All tree material, especially tree material infected with pests, pathogens, and diseases, shall be left on site, chipping the material for use as ground cover or mulch.	Incorporate contractor responsibilities into applicable construction documents. Reuse tree material as applicable	Metrolink/Metro Construction Contractor	1. Metro 2. Construction/ Post-Construction
CULTURAL RESOURCES				
CUL-1	Mitigation Measure **CUL-1** pertains specifically to archaeological involvement. The involvement of the Fernandeño Tataviam Band of Mission Indians and Gabrieleno Band of Mission Indians – Kizh Nation (Consulting Tribes) is detailed in Mitigation Measure **TCR-1**. For the purposes of Mitigation Measures **CUL-1** and **TCR-1**, ground disturbing activities include, but are not limited to, excavation, trenching, grading, and drilling. Prior to issuance of grading permits, a qualified archeologist, meeting the Secretary of the Interior's Standards, shall be retained to serve as Program Archaeologist to develop and supervise the archaeological monitoring program. Prior to commencement of any grading activities on site, the Program Archaeologist shall prepare a Cultural Resources Monitoring Plan (CRMP). The CRMP shall be reviewed by the Lead Agency. The Consulting Tribes shall also be provided an opportunity to review and comment on the CRMP. The CRMP should include at a minimum: (1) the roles and responsibilities of the Program Archaeologist, archaeological monitor, and Native American monitor; (2) the definition of an Environmentally Sensitive Area (ESA) around the previously-identified prehistoric resources adjacent to the Canyon Siding Extension project area, (3) a description of monitoring procedures; (4) a description of the frequency of monitoring (e.g., full-time, part-time, spot checking); (5) a description of what types of resources may be encountered; (6) a description of circumstances that would result in the halting of work at the program site (e.g., what is considered a "significant" archaeological site); (7) a description of procedures to follow	Retain qualified archaeologist who meets the Secretary of Interior's Standards. Prepare CRMP. Implement CRMP including WEAP training, monitoring and reporting requirements.	Metrolink/Metro Construction Contractor	1. Metro 2. Pre-Construction/ Construction

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	when a resource is encountered including curation procedures agreed upon by the Consulting Tribes; (8) communication/notification protocols; and (9) a description of monitoring reporting procedures. At the commencement of construction, an archaeologist shall provide a Worker Environmental Awareness Program (WEAP) training for all earth moving personnel and their supervisors. WEAP materials shall be developed and distributed to construction personnel over the lifetime of the Program. The program shall inform personnel of the types of artifacts and features that may be encountered, the procedures to be followed if archaeological materials are unearthed during program excavation, contact information for the archaeological and Consulting Tribe personnel, and the regulatory requirements for the protection of archaeological resources including penalties for violations. The archaeological monitor shall be present for all ground-disturbing activities in native soil (i.e., undisturbed, non-fill sediments) within the Balboa Double Track Extension and Lancaster Terminal Improvements sites. Within the Canyon Siding Extension capital improvement area, the archaeological monitor shall be present for all ground-disturbing activities within the ESA, including those in disturbed fill sediments. During ground-disturbing activities outside of the ESA within the Canyon Siding Extension capital improvement area, archaeological monitoring shall be limited to ground-disturbing activities within native soil only. All archaeological monitors, working under the supervision of the Program Archaeologist, shall have construction monitoring experience and be familiar with the types of historical and prehistoric resources that could be encountered. A sufficient number of archaeological monitors shall be present each workday to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. The Program Archaeologist shall have the ability to recommend, with written and photographic justification, the			

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	reduction or termination of monitoring efforts to the Lead Agency (i.e., Metro), and should the Lead Agency and the Consulting Tribes concur with this assessment, then monitoring shall be reduced or ceased. If an inadvertent discovery of archaeological materials is made during program-related construction activities, the archaeological monitor shall have the authority to halt ground disturbing activities within 50 feet of the resource(s) and an ESA physical demarcation shall be constructed. The Program Archaeologist and Lead Agency shall be notified regarding the discovery. If prehistoric or potential TCRs are identified within disturbed or native sediments, the Consulting Tribes shall be notified. The procedures outlined in CRMP shall then be implemented.			
GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES				
GEO-1	Prior to the construction of the Proposed Project, Metro shall develop a geotechnical design report to address geological, seismic, and soil-related constraints encountered by the Project. The Proposed Project shall be designed based on the latest versions of local and state building codes and regulations in order to construct seismically resistant structures that help counteract the adverse effects of ground shaking. During final design, site-specific geotechnical investigations shall be performed at the sites where structures are proposed within liquefaction-prone designated areas. The investigations shall include exploratory soil borings with groundwater measurements. The exploratory soil borings shall be advanced, at a minimum, to the depths required by local and state jurisdictions to conduct liquefaction analyses. Similarly, the investigations shall include earthquake-induced settlement analyses of the dry substrata (i.e., above the groundwater table). The investigations shall also include seismic risk solutions to be incorporated into the final design (e.g., deep foundations, ground improvement, remove and replace) for those areas where liquefaction potential may be experienced. The investigation shall include stability analyses of slopes	Prepare final geotechnical design report. Incorporate recommendations into final design.	Lead Engineer/ Geotechnical Consultant	1. Metro 2. Final Design

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	located within earthquake-induced landslide areas and provide appropriate slope stabilization measures (e.g., retaining walls, slopes with shotcrete faces, slopes re-grading). The geotechnical investigations and design solutions shall follow the "Guidelines for Evaluating and Mitigating Seismic Hazards in California" Special Publication 117A of the California Geologic Service, as well as Metro's Design Criteria and the latest federal and state seismic and environmental requirements.			
PAL-1	Full-time paleontological monitoring shall be implemented when Saugus Formation (QTs, Tsr), Pico Formation (Tps, Tp), Towsley Formation (Ttos), or older sedimentary deposits (Qog, Qoa) are impacted. Excavations into artificial fill (af) and younger sedimentary deposits (Qf, Qyfc, Qa, Qg) shall be initially spot-checked during excavations that exceed depths of 5 feet to check for underlying, paleontologically sensitive older sedimentary deposits. If it is determined that only artificial fill (af), modern alluvial fan deposits (Qf), younger alluvial fan deposits (Qyfc), alluvial gravel, and clay of valley areas (Qa), or stream channel deposits (Qg) are impacted, the monitoring program may be reduced or suspended.	Retain qualified paleontologist. Monitor excavation activities.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design
PAL-2	Prior to construction, a Paleontological Resources Impact Mitigation Program (PRIMP) shall be prepared that provides detailed recommended monitoring locations; a description of a paleontological resources worker environmental awareness program to inform construction personnel of the potential for fossil discoveries and of the types of fossils that may be encountered; detailed procedures for monitoring, fossil recovery, laboratory analysis, and museum curation; and notification procedures in the event of a fossil discovery by a paleontological monitor or other project personnel. A curation agreement from the NHMLA, or another accredited repository, shall also be obtained prior to excavation in the event that paleontological resources are discovered during the construction phase of the Project.	Prepare PRIMP. Implement recommendations of the PRIMP.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
GREENHOUSE GAS EMISSIONS				
GHG-1	The following control techniques shall be included in project specifications and shall be implemented by the construction contractor: • Prepare a comprehensive inventory list of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) (i.e., make, model, engine year, horsepower, emission rates) that could be used an aggregate of 40 or more hours throughout the duration of construction to demonstrate how the construction fleet is consistent with the requirements of Metro's Green Construction Policy. • Ensure that all construction equipment is properly tuned and maintained. • Minimize idling time to 5 minutes, whenever feasible, which saves fuel and reduces emissions. • Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary diesel power generators. • Arrange for appropriate consultations with CARB or SCAQMD to determine registration and permitting requirements prior to equipment operation at the site and obtain CARB Portable Equipment Registration with the state or a local district permit for portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, as applicable.	Incorporate contractor responsibilities into applicable construction documents.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Pre-Construction
GHG-2	In compliance with Metro's Green Construction Policy, all off-road diesel powered construction equipment greater than 50 horsepower shall comply with USEPA Tier 4 final exhaust emission standards (40 CFR Part 1039). In addition, if not already supplied with a factory-equipped diesel particulate filter, all construction equipment shall be outfitted with best available control technology devices certified by the CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could	Incorporate contractor responsibilities into applicable construction documents.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Pre-Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine, as defined by CARB regulations. In addition to the use of Tier 4 equipment, all off-road construction equipment shall be fueled using 100 percent renewable diesel.			
HAZARDS AND HAZARDOUS MATERIALS				
HAZ-1	Prior to the start of construction, the contractor shall provide Metro/ Metrolink with an industrial waste management plan and/or a waste and hazardous materials management plan, such as a plan defined in Title 19 California Code of Regulations or a Spill Prevention, Control, and Countermeasure Plan. These plans shall be completed to Metro/ Metrolink contractor specifications and will identify the responsible parties and outline procedures for hazardous waste and hazardous materials worker training, certifications, handling, storage, and transport during construction of the Project. The plan shall specify how the contractor will handle and manage wastes onsite, including: • Prescribe Best Management Practices (BMPs) to follow to prevent hazardous material releases and cleanup of any hazardous material releases that may occur. • Comply with the SWRCB Construction CWA Section 402 General Permit conditions and requirements for transport, labeling, containment, cover, and other BMPs for storage of hazardous materials during construction. During construction, the contractor shall comply with applicable federal and state regulations that consider hazardous material handling and storage practices, such as RCRA, CERCLA, the Hazardous Materials Release Response Plans and Inventory Law, and the Hazardous Waste Control Act.	Prepare industrial waste management plan. Implement industrial waste management plan Comply with federal and state regulations for hazardous material handling and storage.	Metrolink/Metro Construction Contractor	1. Metro 2. Pre-Construction/ Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
HAZ-2	Prior to the start of construction, the construction contractor shall retain a qualified environmental consultant to prepare a Soil Management Plan, Soil Reuse Management Plan, Groundwater Management Plan, and/or Soil, Soil Vapor, and Groundwater Management Plan. These plans shall be completed to Metro/ Metrolink's contractor specifications and submitted to Metro/ Metrolink prior to any ground-disturbing activities for the project. Alternatively, soil, soil vapor, and/or groundwater plans shall be prepared separately and then compiled together as a Soil, Soil Vapor, and Groundwater Management Plan.	Retain qualified environmental hazards consultant. Prepare Soil Management Plan. Prepare Soil Reuse Management Plan. Prepare Groundwater Management Plan or Soil, Soil Vapor, and Groundwater Management Plan. Implement applicable soil management plans.	Metrolink/Metro Construction Contractor	1. Metro 2. Pre-Construction/ Construction
HAZ-3	Consistent with Metro's standard practice, prior to the start of construction, the contractor shall provide Phase I Environmental Site Assessments (ESAs) in accordance with standard American Society for Testing and Materials (ASTM) methodologies, to assess the land use history of each parcel that would be acquired for the Project. The determination of parcels that require a Phase II ESA (i.e., soil, groundwater, soil vapor subsurface investigations) shall be evaluated after the Phase I ESAs have been completed and would be based on the results of the Phase I ESAs. Specifically, if the Phase I ESAs identify suspected contamination in the soil, soil vapor, or groundwater; a Phase II ESA shall be conducted to determine whether the suspect contamination had resulted in soil, groundwater, or soil vapor contamination exceeding regulatory action levels. If the Phase II ESA concludes that the site is impacted, remediation or corrective action (e.g., removal of contamination, in-situ treatment, capping) shall be conducted prior to or during construction under the oversight of federal, state, and/or local agencies (e.g., United States Environmental Protection Agency (USEPA), Department of Toxic Substances Control (DTSC), Regional Water Quality Control Board	Prepare Phase I ESA. Prepare Phase II ESA as applicable. Incorporate contractor responsibilities associated with recommendations in the applicable Phase I and/or Phase II ESA documentation into applicable construction documents. Perform site remediation or corrective action, as applicable.	Metrolink/Metro Construction Contractor	1. Metro 2. Pre-Construction/ Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	(RWQCB), Los Angeles County) and in full compliance with current and applicable federal and state laws and regulations. Additionally, Voluntary Cleanup Agreements shall be used for parcels where remediation or long-term monitoring is necessary.			
HAZ-4	The Balboa Double Track Extension shall be designed in accordance with the City of Los Angeles Municipal Code, Chapter IX, Building Regulations, Article 1, Division 71, Methane Seepage Regulations, as amended by the City of Los Angeles Methane Ordinance (No. 175790). Specific requirements shall be determined according to actual methane levels and pressures measured along the Affected Area, and the specific requirements shall be incorporated into the design and construction.	Verify compliance with City of Los Angeles Building Code Methane Regulations	Metrolink/Metro Project Engineer	1. Metro 2. Final Design/ Pre-Construction
HYDROLOGY AND WATER QUALITY				
WQ-1	During construction, Metro/ Metrolink shall prepare a Stormwater Pollution Prevention Plan (SWPPP) in compliance with the provisions of the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (CGP) (Order No. 2009-0009-DWQ, NPDES No. CAS000002) and any subsequent amendments (Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ), as they relate to project construction activities within the Balboa Double Track Extension, Canyon Siding Extension, and/or Lancaster Terminal Improvements sites. Construction activities shall not commence until a waste discharger identification number is received from the Stormwater Multiple Application and Report Tracking System. The contractor for each capital improvement shall implement all required aspects of the SWPPP during project construction.	Incorporate contractor responsibilities into applicable construction documents. Prepare and submit Notice of Intent. Prepare SWPPP. Implement SWPP. Prepare and submit Notice of Termination.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Permitting

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
WQ-2	Metro/ Metrolink shall comply with the NPDES Waste Discharge Requirements for MS4 Discharges within the Coastal Watersheds of Los Angeles County (Order No. 2012-0175, NPDES No. CAS004001), effective December 28, 2012 (known as the Phase I Permit) and NPDES General Permit for Storm Water Discharges From Small Municipal Separate Storm Sewer Systems (NPDES No. CAS000004), as applicable. This post-construction requirement shall apply to each of the capital improvement sites. Metro/ Metrolink shall prepare a final Low Impact Design (LID) report in accordance with the applicable local LID Manual. These include the City of Los Angeles Planning and Land Development Handbook for Low Impact Development, May 9, 2016 and the County of Los Angeles Department of Public Works Low Impact Development Standards Manual, February 2014. The LID report shall identify the required BMPs to be in place prior to project operation and maintenance.	Incorporate contractor responsibilities into applicable construction documents. Prepare LID report.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Permitting
WQ-3	In the event that groundwater is encountered during excavation, the construction contractor for each capital improvement site where groundwater is present shall comply with the provisions of the General Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2013-0095, NPDES Permit No. CAG994004), effective July 6, 2013 (known as the Dewatering Permit), or NPDES General Permit for Limited Threat Discharges to Surface Waters (Order No. R6T-2014-009, NPDES Permit No. CAG996001) as they relate to discharge of non-stormwater dewatering wastes. The two options to discharge shall be to the local storm drain system and/or to the sanitary sewer system, and the contractor shall obtain a permit from the RWQCB and/or the City of Los Angeles, respectively.	Incorporate contractor responsibilities into applicable construction documents. Obtain dewatering permits as applicable	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Permitting

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
WQ-4	In the event that groundwater is encountered during excavation associated with Canyon Siding Extension, the contractor shall comply with the provisions of the General Waste Discharge Requirements for Discharges of Treated Groundwater from Investigation and/or Cleanup of VOC Contaminated Sites to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2013-0043, NPDES Permit No. CAG914001), effective April 7, 2013 (known as the Dewatering Permit for contaminated sites), for discharge of non-stormwater dewatering wastes from contaminated sites impacted during construction. The two options to discharge shall be to the local storm drain system and/or to the sanitary sewer system, and the contractor shall require a permit from the RWQCB and/or the City of Santa Clarita, respectively.	Incorporate contractor responsibilities into applicable construction documents. Obtain dewatering permits as applicable.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Permitting
WQ-5	Metro/ Metrolink shall comply with the NPDES General Permit for Stormwater Discharges Associated with Industrial Activities (IGP; Order No. 2014-0057-DWQ, NPDES No. CAS000001) for demolished, relocated, or new industrial-related properties impacted by the project. This shall include preparation of industrial SWPPP(s), as applicable.	Incorporate contractor responsibilities into applicable construction documents. Prepare industrial SWPPP.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Permitting
NOISE AND VIBRATION				
NV-1	Metro/ Metrolink's contractor shall develop a Noise Control Plan demonstrating how noise criteria would be achieved during construction. The Noise Control Plan shall be designed to follow Metro requirements, include construction noise control measures, measurements of existing noise, a list of the major pieces of construction equipment that would 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 shall be approved by Metro/ Metrolink prior to initiating construction. Where the construction cannot be performed in accordance with the local noise ordinances construction noise standards, the contractor would investigate alternative construction measures that would result in lower sound levels. The noise limits for each	Incorporate contractor responsibilities into applicable construction documents. Prepare Noise Control and Monitoring Plan. Implement Noise Control and Monitoring Plan.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Permitting

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase

jurisdiction are shown in the following table, NV-1 Noise Limits.

NV-1 Noise Limits

Land Use	Noise Limit – Daytime [1] L_{eq} (dBA)	Noise Limit – Nighttime L_{eq} (dBA)
Any Residential – City of Los Angeles	Ambient +5 dBA	Ambient +5 dBA [2]
Single-Family Residential – Santa Clarita and Lancaster	75 [2]	60 [2, 3]
Multi-Family Residential – Santa Clarita and Lancaster	80 [2]	64 [2, 3]
Commercial	85 [2]	n/a [4]

[1] Daytime is defined as follows:
Los Angeles: 7 am – 9 pm (Mon-Fri), 8 am – 6 pm (Sat)
Santa Clarita: 7 am – 7 pm (Mon – Fri), 8 am – 6 pm (Sat)
Lancaster: 7 am – 8 pm (Mon – Sat)
[2] L.A County Code Limit
[3] Recommended limit if written permission is allowed for work outside of the "Daytime" defined hours
[4] Commercial properties are not typically sensitive at night.

The contractor would conduct noise monitoring to demonstrate compliance with contract noise limits. Noise-reducing methods that may be implemented by Metro/ Metrolink 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 achieve noise levels as close to the nighttime limits of the applicable City of Los Angeles, City of Santa Clarita or City of Lancaster standards as possible.
- Use specialty equipment with enclosed engines, acoustically attenuating shields, and/or high-performance mufflers.
- Locate equipment and staging areas away from noise-sensitive receivers.
- Limit unnecessary idling of equipment.
- Install temporary noise barriers, noise control curtains, and/or noise enclosures. This approach can be particularly effective for stationary noise sources such as compressors and generators. These methods may not be effective for elevated receivers; blocking line-of-sight is necessary.
- Reroute construction-related truck traffic away from local residential streets and/or sensitive receivers.
- Avoid impact pile driving where possible. Where geological

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	conditions permit, the use of drilled piles or a vibratory pile driver is generally quieter. • Use electric instead of diesel-powered equipment and hydraulic instead of pneumatic tools. • Where possible, minimize the use of impact devices such as jackhammers and hoe rams, using concrete crushers and pavement saws instead. • If all conventional noise control measures cannot achieve the noise levels of the applicable City of Los Angeles, City of Santa Clarita or City of Lancaster standards and unavoidable excessive exceedances of the noise limits are predicted, Metro/ Metrolink shall offer to temporarily relocate residents to a hotel. The Noise Control Plan shall define excessive exceedance of the noise limits and shall be approved by Metro/ Metrolink.			
NV-2	Specific measures to be employed to reduce or mitigate construction vibration impacts shall be developed by the contractor and presented in the form of a Vibration Monitoring Plan as part of the Noise Control Plan. Measurements shall be taken during peak vibration generating construction activities, and the results must be submitted to Metro/ Metrolink on a weekly basis. The following precautionary vibration mitigation strategies should be implemented to minimize the potential for damage to any structures and annoyance to occupants in the Project area: • **Alternative Construction Procedures**: If high-vibration construction activities must be performed close to structures, it may be necessary for the contractor to use an alternative procedure that produces lower vibration levels. Examples of high-vibration construction activities include the use of vibratory compaction or hoe rams next to sensitive buildings. Alternative procedures include use of non-vibratory compaction in limited areas and a concrete saw in place of a hoe ram to break up pavement.	Incorporate contractor responsibilities into applicable construction documents. Prepare Vibration Control Plan. Implement Vibration Control Plan.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	• **Occupant Temporary Relocation.** When construction or demolition must occur very close to the receiver, other less conventional vibration reduction techniques shall be employed. A vibration disturbance coordinator shall be established for affected sensitive occupants regarding vibration annoyance. Vibration levels shall be monitored at the affected uses to determine if vibration levels exceed the vibration annoyance criteria of 0.016 inches per second at residential uses and 0.022 inches per second at commercial uses during construction activity. If construction vibration results in exceedances of the vibration annoyance criteria, occupants shall be temporarily relocated to a hotel during construction times when vibration will be the greatest and most intrusive. Construction activities in non-residential areas shall be scheduled during non-operational hours of commercial uses.			
TRANSPORTATION				
TR-1	During the final engineering phase and at least 30 days prior to construction of each capital improvement, a construction Traffic Management Plan (TMP) shall be prepared by the contractor for each capital improvement including the Balboa Double Track Extension in the City of Los Angeles, the Canyon Siding Extension in the City of Santa Clarita, and the Lancaster Terminal Improvements in the City of Lancaster. Each TMP shall be reviewed and approved by Metro/ Metrolink, City of Los Angeles, City of Santa Clarita, City of Lancaster, and Caltrans, where applicable. The TMP shall identify proposed detour routes and construction traffic routes, including haul truck routes and preferred delivery/haul-out locations and hours. Lane and/or road closures shall be scheduled in consultation with the local public works departments associated with each capital improvement site to minimize disruptions to community traffic. The nearest local fire responders shall be notified, as appropriate, of traffic control plans, and lane and/or road closures as well as detour routes	Incorporate contractor responsibilities into applicable construction documents. Prepare a TMP. Implement TMP during construction.	Metrolink/Metro Construction Contractor	1. Metro 2. Final Design/ Permitting

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	and construction vehicle routes shall be coordinated with fire responders to minimize disruptions to emergency response routes. The TMP shall identify pedestrian and bicycle circulation and access detours in and around the affected stations, as well as temporary bus stop locations and signage, as applicable.			
TR-2	During final engineering design and prior to construction, Metro shall establish rail operating agreements and/or memoranda with Metrolink and Union Pacific Railroad (UPRR) to outline mutually agreed upon work windows and contractor operating restrictions. Such agreements shall identify performance objectives such as maximum allowed dwell times and/or on-time performance requirements to be achieved throughout construction, and how construction sequencing and railroad operational protocols would be incorporated into applicable construction documents (plans and specifications) and implemented to maintain the mutually agreed upon performance objectives during construction. Prior to construction, Metro/ Metrolink and the construction contractor shall prepare detailed construction phasing plans for each phase of construction that identify appropriate means and methods to maintain mutually agreed upon on-time performance objectives while minimizing impacts on pedestrians and passengers at Santa Clarita Station and/or Lancaster Terminal. Prior to construction, Metro and the construction contractor shall also coordinate with current rail operators to establish temporary construction detours for passengers at the Santa Clarita Station and Lancaster Terminal that correspond to detailed construction phasing plans to minimize impacts on passenger transfer times. Detailed construction phasing plans shall be deemed acceptable by Metrolink prior to commencement of construction activities that could affect regular Metrolink operations. Throughout the duration of construction, Metro/ Metrolink shall solicit UPRR's participation, as-needed, in construction	Establish rail operating agreement with Metrolink and UPRR. Prepare construction phasing plans. Establish passenger detours. Conduct as needed construction coordination meetings with Metrolink and UPRR.	Metrolink/Metro Construction Contractor	1. Metro 2. Pre-Construction/ Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	coordination meetings to evaluate the efficiency of the measures in place and Metro/ Metrolink and the construction contractor shall implement changes to means and methods during construction to ensure the performance objectives are maintained at an acceptable level throughout construction.			
TRIBAL CULTURAL RESOURCES				
TCR-1	Mitigation Measure **CUL-1** pertains specifically to archaeological involvement. The involvement of the Fernandeño Tataviam Band of Mission Indians and Gabrieleno Band of Mission Indians – Kizh Nation (Consulting Tribes) is detailed in Mitigation Measure **TCR-1**. For the purposes of Mitigation Measures **CUL-1** and **TCR-1**, ground disturbing activities include, but are not limited to, excavation, trenching, grading, and drilling. In addition to the Program Archaeologist and archaeological monitor, a Native American monitor from the Consulting Tribes shall be retained to monitor earth-moving activities. Native American monitoring shall be conducted on a rotational basis between the Consulting Tribes (Fernandeño Tataviam Band of Mission Indians and Gabrieleno Band of Mission Indians – Kizh Nation) during these construction activities, and attendance is ultimately at the discretion of the Consulting Tribes. Prior to commencement of any grading activities on site, the Program Archaeologist shall prepare a Cultural Resources Monitoring Plan (CRMP). The CRMP shall be reviewed by the Lead Agency and Consulting Tribes. The CRMP should include at a minimum: (1) the roles and responsibilities of the Program Archaeologist, archaeological monitor, and Native American monitor; (2) the definition of an Environmentally Sensitive Area (ESA) around the previously-identified prehistoric resources adjacent to the Canyon Siding Extension capital improvements area, (3) a description of monitoring procedures; (4) a description of the frequency of monitoring (e.g., full-time, part-time, spot checking); (5) a description of what types of resources may be encountered; (6) a description	Retain Consulting Tribal Monitor(s) for all ground disturbing activities as defined in Mitigation Measure**TCR-1**. Incorporate Native American Monitoring requirements into the CRMP. Implement CRMP Native American Monitoring requirements.	Metrolink/Metro Construction Contractor	1. Metro 2. Pre-Construction/ Construction

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	of circumstances that would result in the halting of work at the program site (e.g., what is considered a "significant" archaeological site); (7) a description of procedures to follow when a resource is encountered including curation procedures agreed upon by the Consulting Tribes; (9) communication/notification protocols; and (8) a description of monitoring reporting procedures. At the commencement of construction, Native American representatives from the Consulting Tribes shall provide a Worker Environmental Awareness Program (WEAP) training for all earth moving personnel and their supervisors. WEAP materials shall be developed and distributed to construction personnel over the lifetime of the program. The program shall inform personnel of the types of artifacts and features that may be encountered, the procedures to be followed if archaeological materials are unearthed during program excavation, contact information for the archaeological and Consulting Tribe personnel, and the regulatory requirements for the protection of archaeological resources including penalties for violations. The Native American monitor shall be present for all ground-disturbing activities in native soil (i.e., undisturbed, non-fill sediments) within the Balboa Double Track Extension and Lancaster Terminal Improvements sites. Within the Canyon Siding Extension site, the Native American monitor shall be present for all ground-disturbing activities within the ESA, including those in disturbed fill sediments. During ground-disturbing activities outside of the ESA within the Canyon Siding Extension capital improvement area, Native American monitoring shall be limited to ground-disturbing activities within native soil only. A sufficient number of Native American monitors shall be present each workday to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage.			

ID	Mitigation Measures	Monitoring Action	Responsible Party	1. Enforcement Agency 2. Monitoring Phase
	If an inadvertent discovery of archaeological materials is made during program-related construction activities, the Native American monitor shall have the authority to halt ground disturbing activities within 50 feet of the resource(s) and an ESA physical demarcation shall be constructed. The Program Archaeologist, Lead Agency, and Consulting Tribes shall be notified regarding the discovery. The procedures outlined in CRMP shall then be implemented.			

SOURCE: Terry A. Hayes Associates Inc., 2021.