



# Draft Environmental Impact Report

*Simi Valley Double Track and Platform Project*

March 2021



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## Abbreviations and Acronyms

AB	Assembly Bill
ACM	asbestos-containing materials
ACS	American Community Survey
ADA	Americans with Disabilities Act
AFY	acre feet year
AQMP	air quality management plan
AST	aboveground storage tank
AQMP	air quality management plan
bgs	below ground surface
BLM	Bureau of Land Management
BMP	best management practice
BRTR	Biological Resources Technical Report
BTU	British thermal unit
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAGN	Coastal California gnatcatcher
CalEPA	California Environmental Protection Agency
CALFire	California Department of Forestry and Fire Protection
CalGreen	California Green Building Standards
Cal/OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
CalSTA	California State Transportation Agency
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Office Association
CARB	California Air Resources Board
CBC	California Building Code
CBSC	California Building Standards Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQ	Council on Environmental Quality

CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH <sub>4</sub>	methane
CHP	California Highway Patrol
CHRIS	California Historical Resources Regional Information Center
CHSRA	California High-Speed Rail Authority
CIWMB	California Integrated Waste Management Board
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	CO <sub>2</sub> equivalent
CP	control point
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
CRPR	California Rare Plant Rank
CTP	Comprehensive Transportation Plan
CURB	City Urban Restriction Boundary
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DCM	Design Criteria Manual
DOC	Department of Conservation
DOT	Department of Transportation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
du/ac	dwelling units per acre
EDR	Environmental Data Resource
EIR	environmental impact report

EO	Executive Order
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
ESA	environmental site assessment
FAR	floor area ratio
FE	federally endangered
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rate Map
FHSZ	fire hazard severity zone
FP	fully protected
FR	Federal Register
FRA	Federal Railroad Administration
FT	federally threatened
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
GHG	greenhouse gas
GIS	geographic information system
GPD	gallons per day
GWP	global warming potential
H&H	hydrologic and hydraulic
HARP	Hotspots Analysis and Reporting Program
HCM	Highway Capacity Manual
HCP	hydromodification control plan
HEC-RAS	Hydrologic Engineering Center River Analysis System
HFC	hydrofluorocarbon
HMBP	hazardous materials release response plan
HMMP	hazardous materials management program
HQTA	High Quality Transit Area
HRA	health risk assessment
HSR	high-speed rail
ID	identification
IPCC	Intergovernmental Panel on Climate Change
IWMA	Integrated Waste Management Act

JD	jurisdictional determination
JDR	Jurisdictional Delineation Report
JSA	jurisdictional study area
KOP	key observation point
LA	load allocations
LACM	Natural History Museum of Los Angeles County
LBP	lead-based paint
LBVI	Least Bell's vireo
LCFS	Low-Carbon Fuel Standard
L <sub>dn</sub>	day-night average sound level
L <sub>eq</sub>	equivalent sound level
L <sub>eq</sub> (h)	equivalent sound level over a 1-hour time period
L <sub>eq</sub> (24h)	equivalent sound level over a 24-hour time period
LID	low impact development
L <sub>max</sub>	maximum sound level
LOS	level of service
LOSSAN	Los Angeles-San Diego-San Luis Obispo
LRA	Local Responsibility Area
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
MLD	most likely descendant
MP	Mile Post
MPO	metropolitan planning organization
MS4	Municipal Separate Storm Sewer System
MT	million tons
N <sub>2</sub> O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NAVD 88	North American Vertical Datum of 1988
NCCP	Natural Communities Conservation Planning
NCP	National Contingency Plan
NEHRP	National Earthquake Hazards Reduction Program
NFPA	National Fire Protection Association
NHPA	National Historic Preservation Act

NHTSA	National Highway Traffic Safety Administration
NIMS	National Incident Management System
NO <sub>2</sub>	nitrogen dioxide
NOI	Notice of Intent
NOP	Notice of Preparation
NO <sub>x</sub>	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRHP	National Register of Historic Places
O <sub>3</sub>	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PBDB	PaleoBiology Database
PFYC	potential fossil yield classification
PM	post mile
PM <sub>10</sub>	particulate matter less than 10 micron diameter
PM <sub>2.5</sub>	particulate matter less than 2.5 micron diameter
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
Project	Simi Valley Double Track and Platform Project
PTC	positive train control
QZRI	Quiet Zone Risk Index
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
RIWH	Risk Index With Horns
RMS	root-mean-square
ROG	reactive organic gases
ROW	right-of-way
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan

RWQCB	Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAB	South Coast Air Basin
SCCAB	South Central Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCH	State Clearinghouse
SCORE	Southern California Optimized Rail Expansion
SCRRA	Southern California Regional Rail Authority
SCS	Sustainable Communities Strategy
SE	state endangered
SEMS	Standardized Emergency Management System
SGMA	Sustainable Groundwater Management Act of 2014
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SLCP	short-lived climate pollutant
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	sulfur oxide
SPCC	Spill Prevention Control and Countermeasure
SR	State Route
SRA	State Responsibility Area
SSC	Species of Special Concern
SSM	supplemental safety measure
SWFL	Southwestern willow flycatcher
SWP	State Water Project
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCE	Temporary construction easements
TCR	tribal cultural resource



TDML	total maximum daily loads
TDS	total dissolved solids
TGM	Technical Guidance Manual
TIRCP	Transit and Intercity Rail Capital Program
TIS	Traffic Impact Study
TMP	transportation management plan
TSCA	Toxic Substances Control Act
U.S.	United States
UBC	Uniform Building Code
UCMP	University of California Museum of Paleontology
UPRR	Union Pacific Railroad
USACE	United States Army Corps of Engineers
USC	United States Code
USDOT	United States Department of Transportation
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
UWMPA	Urban Water Management Planning Act
VCAPCD	Ventura County Air Pollution Control District
VCFD	Ventura County Fire Department
VCL	Ventura County Line
VCTC	Ventura County Transportation Commission
VCW	Ventura County Waterworks
VCWPD	Ventura County Watershed Protection District
VdB	velocity decibel
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
WQAR	Water Quality Assessment Report
WUI	wildland urban interface

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# ES Executive Summary

## ES.1 Introduction

The Southern California Regional Rail Authority (SCRRA), as the California Environmental Quality Act (CEQA) lead agency, is proposing the Simi Valley Double Track and Platform Project (Project) to increase the operational capacity and service frequency on Metrolink's Ventura County Line (VCL) and at the existing Simi Valley Metrolink Station.

This environmental impact report (EIR) has been prepared in compliance with CEQA (California Public Resources Code [PRC], Division 13, Section 21000 et seq.) and the Guidelines for the Implementation of CEQA (California Code of Regulations [CCR], Title 14, Chapter 3, Section 15000 et seq.), as promulgated by the California Resources Agency and the Governor's Office of Planning and Research. The purpose of this environmental document is to disclose the potential environmental impacts associated with the Project.

## ES.2 Project Location and Study Area

The Project is located on a 2.20-mile segment of Metrolink's VCL. The Project study area begins at its western terminus at Sequoia Avenue and ends east of Hidden Ranch Drive, just west of the Arroyo Simi Railroad Bridge, within the City of Simi Valley. Figure 2-1 in Chapter 2, Project Description, shows the regional location of the Project.

The Project study area includes the Project footprint (or limits of probable construction) and a 500-foot buffer. Figure 2-2 in Chapter 2, Project Description, shows the Project's location in southern Simi Valley, the extent of the proposed improvements, and the Project study area. The Project study area is in an area of Simi Land Grant on the United States Geological Survey *Simi Valley East, California* 7.5-minute series topographical quadrangle. As shown on Figure 2-1 in Chapter 2, Project Description, the Project is located between Mile Post (MP) 436.20 and MP 438.40.

## ES.3 Project Goals Objectives

The goal of the Project is to facilitate increased operational capacity on Metrolink's VCL to accommodate 30-minute, bi-directional passenger rail service during peak commute times. The following objectives were identified for implementing the Project:

- Improve safety and reliability of the existing rail system.
- Increase operational capacity of the existing VCL passenger rail system and increase passenger capacity at the Simi Valley Station to enabled increased service frequency during peak commute times.
- Implement infrastructural improvements that will support future applications to the Federal Railroad Administration (FRA) for quiet zone status along the Project alignment.

These objectives would support the City's potential future application with the FRA for quiet zone status along the alignment.

## ES.4 Anticipated Agency Involvement

The following agencies are anticipated to be involved during Project development, construction, and future operations:

- FRA
- Federal Communications Commission
- Federal Transit Administration (FTA), Region 9
- California Public Utilities Commission (CPUC)
- California State Transportation Agency (CalSTA)
- California Department of Transportation (Caltrans)
- Regional Water Quality Control Board (RWQCB)
- South Coast Air Quality Management District (SCAQMD)
- Southern California Council of Governments (SCAG)
- City of Simi Valley
- Ventura County Transportation Commission (VCTC)
- Ventura County

## ES.5 CEQA Responsible and Trustee Agencies

The information in this EIR may also be used by other responsible agencies (i.e., agencies, other than the lead agency, that have a responsibility to approve the Project under CEQA), as defined by CEQA Guidelines Section 15381. Responsible agencies may include, but are not limited to, the following:

- California Public Utilities Commission
- City of Simi Valley
- Ventura County

The California Department of Fish and Wildlife (CDFW) is a CEQA trustee agency (i.e. an agency having jurisdiction, by law, over natural resources potentially affected by the Project), as defined by CEQA Guidelines Section 15386[a].

## ES.6 Anticipated Permits, Discretionary Actions, and Agency Approvals

The CEQA Guidelines require that an EIR identify the regulatory approvals anticipated for a project. This includes a list of responsible agencies other than the lead agency, which have discretionary approval authority over the Project. The following agencies, at minimum, are expected to use this EIR for Project-related discretionary actions and permitting processes:

- SCRRA
- FRA

- Federal Communications Commission
- CPUC
- RWQCB
- City of Simi Valley
- Ventura County

## ES.7 Summary of Impacts and Mitigation Measures

Table ES-1 summarizes potential Project-related environmental impacts, mitigation measures, and level of significance after implementation of proposed mitigation, if applicable. Those environmental resources that the Project would have no impact on are not included in Table ES-1; however, detailed analyses of these topics are provided in Section 3.1 through Section 3.15 of this EIR.

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**Table ES-1. Summary of Mitigation Measures**

Project Phase	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
<b>Section 3.1, Aesthetics</b>			
<i>Threshold 3.1-A: Have a substantial adverse effect on a scenic vista</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	No impact	No mitigation required.	No impact
<i>Threshold 3.1-C: Substantially degrade the existing visual character of quality of the site or its surroundings.</i>			
Construction	Potentially significant	AES-1. Temporary Screening.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.1-D: Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.</i>			
Construction	Potentially significant	AES-2. Minimize Nighttime Work and Screen Direct Lighting.	Less than significant
Operation	Potentially significant	AES-3. Screen Direct Lighting and Glare.	Less than significant
<b>Section 3.2, Air Quality</b>			
<i>Threshold 3.2-A: Conflict with or obstruct implementation of the applicable air quality plan</i>			
Construction	Potentially significant	AQ-1. Use of Tier 4 Construction Equipment.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.2-B: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is a nonattainment area for an applicable federal or state ambient air quality standard</i>			
Construction	Potentially significant	AQ-1. Use of Tier 4 Construction Equipment.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.2-C: Expose sensitive receptors to substantial pollutant concentrations</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.2-D: Result in other emissions (such as those leading to odors) affecting a substantial number of people</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant

**Table ES-1. Summary of Mitigation Measures**

Project Phase	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
<b>Section 3.3, Biological Resources</b>			
<i>Threshold 3.3-A: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.</i>			
Construction	Potentially significant	BIO-1. Implement Biological Resource Protection Measures During Construction. BIO-2. Avoid Impacts on Migratory and Nesting Birds. AQ-1. Use of Tier 4 Construction Equipment.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.3-B: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS.</i>			
Construction	Potentially significant	BIO-1. Implement Biological Resource Protection Measures During Construction. AQ-1. Use of Tier 4 Construction Equipment.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.3-C: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.</i>			
Construction	Potentially significant	BIO-1. Implement Biological Resource Protection Measures During Construction.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.3-D: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.</i>			
Construction	Potentially significant	BIO-1. Implement Biological Resource Protection Measures During Construction. BIO-2. Avoid Impacts on Migratory and Nesting Birds.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.3-E: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.</i>			
Construction	Potentially significant	BIO-3. Protected Trees.	Less than significant
Operation	No impact	No mitigation required.	No impact
<b>Section 3.4, Cultural Resources</b>			
<i>Threshold 3.4-A: Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5</i>			
Construction	Potentially significant	CUL-1. Cultural Monitoring.	Less than significant



**Table ES-1. Summary of Mitigation Measures**

Project Phase	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Operation	No impact	No mitigation required.	No impact
<i>Threshold 3.4-B: Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5</i>			
Construction	Potentially significant	CUL-1. Cultural Monitoring. CUL-2. Unanticipated Discoveries.	Less than significant
Operation	No impact	No mitigation required.	No impact
<i>Threshold 3.4-C: Disturb any human remains, including those interred outside of formal cemeteries</i>			
Construction	Potentially significant	CUL-3. Human Remains and Associated or Unassociated Funerary Objects.	Less than significant
Operation	No impact	No mitigation required.	No impact
<b>Section 3.5, Energy</b>			
<i>Threshold 3.5-A: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.5-B: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<b>Section 3.6, Geology, Soils, and Seismicity</b>			
<i>Threshold 3.6-Ai: Directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</i> <i>i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.6-Aii: Directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</i> <i>ii. Strong seismic ground shaking</i>			
Construction	Potentially significant	GEO-1. Final Geotechnical Report.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant

**Table ES-1. Summary of Mitigation Measures**

Project Phase	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
<i>Threshold 3.6-Aiii: Directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: iii. Seismic-related ground failure, including liquefaction</i>			
Construction	Potentially significant	GEO-1. Final Geotechnical Report.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.6-Aiv: Directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: iv. Landslides</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.6-B: Result in substantial soil erosion or the loss of topsoil</i>			
Construction	Potentially significant	HWQ-1. Prepare and Implement a Project-Specific SWPPP.	Less than significant
Operation	No impact	No mitigation required.	No impact
<i>Threshold 3.6-C: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse</i>			
Construction	Potentially significant	GEO-1. Final Geotechnical Report.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.6-D: Be located on expansive soil, as defined in Table 18-1-B of the UBC (1994), creating substantial direct or indirect risks to life and property</i>			
Construction	Potentially significant	GEO-1. Final Geotechnical Report.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.6-F: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature</i>			
Construction	Potentially significant	PAL-1. Paleontological Monitoring. PAL-2. Paleontological Spot Checks. PAL-3. Unanticipated Discovery of Paleontological Resources. PAL-4. Paleontological Reporting.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<b>Section 3.7, Greenhouse Gas Emissions</b>			
<i>Threshold 3.7-A: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment</i>			

**Table ES-1. Summary of Mitigation Measures**

Project Phase	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.7-B: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<b>Section 3.8, Hazards and Hazardous Materials</b>			
<i>Threshold 3.8-A: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.</i>			
Construction	Potentially significant	HAZ-1. HMMP.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.8-B: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.</i>			
Construction	Potentially significant	HAZ-1. HMMP. HAZ-2. Unanticipated Encounters with Contaminated Soils. HAZ-3. Soil Management Plan. HWQ-1. Prepare and Implement a Project-Specific SWPPP.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.8-D: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.</i>			
Construction	Potentially significant	HAZ-2. Unanticipated Encounters with Contaminated Soils. HAZ-3. Soil Management Plan.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.8-F: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.</i>			
Construction	Potentially significant	TRA-2. Maintain Pedestrian and Bicycle Access During Construction.	Less than significant
Operation	Potentially significant	TRA-1. Prepare a TMP for construction.	Less than significant
<i>Threshold 3.8-G: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.</i>			
Construction	Potentially significant	WLD-1. Provide accessible fire suppression equipment.	Less than significant

**Table ES-1. Summary of Mitigation Measures**

Project Phase	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Operation	Less than significant	No mitigation required.	Less than significant
<b>Section 3.9, Hydrology, Flooding and Water Quality</b>			
<i>Threshold 3.9-A: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.</i>			
Construction	Potentially significant	HWQ-1. Prepare and Implement a Project-Specific SWPPP. HWQ-2. Prepare a Final Drainage Plan. HWQ-3. Prepare a Hydrologic and Hydraulic Analysis.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.9-B: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.9-Ci: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would</i>  <i>i. Result in substantial erosion or siltation on- or off-site</i>			
Construction	Potentially significant	HWQ-1. Prepare and Implement a Project-Specific SWPPP.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.9-Cii: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would</i>  <i>ii. Increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site</i>			
Construction	Potentially significant	HWQ-1. Prepare and Implement a Project-Specific SWPPP. HWQ-2. Prepare a Final Drainage Plan.	Less than significant
Operation	Potentially significant	HWQ-2. Prepare a Final Drainage Plan.	Less than significant
<i>Threshold 3.9-Ciii: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would</i>  <i>iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff</i>			
Construction	Potentially significant	HWQ-2. Prepare a Final Drainage Plan.	Less than significant

**Table ES-1. Summary of Mitigation Measures**

Project Phase	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.9-Civ: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would</i>			
<i>iv. Impede or redirect flood flows</i>			
Construction	Potentially significant	HWQ-3. Prepare a Hydrologic and Hydraulic Analysis.	Less than significant
Operation	Potentially significant	HWQ-3. Prepare a Hydrologic and Hydraulic Analysis.	Less than significant
<i>Threshold 3.9-D: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.</i>			
Construction	Potentially significant	HWQ-1. Prepare and Implement a Project-Specific SWPPP.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.9-E: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<b>Section 3.10, Land Use and Planning</b>			
<i>Threshold 3.10-A: Physically divide an established community.</i>			
Construction	Potentially significant	TRA-1. Prepare a TMP for Construction. TRA-2. Maintain Pedestrian and Bicycle Access During Construction	Less than significant
Operation	No impact.	No mitigation required.	No impact.
<i>Threshold 3.10-B: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.</i>			
Construction	Potentially significant	AES-1. Temporary Screening AES-2. Minimize Nighttime Work and Screen Direct Lighting AQ-1. Use of Tier 4 Construction Equipment BIO-1. Implement Biological Resource Protection Measures During Construction. BIO-2. Avoid Impacts on Migratory and Nesting Birds. BIO-3. Protected Trees. CUL-1. Cultural Monitoring. CUL-2. Unanticipated Discoveries. CUL-3. Human Remains and Associated or Unassociated Funerary Objects. HAZ-1. HMMP.	Less than significant

**Table ES-1. Summary of Mitigation Measures**

Project Phase	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
		NV-1. Employ Noise- and Vibration-reducing Measures During Construction. NV-2. Prepare a Community Notification Plan for Project Construction. PAL-1. Paleontological Monitoring. PAL-2. Paleontological Spot Checks. PAL-3. Unanticipated Discovery of Paleontological Resources. TRA-1. Prepare a TMP for Construction. TRA-2. Maintain Pedestrian and Bicycle Access During Construction. WLD-1. Provide Accessible Fire Suppression Equipment.	
Operation	Less than significant	No mitigation required.	Less than significant
<b>Section 3.11, Noise and Vibration</b>			
<i>Threshold 3.11-A: Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.</i>			
Construction	Potentially significant	NV-1. Employ Noise- and Vibration-reducing Measures During Construction. NV-2. Prepare a Community Notification Plan for Project Construction.	Potentially significant
Operation	Potentially significant	NV-3. Quiet zone Implementation. NV-4. Wayside Horns.	Less than significant
<i>Threshold 3.11-B: Result in the generation of excessive groundborne vibration or groundborne noise levels.</i>			
Construction	Potentially significant	NV-1. Employ Noise- and Vibration-reducing Measures During Construction. NV-2. Prepare a Community Notification Plan for Project Construction.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<b>Section 3.12, Transportation and Traffic</b>			
<i>Threshold 3.12-A: Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.</i>			
Construction	Potentially significant	TRA-1. Prepare a TMP for Construction. TRA-2. Maintain Pedestrian and Bicycle Access During Construction.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.12-C: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).</i>			
Construction	Potentially significant	TRA-1. Prepare a TMP for Construction.	Less than significant

**Table ES-1. Summary of Mitigation Measures**

Project Phase	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Operation	Potentially significant	TRA-3. Implement Pre-signals or Comparable Measure(s).	Less than significant
<i>Threshold 3.12-D: Result in inadequate emergency access.</i>			
Construction	Potentially significant	TRA-1. Prepare a TMP for Construction. TRA-2. Maintain Pedestrian and Bicycle Access During Construction.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<b>Section 3.13, Tribal Cultural Resources</b>			
<i>Threshold 3.13-A: Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC 5020.1(k).</i>			
Construction	Potentially significant	CUL-2. Unanticipated Discoveries.	Less than significant
Operation	No impact	No mitigation required.	No impact
<i>Threshold 3.13-B: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC 5024.1. In applying the criteria set forth in subdivision (c) of PRC 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</i>			
Construction	Potentially significant	CUL-2. Unanticipated Discoveries. CUL-3. Human Remains and Associated or Unassociated Funerary Objects.	Less than significant
Operation	No impact	No mitigation required.	No impact
<b>Section 3.14, Utilities and Service Systems</b>			
<i>Threshold 3.14-A: Require or result in the relocation or construction of new or expanded water treatment or stormwater drainage, electrical power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects.</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.14-B: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.14-C: Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.</i>			
Construction	Less than significant	No mitigation required.	Less than significant

**Table ES-1. Summary of Mitigation Measures**

Project Phase	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.14-D: Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.14-E: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<b>Section 3.15, Wildfire</b>			
<i>Threshold 3.15-A: Substantially impair an adopted emergency response plan or emergency evacuation plan.</i>			
Construction	Potentially significant	TRA-1. Prepare a TMP for Construction.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.15-B: Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?</i>			
Construction	Potentially significant	WLD-1. Provide Accessible Fire Suppression Equipment. TRA-2. Maintain Pedestrian and Bicycle Access During Construction.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant
<i>Threshold 3.15-C: Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?</i>			
Construction	Potentially significant	TRA-1. Prepare a TMP for Construction. WLD-1. Provide Accessible Fire Suppression Equipment.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant



**Table ES-1. Summary of Mitigation Measures**

Project Phase	Significance Determination (Before Mitigation)	Proposed Mitigation Measures	Significance Determination (After Mitigation)
<i>Threshold 3.15-D: Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?</i>			
Construction	Less than significant	No mitigation required.	Less than significant
Operation	Less than significant	No mitigation required.	Less than significant

Notes:

CDFW=California Department of Fish and Wildlife; CRHR=California Register of Historical Resources; GHG=greenhouse gas; HMMP=hazardous materials management plan; SWPPP=Stormwater Pollution Prevention Plan; TMP=transportation management plan; UBC=Uniform Building Code; USFWS=United States Fish and Wildlife Service

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## ES.8 Significant and Unavoidable Environmental Impacts

Section 15216.2(b) of the CEQA Guidelines requires EIRs to include a discussion of any significant environmental impacts that cannot be avoided if the Project is implemented. Sections 3.1 through 3.15 of this EIR provide a detailed analysis of all significant environmental impacts related to the Project; identifies feasible mitigation measures, where feasible, that could avoid or reduce these significant impacts; and, presents a determination as to whether these mitigation measures would reduce potential impacts to a level that is less than significant. Section 4.0, Cumulative Impacts, of this EIR identifies the significant cumulative impacts resulting from the combined impacts of the Project and related projects considered in cumulative analysis. If a specific impact in either of these sections cannot be fully reduced to a less than significant level, it is considered a significant and unavoidable impact.

Implementation of the Project would not result in significant and unavoidable impacts.

## ES.9 Project Alternatives

Section 15126.6(a) of the CEQA Guidelines requires that an EIR “describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project, but would avoid or substantially lessen any of the significant effects of the Project, and evaluate the comparative merits of the alternatives.” A summary of the alternatives evaluated in this EIR is provided below:

- No Project Alternative – the No Project Alternative assumes that none of the improvements to the Simi Valley Station would be constructed and existing conditions would remain within the existing railroad corridor, including existing operational limitations.
- Alternative 1 – Reduced Main Track 2 Platform and Construction Staging, would include a 14-foot-wide platform compared with the standard 16-foot-wide platform. Additionally, the northern ramp wall for the Main Track 2 ramp would be situated under the reduced Main Track 2 platform which would reduce 1.5-feet of ROW acquisition and remove the TCE for the staging area needed from a multifamily property located south of the newly proposed Main Track 2 platform at 5008 Arroyo Lane. This alternative would also consolidate construction staging and laydown in the northwest portion of the parking lot at the Simi Valley Station. Alternative 1 achieves reductions in ROW impact.

## ES.10 CEQA Environmentally Superior Alternative

The no Project alternative would avoid the construction and operational impacts identified for the Project. However, the No Project alternative does not meet the Project objectives and is inconsistent with *Connect SoCal – The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS)* (SCAG 2020a) and *California State Rail Plan* (Caltrans 2018).

Additionally, CEQA Guidelines Section 15126.6(e)(2) states that “if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” Even though Alternative 1 would be required to implement the same mitigation measures as the proposed Project, this alternative would be capable of reducing land use, visual, drainage, and noise impacts to the multifamily property located south of the proposed Main Track 2 platform. Therefore, Alternative 1 is environmentally superior to the Project.

## ES.11 Areas of Controversy

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

During the public comment period for the CEQA Notice of Preparation (NOP), various comment letters were received regarding the Project. The comments submitted on the NOP during the public review and comment period are included in Appendix A of this EIR. In general, areas of potential controversy known to SCRRA pertain to the potential construction impacts of the Project. These issues were considered in the preparation of this EIR and are addressed in the environmental impact analysis presented in Sections 3.1 through 3.15. Areas of known controversy are briefly summarized below.

- Concerns related to construction of the Project were identified related to the following issue areas:
  - Aesthetics – Construction of the Project may result in short-term visual impacts and nighttime lighting.
  - Noise and Vibration – Construction of the Project may result in the temporary increase of noise and vibration. These activities would be required during nighttime hours.
  - Transportation and Traffic – Construction of the Project may result in temporary disruptions to the circulation system. Bicycle access during and following construction was also identified as an issue of concern.
  - Cultural Resources – Construction of the Project may result in encountering significant archeological materials.
  - Hydrology, Flooding, and Water Quality – Placement of the Project facilities including track infrastructure and new station platform would occur within a delineated 100-year flood hazard area, including areas designated Zone AE (Floodway). Although multiple drainage improvements are contemplated by other agencies (e.g., Ventura County Flood Control and watershed Protection District) that would effectively reduce the threat of flooding throughout the Arroyo Simi, the timing of these projects is unknown, and their implementation is outside SCRRA's control. Based on this context and the fact that operations would likely start in advance of the completion of the necessary flood control projects, rail operations could be affected by flooding until these improvements are completed.

## ES.12 Issues to be Resolved

Section 15123(b)(3) of the CEQA Guidelines requires a discussion of issues to be resolved, including a choice of alternatives and whether or how to mitigate significant impacts.

# 1 Introduction

This Draft Environmental Impact Report (EIR) was prepared by the Southern California Regional Rail Authority (SCRRA) for the Simi Valley Double Track and Platform Project (Project) located in the City of Simi Valley, California. This EIR has been prepared in compliance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC], Division 13, Section 21000 et seq.) and the Guidelines for the Implementation of CEQA (California Code of Regulations [CCR], Title 14, Chapter 3, Section 15000 et seq.), as promulgated by the California Resources Agency and the Governor’s Office of Planning and Research (OPR). The purpose of this environmental document is to disclose the potential environmental impacts associated with the Project.

## 1.1 Project Background

The proposed Project is a component of Metrolink’s Southern California Optimized Rail Expansion (SCORE) Program, which is a system-wide capital improvement program with the objective of increasing the frequency of passenger rail service on existing routes and accelerating progress towards Metrolink’s Tier 4 locomotive conversion initiative. In alignment with the Southern California Association of Governments (SCAG) *Connect SoCal: 2020-2045 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS)*, a 25-year planning and implementation framework for Southern California’s rail network, SCRRA has identified railroad improvements throughout the Metrolink system that would improve safety, enable more frequent service, and provided increased service reliability (SCAG 2020a).

As part of the SCORE Program, Metrolink performed a comprehensive operational analysis to identify and prioritize major bottlenecks within its existing system—including along the Ventura Subdivision—and to identify priority projects that support these operational objectives. The proposed Project represents a priority (or Phase 1) project for Metrolink’s Ventura Subdivision as part of the SCORE Program.

Metrolink currently operates passenger rail service on the Ventura County Line (VCL) through the Project area with station stops at the existing Simi Valley Station. With Project implementation, as well as completion of the other VCL projects, Metrolink service would increase, providing up to 48 revenue trains per day on the VCL (see Section 2.2.3 in Chapter 2, Project Description for details). The existing rail infrastructure at the Simi Valley Station and within portions of the rail corridor to the east and west does not provide adequate operational capacity to serve future passenger rail frequency envisioned under SCORE. The proposed Project improvements would facilitate SCORE service objectives and would enhance pedestrian safety, service reliability, and other environmental benefits, including the implementation of quiet zones within the Project study area.

## 1.2 Project Overview

SCRRA is proposing the Project to improve safety at the Simi Valley Station and to increase operational capacity on Metrolink’s VCL. The Project includes new rail infrastructure within existing railroad right-of-way (ROW) from Sequoia Avenue east to the Arroyo Simi Railroad Bridge just south of Stearns Street in the City of Simi Valley, California. Specifically, the Project would add a second main track along a 2.20-mile segment of Metrolink’s existing VCL, as well as a new side platform (south of the existing platform) and pedestrian underpass at the existing Simi Valley Station, thereby

increasing the passenger capacity on Metrolink’s VCL. In addition, an existing signal at Sycamore Drive would be relocated, and a new signal would be installed approximately 2,000 feet west of Erringer Road (see Chapter 2, Project Description, for details).

## 1.3 EIR Intended Uses

All discretionary projects in the State of California are required to comply with CEQA if implementation of the project has the potential to result in either a direct physical change to the environment or a reasonably foreseeable indirect physical change to the environment. More specifically, a project requires environmental review if it incorporates a discretionary action undertaken by a public agency. Discretionary actions are activities that are supported in whole, or in part, through public agency contracts, grants, subsidies, etc.; or activities requiring a public agency to issue a lease, permit, license, certificate, or other entitlement. If the project may have a significant impact on any environmental resource, an EIR must be prepared. In accordance with Section 15121(a) of the CEQA Guidelines, the purpose of an EIR is as follows:

*An EIR is an informational document, which will inform public agency decision makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.*

Pursuant to the CEQA Guidelines, SCRRA as the CEQA lead agency, has identified an accurate, stable, and finite description of the “project” in this EIR to facilitate a consideration of reasonably foreseeable direct and indirect changes to the environment and public and agency comment at the local and state level. SCRRA is preparing this project-level EIR to provide information to public agencies, the general public, and decision makers regarding the Project-specific and cumulative environmental impacts of the Project. This EIR also identifies feasible mitigation measures that would avoid or reduce significant impacts resulting from implementation of the Project.

This EIR will be used by SCRRA’s Board of Directors to inform decisions regarding Project approval and implementation. The EIR may also be used by CEQA responsible and trustee agencies (i.e., local jurisdictions and state agencies) for anticipated permits and approvals from these agencies, as required for the Project.

### 1.3.1 CEQA Responsible and Trustee Agencies

The information in this EIR may also be used by other agencies involved with the Project that have a responsible agency role under CEQA, including but not limited to the following:

- Regional Water Quality Control Board (RWQCB)
- California Public Utilities Commission (CPUC)
- California Department of Fish and Wildlife (CDFW)
- Federal Railroad Administration (FRA)
- City of Simi Valley
- Ventura County

- Ventura County Transportation Commission (VCTC)
- Affected utility providers

CDFW is a CEQA trustee agency (Section 15386[a] of the CEQA Guidelines) and must be notified if the Project involves fish and wildlife of the state's rare and endangered native plants, wildlife areas, and ecological reserves.

## 1.4 Document Organization

The content and format of this EIR meet the current requirements of CEQA and the CEQA Guidelines. This EIR is organized into the following chapters with supporting technical appendices, so that the reader can easily obtain information about the Project and its specific issues.

**Executive Summary:** This chapter provides a summary of the potential impacts, mitigation measures, and impact conclusions associated with the Project and includes a summary of alternatives to the Project. Areas of controversy and issues to be resolved are also discussed.

**Chapter 1 – Introduction:** This chapter describes the purpose and use of the EIR and the organization of the EIR. This chapter provides a description of the NOP and scoping process. A list of environmental topics addressed in the EIR is provided.

**Chapter 2 – Project Description:** This chapter provides a detailed description of the Project, Project components, and discretionary actions, as well as identifies the overall objectives for the Project.

**Chapter 3 – Environmental Analysis, Impacts and Mitigation:** For each environmental issue, this chapter presents the existing environmental setting and conditions before Project implementation, regulatory environment, methods and assumptions used in the impact analysis, thresholds for determining significance, impacts that would result from the Project, mitigation measures that would eliminate or reduce significant impacts, and the level of significance of each impact area after implementation of Project-specific mitigation.

**Chapter 4 – Cumulative Impacts:** This chapter identifies cumulative impacts.

**Chapter 5 – Alternatives:** This chapter describes the range of alternatives considered by SCRRA and provides a comparative analysis of the Project's environmental impacts for each alternative. Additionally, this chapter identifies the environmentally superior alternative.

**Chapter 6 – Economic, Social and Growth-Inducing Effects:** This chapter identifies growth-inducing impacts associated with Project implementation.

**Chapter 7 – Other CEQA Considerations:** This chapter identifies significant irreversible environmental changes, impacts found not to be significant, and significant and unavoidable environmental impacts as a result of Project implementation.

**Chapter 8 – References:** This chapter identifies the documents (printed references) and individuals (personal communications) consulted in preparing this EIR.

**Chapter 9 – Preparers:** This chapter identifies the individuals involved in preparing this EIR and the organizations and persons consulted.

**Technical Appendices:** This section presents data supporting the analysis or contents in this EIR. Copies of these reports are posted on SCRRA’s website ([metrolinktrains.com/score](http://metrolinktrains.com/score)). In addition, CD technical appendices will be available with the printed EIRs on file at the following locations during normal business hours, or hours posted in response to the COVID-19 pandemic:

- SCRRA headquarters, located at 900 Wilshire Boulevard, Suite 1500, Los Angeles, California 90017;
- The Los Angeles County Clerk, located at 12400 Imperial Highway, Norwalk, California 90650;
- The Simi Valley Public Library, located at 2969 Tapo Canyon Road, Simi Valley, California 93063; and,
- The County of Ventura Clerk Recorder, located at Hall of Administration, Main Plaza, 800 South Victoria Avenue, Ventura, California 93009-1260.

## 1.5 Notice of Preparation and Scoping Meeting

SCRRA began the environmental review process pursuant to CEQA by sending out a Notice of Preparation (NOP) (Appendix A of this EIR). The NOP was first distributed locally to interested local public agencies and the general public, and then to the State Clearinghouse (SCH) for distribution to state responsible and trustee agencies. The CEQA-required 30-day NOP review period began November 6, 2020 and identified that SCRRA intended to prepare an EIR for the Project. The NOP provided the general public and local public agencies with an opportunity to comment on the Project and the scope and content of environmental issues to be examined in the EIR. SCRRA extended the NOP review period beyond the CEQA-mandated 30 days and accepted comments through December 18, 2020.

The NOP was distributed to the public through mail and advertisements. The NOP was also made available on the Project website and was published in several local, multicultural publications in different languages, including the following: Simi Valley Acorn (print and digital), Ventura County Star (print), and a Spanish-language ad in Vida (print).

In addition, SCRRA held a virtual public scoping meeting for the Project to further obtain input as to the scope of environmental issues to be evaluated in the EIR. The scoping meeting was held on November 18, 2020, from 5:30 to 6:30 p.m., and accessible via Zoom ([us02web.zoom.us/j/85093984326](https://us02web.zoom.us/j/85093984326)) or by phone (877-853-5257 or 888-475-4499). In addition, a Virtual Meeting Room ([metrolinktrains.com/score](http://metrolinktrains.com/score)) was made available from Wednesday, November 18 through Friday, December 18 to view the Project collaterals. A feedback station was available in the Virtual Meeting Room.

At the virtual scoping meeting, members of the public were invited to ask questions regarding the Project and the environmental review process and comment both verbally and in writing on the scope and content of the EIR. Written comments received during the 30-day review period for the NOP, as well as during the public scoping meeting, are included in Appendix A of this EIR.



## 1.6 Environmental Topics Addressed

This EIR addresses the potential environmental impacts of the Project and was prepared following input from the public and the responsible and affected agencies, through the EIR scoping process, as discussed previously. The contents of this EIR is based on public and agency input. The following environmental topics are analyzed in Chapter 3, Environmental Analysis, Impacts, and Mitigation, of this EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology, Flooding, and Water Quality
- Land Use and Planning
- Noise and Vibration
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfires

## 1.7 Documents Incorporated by Reference

The following environmental documents and supporting environmental analysis are incorporated by reference into this EIR per Section 15150 of the CEQA Guidelines:

- 2020-2045 RTP/SCS (SCAG 2020a) and Program EIR (SCH #2019011061).
  - The 2020-2045 RTP/SCS EIR is being incorporated by reference for its analysis of cumulative impacts associated with increasing passenger rail along the VCL.
- *Simi Valley General Plan Environmental Impact Report* (Simi Valley General Plan EIR) (City of Simi Valley 2012a) (SCH #2009121004)
  - The Simi Valley General Plan EIR is being incorporated by reference for localized analysis of flooding issues in both the City and study area; and potential overriding impacts related to flooding.

## 1.8 EIR Processing

This Draft EIR is being distributed to interested agencies, stakeholder organizations, and individuals for review and comment. This distribution starts a 45-day comment period where interested parties have an opportunity to express their views regarding the environmental impacts of the Project and public agencies may offer information pertinent to potential Project permits, authorizations, and approvals and inform SCRRA of their CEQA-responsible and trustee agency role for the Project. The document is available for review by the public on SCRRA's website (<https://metrolinktrains.com/about/agency/score/simi-valley-project/>) and at the following locations during normal business, or hours posted in response to the COVID-19 pandemic:

- SCRRA headquarters, located at 900 Wilshire Boulevard, Suite 1500, Los Angeles, California 90017;
- The Los Angeles County Clerk, located at 12400 Imperial Highway, Norwalk, California 90650;
- The Simi Valley Public Library, located at 2969 Tapo Canyon Road, Simi Valley, California 93063; and,
- The County of Ventura Clerk Recorder, located at Hall of Administration, Main Plaza, 800 South Victoria Avenue, Ventura, California 93009-1260.

## 1.9 Comments Requested

This Draft EIR is being distributed for a 45-day period that will begin on March 18, 2021, and end on May 2, 2021. Written comments should be sent to the following address:

Chris Haskell, Project Manager  
Southern California Regional Rail Authority  
900 Wilshire Boulevard, Suite 1500, Los Angeles, California 90017  
213.452.0242

Comments may be provided via online comment form at <https://metrolinktrains.com/about/agency/score/simi-valley-project/> or via email. Please include the Project title in the subject line, attach comments in Microsoft Word format, and include the commenter's U.S. Postal Service mailing address. Email comments should be directed to 900 Wilshire Boulevard, Suite 1500, Los Angeles, CA 90017 or [communityrelations@scrra.net](mailto:communityrelations@scrra.net). SCRRA will respond to these comments in the Final EIR. All public comments must be received by 5:00 p.m., May 2, 2021, to facilitate incorporation into the Final EIR.

Once all comments have been assembled and reviewed, responses will be prepared to address significant environmental issues that have been raised in the comments. The responses will be included in the Final EIR.

## 2 Project Description

### 2.1 Project Overview

SCRRA is proposing the Project to improve safety at the Simi Valley Station and to increase operational capacity on Metrolink's VCL. The Project includes at-grade crossing improvements and the construction of new rail infrastructure. The Project would occur primarily within existing railroad ROW owned by SCRRA and Union Pacific Railroad (UPRR) from Sequoia Avenue east to the Arroyo Simi Railroad Bridge just south of Stearns Street in the City of Simi Valley, California. The Project would add 2.20 miles of main track and increase the passenger capacity at the Simi Valley Station by adding an additional platform and pedestrian undercrossing. In addition, an existing signal at Sycamore Drive would be relocated, and a new signal would be installed approximately 2,000 feet west of Erringer Road.

The objectives of the Project are to improve safety by adding pedestrian safety features and improve reliability by allowing more efficient train operations; allow for an hourly bidirectional service, a half-hourly regional train to dispatch in the peak direction, and an hourly express train in the peak direction along Metrolink's VCL, which operates on the Ventura Subdivision between Moorpark and Los Angeles Union Station; and include at-grade crossing improvements at Sequoia Avenue, Tapo Canyon Road, Tapo Street, East Los Angeles Avenue, and Hidden Ranch Drive in support of the city's future application with FRA for quiet zone status along the alignment.

### 2.2 Goals and Objectives

The Project includes the following objectives:

- Objective 1: Improve safety and reliability of the existing rail system
- Objective 2: Increase operational capacity of the existing VCL passenger rail system and increase passenger capacity at the Simi Valley Station
- Objective 3: Implement infrastructural improvements that will support the city's future applications to FRA for quiet zone status along the alignment

### 2.3 Project Location

For the purposes of this EIR, SCRRA defined a Project study area, which comprises the Project's physical footprint along the approximately 2.20-mile segment of SCRRA's Ventura Subdivision with a 500-foot buffer. The Project study area begins at its western terminus at Sequoia Avenue and ends east of Hidden Ranch Drive, just west of the Arroyo Simi Railroad Bridge, within the City of Simi Valley. Figure 2-1 shows the regional location of the Project. Figure 2-2 shows the Project's location in southern Simi Valley, the extent of the proposed improvements, and the Project study area. The Project study area is part of the Simi Land Grant on the United States Geological Survey *Simi Valley East, California* 7.5-minute series topographical quadrangle. As shown on Figure 2-2, the Project is predominantly located between Mile Post (MP) 436.20 and MP 438.40.

## 2.4 Project Components

As shown on Figure 2-3 (Sheet 1 through 9), the Project would include construction of a new side platform (south of the existing platform) and pedestrian underpass at the existing Simi Valley Station, the construction of a second main track along a 2.20-mile stretch of Metrolink’s existing Ventura Subdivision from MP 436.20 to MP 438.40, and the implementation of two new control points (CP) at MP 436.30 (CP Sequoia) and MP 438.40 (CP Arroyo) (Figure 2-3). New intermediate signals would be installed at MP 433.96, MP 435.13, and MP 437.30. Additionally, Project improvements would include supplemental safety measures (SSM) at the existing grade crossings at Sequoia Avenue, Tapo Canyon Street, Tapo Street, East Los Angeles Avenue, and Hidden Ranch Drive, which would support future applications by the city to FRA for quiet zone status along the alignment.<sup>1</sup> Existing wet and dry utilities (above and below grade) within the Project study area would also be protected in place or relocated pending final engineering design and final placement of the proposed infrastructure.

### 2.4.1 Physical Improvements

As stated above, the Project would include multiple improvements to the existing railroad infrastructure and Simi Valley Station. These improvements are described in more detail below.

#### Track and Civil

SCRRA proposes the construction of an approximately 2.20-mile segment of second mainline track, from Barnes Street in the west to Hidden Ranch Road in the east, to enhance operational capacity on Metrolink’s VCL. The track improvements are described in further detail below:

- Approximately 900 feet of the main track would be re-profiled east of CP Sequoia.
- West of Tapo Street (to Barnes Street), a new second track would be placed within SCRRA ROW. The new track would be constructed north of the existing main line track and would connect to the existing track east of Tapo Street to form Main Track 1.
- Approximately 900 feet of existing track between East Los Angeles Avenue and Tapo Street would be shifted to accommodate the new tracks tying into the existing track. In addition, an existing UPRR spur track between East Los Angeles Avenue and Tapo Street, within SCRRA ROW, would be shifted to accommodate the second track on the north side.
- Approximately 1,400 feet of existing track would be shifted between East Los Angeles Avenue to Simi Valley Station to accommodate the installation of a second track south of the existing track, within UPRR ROW. These two main tracks are shown and labeled as MT-1 and MT-2 on Figure 2-3 (Sheets 3 through 6). The new track on the south side of the ROW would connect to the existing track just east of Tapo Street, such that the new track east of Tapo Street and existing track west of Tapo Street form Main Track 2.

At the Simi Valley Station, the existing and proposed station platforms would be shifted eastward to maintain approximately 19-foot track centers for 150 feet beyond the platforms to accommodate the inter-track fence. The 19-foot track spacing through station limits would avoid placing track curvature

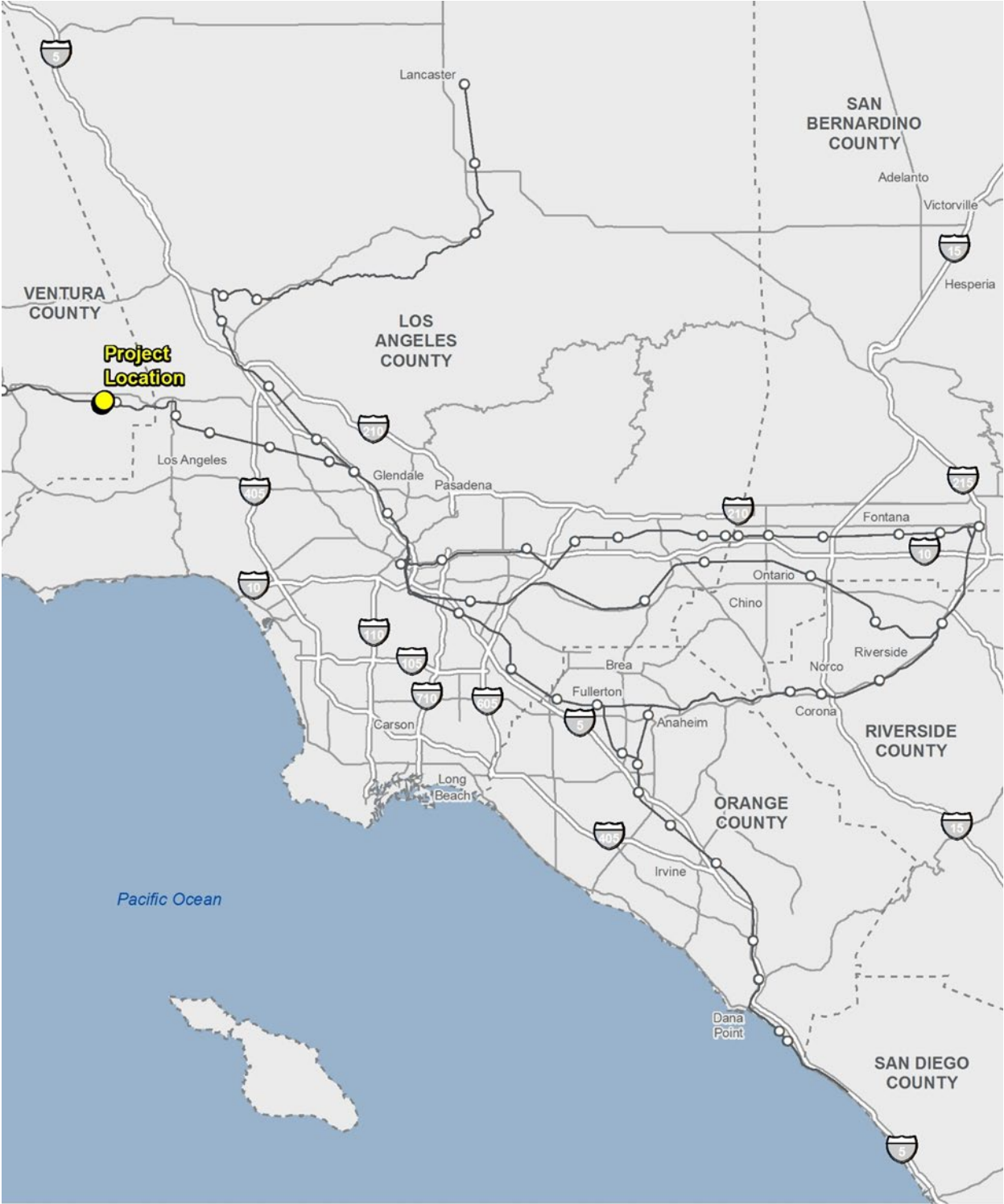
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<sup>1</sup> Upon completion of the Project, the City of Simi Valley would be required to complete the Quiet Zone Creation Process in accordance with the regulations, policies, and procedures established by the Federal Railroad Administration (FRA) in its Train Horn Final Rule, as amended on August 17, 2006 (49 Code of Federal Regulations [CFR] Part 222).

within Hidden Ranch Drive, avoid the need to obtain more ROW through the station, and maintain clearance from the Arroyo Simi Bike Path. The 780-foot length of the existing platform would be maintained, and the new platform would be a minimum of 680 feet. The existing track alignment would be maintained at four of the at-grade crossings (Sequoia Avenue, Tapo Canyon Street, Tapo Street, and East Los Angeles Avenue), but the track alignment would be shifted approximately 6 inches south at the Hidden Ranch Drive crossing to eliminate curvature between the platform and the crossing.

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Figure 2-1. Regional Location



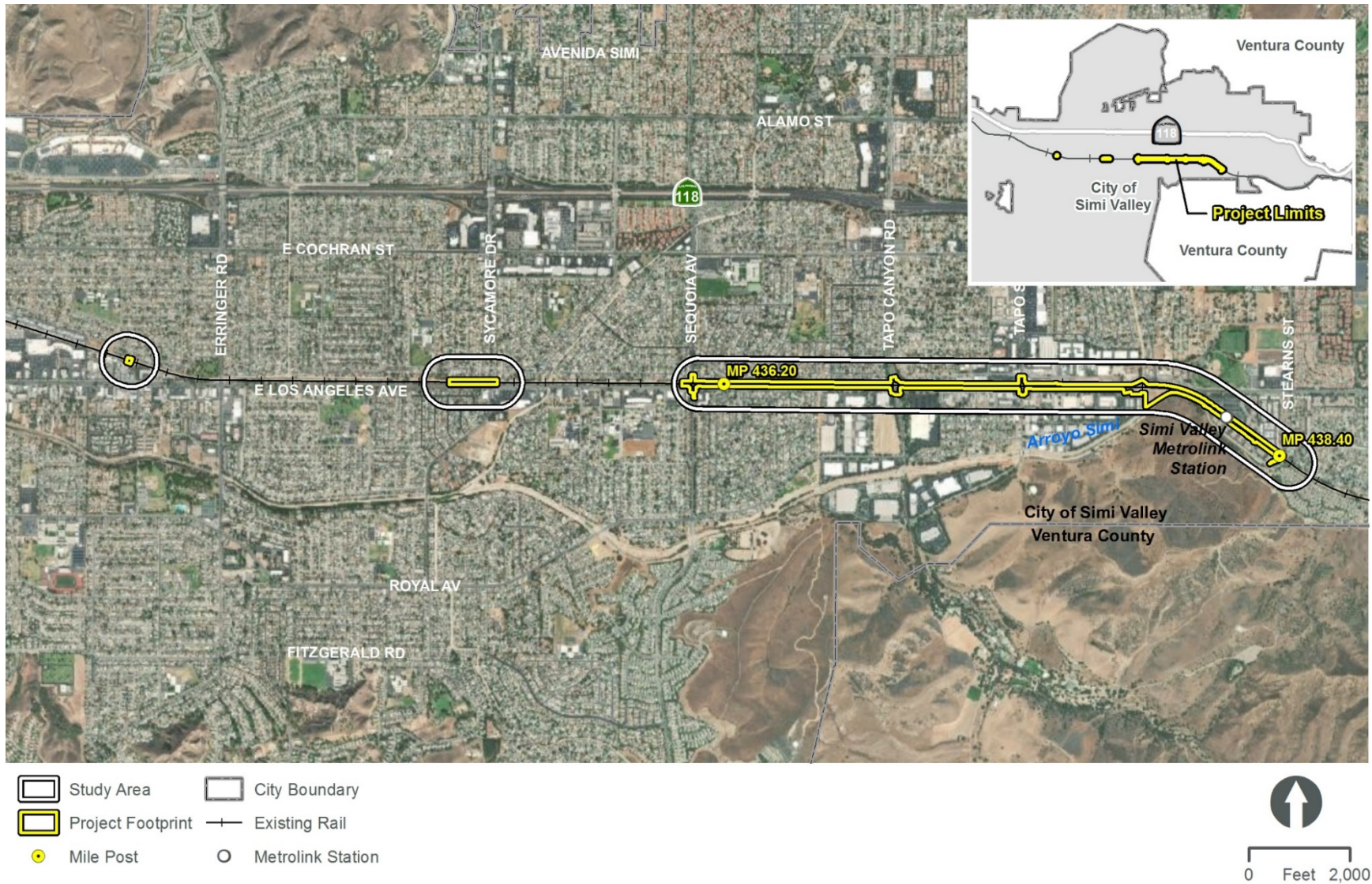
-  Project Location
-  County Boundary
-  Metrolink Station
-  Interstate
-  Metrolink Line
-  Highway



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Figure 2-2. Project Location



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Figure 2-3. Project Detail Map  
(Sheet 1 of 9)



-  Project Footprint
-  Existing Track
-  Mile Post
-  Grade Crossing Design
-  Rail ROW
-  Proposed Signal Equipment

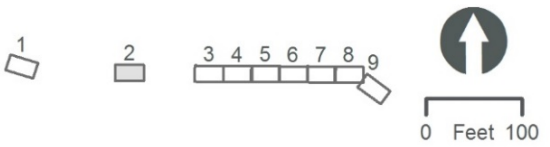
A scale bar showing a distance of 100 feet, divided into 10 segments. A north arrow is located to the right of the scale bar. The scale bar is labeled with numbers 1 through 9, and the text "0 Feet 100" is below it.

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Figure 2-3. Project Detail Map  
 (Sheet 2 of 9)



- Project Footprint
- Existing Track
- Mile Post
- Grade Crossing Design
- Rail ROW
- Proposed Signal Equipment
- Removal of Existing Signal Equipment



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Figure 2-3. Project Detail Map  
 (Sheet 3 of 9)



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Figure 2-3. Project Detail Map  
(Sheet 4 of 9)



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Figure 2-3. Project Detail Map  
 (Sheet 5 of 9)



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Figure 2-3. Project Detail Map  
 (Sheet 6 of 9)



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Figure 2-3. Project Detail Map  
 (Sheet 7 of 9)



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Figure 2-3. Project Detail Map  
 (Sheet 8 of 9)



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Figure 2-3. Project Detail Map  
 (Sheet 9 of 9)



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## At-Grade Crossings

The Project would include improvements and related SSMs at existing at-grade crossings within the Project study area to facilitate future quiet zone implementation. These at-grade crossing improvements would generally include the accommodation of the second mainline track and related ancillary improvements, except for at the Sequoia at-grade crossing, where a second track would not be constructed. These improvements would include sidewalk and pavement reconstruction; installation of pedestrian gates and warning signals; roadway restriping; pedestrian channelization; construction, of or modification to, a raised roadway median; and installation/modification of the roadway gates. Each at-grade crossing is further described below.

- **Sequoia Avenue.** The improvements at Sequoia Avenue include those described above, except a second mainline track crossing would not be constructed. A new railroad signal house would also be installed at this location.
- **Tapo Canyon Street.** In addition to the improvements described above, a new signal house would also be constructed at Tapo Canyon Street.
- **Tapo Street.** In addition to the improvements described above, a new signal house would also be constructed at Tapo Street.
- **East Los Angeles Avenue.** In addition to the improvements described above, a new signal house would also be constructed at East Los Angeles Avenue. Additionally, the existing access roads leading from the Arroyo Simi Bike Path would be modified to accommodate the proposed pedestrian improvements and the existing retaining wall located in the southeast quadrant would be reconstructed.
- **Hidden Ranch Drive.** In addition to the improvements described above, a new signal house would also be constructed at Hidden Ranch Drive.

## Railroad Signals and Communications

The track improvements would require new track panels, signals, and warning devices at the existing at-grade crossings. At Sequoia Avenue, Tapo Canyon Road, and Tapo Street, the pre-signals on the southwest quadrants would be located outside of the exit gates to improve visibility for southbound traffic approaching the tracks. Additional safety improvements would include adding flashers to the warning devices for vehicles turning onto Tapo Canyon Road from East Los Angeles Avenue. Maintenance access to the new signal houses would also be added.

The Project would include two new CPs. At the western limit of the new track, CP Sequoia would be installed approximately 0.20 mile east of Sequoia Avenue. CP Arroyo would be installed directly west of Arroyo Simi. The existing signal at Tapo Street would be modified to accommodate the second track. In order to account for the proximity to the new CP Sequoia, the existing signal at Sycamore Drive would be relocated approximately 700 feet west. To reduce headway times to CP Strathern, an additional signal would be added approximately 2,000 feet west of Erringer Road.

At each new signal site, the following improvements would be installed:

- 6-foot by 8-foot signal house with a security fence
- Wayside signal
- 40-foot positive train control (PTC) antenna tower

- 200-amp Southern California Edison power meter pedestal
- Underground railroad fiber optic cable with vault

### Simi Valley Station Enhancements

The existing Simi Valley Station consists of one side platform on the north side of the main line track with custom passenger canopies, a ticket vending machine, and an at-grade parking lot north of the platform. The existing path of travel to the station extends south from a bus stop at the platform entrance and from the adjacent parking lot. Station access would remain unchanged under the proposed Project.

The Project would construct a new pedestrian underpass, stairs, and ramps at the Simi Valley Station. The Project would change the existing platform configuration by demolishing approximately 250 feet of the curved portion of the platform on the west end of the station. To maintain the 780-foot length of the existing platform, the remaining platform would be extended approximately 95 feet to the west and 155 feet to the east, so that the entire length of the platform is along tangent track (i.e., where the track is not curved). At the east end of the station, a pedestrian underpass would be installed with ramp and stair access. The design of the pedestrian underpass would be in accordance with the most recent SCRRA Design Criteria Manual (DCM; Metrolink 2021). The proposed structure type is a precast concrete box structure, composed of sections, selected to minimize construction track windows (i.e., minimize impacts on train schedules). The internal dimensions of the proposed structure would be 14 feet wide by 9 feet, 10 inches high. The depth of cover (i.e., amount of fill between the structure and the tracks) would be minimized to facilitate construction and maintenance of the structure, as well as reduce the length of approach ramps and the number of stairs needed to reach the station platform. The design of the approach ramp retaining wall would be in accordance with the most recent SCRRA DCM. The new underpass would provide access to a new, second platform on the south side of the main line tracks, which would be a minimum of 680 feet long.

The Project would match the existing platform amenities (canopies, seating, signage, and lighting), and would include aesthetic treatments to the ramps, stairs, and underpass walls and ceiling. The Project would implement crime prevention through environmental design principles, which would include natural surveillance, natural access control, territorial reinforcement, and maintenance. The proposed station improvements would also meet National Fire Protection Association standards by providing passengers egress capabilities to vacate the platform within 4 minutes and to reach a point of safety within 6 minutes.

### Drainage Improvements

The proposed Project would include the following drainage improvements:

- Underdrains at the at-grade crossings where ditches are infeasible, and between the tracks at the platforms with the subgrade sloping toward the underdrain;
- Trackside ditches between at-grade crossings;
- Storm drain extensions or encasements where existing drainage systems intersect the proposed track infrastructure; and
- A new pump station at the low point of the pedestrian underpass at Simi Valley Station.

Portions of the Project study area overlap with areas mapped by the Federal Emergency Management Agency as having a 1 percent annual chance of flood hazard with a potential for shallow flooding (Figure 2-4). The proposed drainage improvements would be coordinated with the City of Simi Valley to provide the new track infrastructure with adequate flood protection and to maintain existing drainage patterns to the extent practical throughout the Project study area.

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Figure 2-4. Federal Emergency Management Agency Flood Hazard Map



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## Utilities

Utilities within the Project study area include gas lines, electrical power lines, communications/fiber optic lines, and municipal water and sewer pipes. The Project would result in multiple utility conflicts, and impacted utilities would either be protected in place, extended, or relocated. Specifically, the Project may require relocation or casing extensions for the following utilities:

- Crimson Pipeline gasoline pipeline (6- to 12-inch pipeline) at East Los Angeles Avenue and Tapo Canyon Road;
- Southern California Edison electrical transmission and distribution (above and below ground) lines at Sequoia Avenue, East Los Angeles Avenue, Goddard Avenue, and Hidden Ranch Drive;
- City of Simi Valley sewer and potable water lines at Sequoia Avenue, East Los Angeles Avenue, Tapo Canyon Road, and Hidden Ranch Drive;
- Southern California Gas natural gas lines at Sequoia Avenue, East Los Angeles Avenue, Tapo Street, Arroyo lane, and Hidden Ranch Drive;
- Golden State Water Company potable water lines at Sequoia Street, Goddard Avenue, Hietter Avenue, Tapo Street, and East Los Angeles Avenue; and,
- Fiber optic cables parallel to the ROW owned by the following communications companies:
  - Lumen Technologies (formerly CenturyLink)
  - Verizon
  - AT&T
  - Sprint
  - Wilshire Communication
  - Charter Communications

Potholing would be implemented in conjunction with final design to verify the locations of all existing utilities within the Project study area and to determine which utilities would be protected in place and which utilities would require relocation or abandonment.

## Right-of-Way

The majority of proposed improvements (including the proposed pedestrian underpass at the Simi Valley Station) would be constructed within the railroad ROW as shown on Figure 2-3 (Sheet 1 through 9). The northern 40 feet of ROW are owned by SCRRRA, while the southern 60 feet are owned by UPRR. The ramp and stair access from the undercrossing to the new platform would extend south of the existing UPRR ROW and require acquisition of a portion of the adjacent multifamily parcel.

Roadway improvements would generally be located outside of the railroad ROW and within the City of Simi Valley's roadway ROW. Improvements at Hidden Ranch Drive would require acquisition of portions of two adjacent multifamily parcels at the southern and western corners of the crossing. Additionally, potential sidewalk crossing improvements that would extend into unimproved areas of private properties near Hidden Ranch Drive would require temporary construction easements in order to access the proposed CP Arroyo area.

To connect with the Arroyo Simi Bike Path, the egress path from the new platform may also extend south of the ROW onto the Ventura County Flood Control District's property, or it could extend further west to connect to the bike path within UPRR ROW. Final ROW needs would be confirmed during final design; however, are not anticipated to differ significantly from those ROW requirements reflected herein.

## 2.4.2 Construction

Project construction would begin as early as April 2022 and would last for approximately 19 months. The work would be accomplished over four phases, beginning with construction of the pedestrian underpass and new platform at the station, and ending with reconstruction of 250 feet of the existing station platform. Construction may involve multiple crews working simultaneously and would include equipment such as track stabilizers, excavators, front-end loaders, rubber-tired dozers, cranes, haul trucks, and water trucks.

Construction would generally proceed in the following four phases over the 19-month construction schedule:

- Phase 1:
  - A number of third-party utility lines would be relocated in order to make way for the improvements of the proposed project. These utilities include fiber optic lines that run parallel to the Project study area, as well as many crossing utilities, such as water, gas, electric, and others. The relocations are due to the addition of a second main track, added second platform, inadequate depth underneath the rail, or insufficient casing length that spans the entire railroad right-of-way.
- Phase 2:
  - Construct structures, including the pedestrian underpass and new platform at Simi Valley Station and the retaining wall near the Arroyo Simi Bike Path
  - Construct track work, including the new main track (Main Track 1) outside of grade crossing limits and new turnouts, while maintaining service on the existing track
  - Construct signal houses, signal foundations, grade crossing warning devices and associated conduits
- Phase 3:
  - Construct track and roadway improvements at the at-grade crossings
  - Transfer rail service onto the newly constructed Main Track 1; take the existing track out of service for the second main track (Main Track 2) improvements
  - Finish installing signals at new CP Sequoia and CP Arroyo
- Phase 4:
  - Construct Main Track 2 track and upgrade existing from timber to concrete ties
  - Activate Main Track 2 track into service
  - Remove and reconstruct 250 feet of the existing Simi Valley Station platform and finish upgrading any remaining timber ties to concrete ties

Material and equipment imports and construction personnel would access the Project study area via walking points from the nearest fence access or staging area. Potential construction access points and staging areas have been identified within the ROW and are shown on Figure 2-3 (Sheets 3, 6, 7, 8, and 9). An additional staging area outside the ROW was identified between East Los Angeles Avenue and Arroyo Simi, as shown on Figure 2-3. The final construction staging area locations would be confirmed during design development.

Construction activities would be scheduled during time frames that allow for exclusive track occupancy by construction crews to minimize effects on Metrolink operations. To the greatest extent possible, construction activities would be scheduled during the daytime; however, nighttime work would be required to maximize construction work windows. The Project would also include weekend work when Metrolink service is reduced.

Prior to construction, coordination would be needed with regard to the bike trail and potential temporary construction closures. Dewatering is expected to be necessary during construction of the pedestrian underpass at the station and would be completed in accordance with applicable regulations.

### 2.4.3 Operations

The Project would improve safety and reliability on the VCL and at the Simi Valley Station and adds capacity to accommodate growth of Metrolink commuter train operations through the Project study area. The Project would install safety improvements at four grade crossings and create a new 2.20-mile double track segment through southern Simi Valley, which would reduce the distance of single-track territory through the Project study area. Passenger trains running along the Ventura Subdivision on the Metrolink VCL would be able to use this double track segment to pass uninterrupted through the Project study area rather than idling at the nearest location with two tracks, waiting for trains in the opposite direction to cross the single-track segment.

Project operations are projected to be fully realized in 2025. The Project would also provide faster, more frequent, and more reliable service by increasing on-time performance. As the population of Southern California increases, it is likely that additional passenger rail service would be added to the Metrolink VCL in the future to ease traffic congestion on freeways and local streets.

With Project implementation, as well as completion of the other VCL projects, Metrolink service would increase, providing up to 48 revenue trains per day on the VCL (Table 2-1).

**Table 2-1. 2019 Schedules and Proposed Service Schedules: Ventura County Line**

Schedule	Existing Service (2019)			Proposed Service (2025)		
	To Los Angeles <sup>a</sup>	From Los Angeles <sup>a</sup>	All	To Los Angeles <sup>a</sup>	From Los Angeles <sup>a</sup>	All
Weekday (total VCL)	16	17	33	24	24	48
<i>Weekday (extending through Project area)<sup>b</sup></i>	7	7	14	19	19	38
Saturday	0	0	0	1 <sup>c</sup>	1 <sup>c</sup>	2 <sup>c</sup>

**Table 2-1. 2019 Schedules and Proposed Service Schedules: Ventura County Line**

Schedule	Existing Service (2019)			Proposed Service (2025)		
	To Los Angeles <sup>a</sup>	From Los Angeles <sup>a</sup>	All	To Los Angeles <sup>a</sup>	From Los Angeles <sup>a</sup>	All
Sunday	0	0	0	0	0	0

Notes:

<sup>a</sup> VCL trains to or from Los Angeles originate or terminate in Ventura, Moorpark, Chatsworth, or Burbank. Future service includes trains originating and terminating in Van Nuys.

<sup>b</sup> Existing and proposed VCL train counts for the Project only consider train service extending to Moorpark and Ventura (i.e., traversing through the Project study area).

<sup>c</sup> VCL Saturday service would operate between April and October only.

VCL=Ventura County Line

## 2.5 Permits and Approvals

SCRRA, as the CEQA lead agency, has concluded that the Project is subject to the requirements of CEQA. Pending the completion of additional technical analysis, SCRRA will determine the appropriate level of documentation required to comply with CEQA.

Other potential Project approvals and permits may include, but are not limited to, the following:

- National Pollutant Discharge Elimination System (NPDES) Permit(s) from the Los Angeles RWQCB
- General Order(s) from the CPUC, including approval of SSMS
- Notice of Intent (NOI) by the City of Simi Valley for formation of the proposed quiet zones and approval from FRA
- Applicable permits (e.g., grading, traffic safety, floodplain, and roadway encroachment) from the City of Simi Valley and/or County of Ventura
- Permits from or agreements with affected utility providers

# 3 Environmental Analysis, Impacts, and Mitigation

## 3.1 Introduction to Environmental Analysis

This chapter provides an overview of the environmental analysis and presents the format for the environmental analysis in each topical section.

### 3.1.1 Environmental Topics Included in the Analysis

For each environmental issue area, this chapter presents the existing environmental setting and conditions before Project implementation, regulatory setting, methods and assumptions used in the impact analysis, thresholds for determining significance, impacts that will result from the Project, and mitigation measures that will eliminate or reduce significant impacts. The following environmental issue areas are analyzed in this chapter:

- Section 3.1, Aesthetics
- Section 3.2, Air Quality
- Section 3.3, Biological Resources
- Section 3.4, Cultural Resources
- Section 3.5, Energy
- Section 3.6, Geology, Soils, and Seismicity
- Section 3.7, Greenhouse Gas Emissions
- Section 3.8, Hazards and Hazardous Materials
- Section 3.9, Hydrology, Flooding, and Water Quality
- Section 3.10, Land Use and Planning
- Section 3.11, Noise and Vibration
- Section 3.12, Transportation and Traffic
- Section 3.13, Tribal Cultural Resources
- Section 3.14, Utilities and Service Systems
- Section 3.15, Wildfire

Chapter 4, Cumulative Impacts, provides the analysis of cumulative impacts based on the project-level findings and determinations in Sections 3.1 through 3.15.

### 3.1.2 Format and Content Used in the Analysis

For each environmental issue area considered in Chapter 3, Environmental Analysis, Impacts, and Mitigation, the basic format for the environmental analysis is as follows:

- Introduction
- Environmental Setting
- Regulatory Setting
- Impact Analysis
- Mitigation Measures
- CEQA Significance Conclusions After Mitigation

The content for each of these sections is described below.

#### Introduction

This chapter provides a brief summary of the environmental issue area to be analyzed. Documents incorporated by reference into the EIR analysis are identified in this sub-section, as applicable, for each environmental resource topic. The introduction also notes any previously certified environmental documentation that is incorporated by reference for the purposes of the resource-specific analysis.

#### Environmental Setting

This discussion provides a description of the existing physical environment and baseline setting for each environmental issue area. For the purpose of this document and pursuant to the CEQA Guidelines Section 15125(a), the environmental setting is used to determine the impacts associated with the Project and is based on the environmental conditions that existed at the time the NOP was published (November 2020).

In distinguishing between the geographic areas considered in the environmental analysis, it is important to note that the existing conditions for most environmental issue areas within Chapter 3, Environmental Analysis, Impacts, and Mitigation, of this EIR are characterized in terms of the Project study area. For some environmental issue areas, the study areas vary to properly analyze impacts of that specific resource. For example, in addition to considering the Project study area, the air quality analysis considers the Project's regional impacts on the South Central Coast Air Basin (SCCAB).

#### Regulatory Setting

This discussion describes the regulatory context of the environmental issue area being analyzed, including any applicable federal, state, and local regulations, plans, policies, programs, and/or laws relevant to the Project.

#### Impact Analysis

For each threshold considered, the discussion is subdivided, as appropriate, to differentiate between environmental impacts that could occur. Each resource-specific impact analysis includes discussion of the methodology employed as part of the analysis and any previously certified environmental documentation incorporated by reference. Subheadings and sub-numbering are used, where appropriate, for transitions between major topics and distinctions in impact determinations for



sub-issues covered by the threshold. The environmental analysis places emphasis on distinguishing between temporary construction and long-term operational impacts.

Changes that would result from the Project were evaluated relative to existing environmental conditions within the Project study area, as defined in Chapter 2, Project Description.

The “Thresholds of Significance” subsection lists the thresholds used to determine the significance of each Project impact and is based on CEQA Guidelines, Appendix G.

This EIR uses the following terminology to denote the significance of environmental impacts of the Project:

- *No Impact* indicates that the construction and operation of the Project would not have any impacts on the environment. It means no change from existing conditions. This impact level does not need mitigation.
- A *Less than Significant Impact* is one that would not result in a substantial or potentially substantial adverse change in the physical environment. This impact level does not require mitigation, even if feasible, under CEQA.
- A *Significant Impact* is defined by CEQA Section 21068 as one that would cause “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project.” Levels of significance can vary by project, based on the change in the existing physical condition. Under CEQA, mitigation measures or alternatives to the project must be provided, where feasible, to reduce the magnitude of significant impacts.
- An *Unavoidable Significant Impact* is one that would result in a substantial or potentially substantial impact on the environment, and that could not be reduced to a less than significant level even with any feasible mitigation. Under CEQA, a project with significant and unavoidable impacts could proceed, but the lead agency would be required to prepare a “statement of overriding considerations” in accordance with CEQA Guidelines Section 15093, explaining why the lead agency would proceed with the project understanding the potential for significant impacts.

In circumstances where the applied threshold is irrelevant to the Project and clearly no impact will result, this fact is noted, and the associated threshold is eliminated from further analysis. This includes the provision of SCRRA’s supporting rationale.

## Mitigation Measures

This discussion identifies proposed mitigation measures to avoid, minimize, rectify, reduce, or compensate for Project-related impacts in accordance with CEQA Guidelines Sections 15002(a)(3), 15021(a)(2), 15091(a)(1), and 15370, where feasible.

## CEQA Significance Conclusions After Mitigation

This section includes an explanation of how the applied mitigation measure(s), if required, reduces the impact. If the impact remains significant, additional discussion is provided to indicate why no mitigation is available or why the applied mitigation is not effective in reducing the significant impact to a level less than significant.

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## 3.1 Aesthetics

### 3.1.1 Introduction

The Aesthetics section describes the environmental and regulatory setting for aesthetic resources in the vicinity of the Project (i.e., Project study area) and evaluates the Project's potential direct and indirect impacts on aesthetic resources. Mitigation measures are proposed to reduce significant impacts, where feasible. Cumulative impacts on aesthetics and visual resources in combination with planned, approved, and reasonably foreseeable projects are discussed in Chapter 4, Cumulative Impacts.

### 3.1.2 Environmental Setting

This section summarizes the existing aesthetic resources within the Project study area. In describing the Project study area, SCRRRA included the Project railroad corridor and adjacent land uses with views of the Project railroad corridor. The Project railroad corridor is visible from public roadways and surrounding residences. Viewer groups predominantly comprise transient members of the public, including recreationalists, traveling through the Project study area. The largest viewer group comprises motorists traversing the Project study area in north or south directions.

Key terms used throughout this section are defined below.

**Aesthetic value:** refers to the perception of natural beauty of the area, as well as the elements that create or enhance the visual quality. The aesthetic value in the Project study area is largely characterized by urban development.

**Scenic resources:** can include natural open spaces, topographic formations, and landscapes. They are resources that can be maintained and enhanced to promote a positive image of an area. Scenic resources can also include urban open spaces and the built environment (parks, trails, pathways, nature centers, cultural resources, and architectural features). Within the urban setting along the Project alignment, there are no designated historic resources that may constitute a scenic resource.

**Viewsheds:** constitute the range of sight from a specific viewer location, and often include scenic resources. Viewsheds are defined by physical features that frame the boundaries or context of the visual environment or of one or more scenic resources. They can include a range of resources, whether natural or manmade.

#### Landscape Existing Conditions

The Project is located in southern Simi Valley, which sits in a valley surrounded by major ridgelines, canyons, woodlands, rolling hillsides and knolls, oak and sycamore trees. The Project study area is within an urban parkway that is visually characterized by existing structures, traffic lights, streetlights and rail warning signal lights.

## Sensitive Viewers

**Scenic Routes/Vistas:** There are no designated scenic resources, including scenic routes, within the Project study area. State Highway 118 is located 0.5 mile north of the Project study area and is considered an Eligible State Scenic Highway but is not officially designated on the California Department of Transportation’s (Caltrans) Scenic System List.

The *City of Simi Valley General Plan* (General Plan) does not specifically define “scenic vistas” (City of Simi Valley 2012b). Instead, the City of Simi Valley (City) relies on aesthetic value, scenic resources, and viewsheds to characterize the aesthetic nature of the City (City of Simi Valley 2012a).

**Recreational Areas.** The Rancho Santa Susana Community Center (located at 505 East Los Angeles Avenue) is adjacent to the Project study area (Rancho Simi Recreation and Parks District 2020). A Class 2 bicycle route runs along East Los Angeles Avenue intersecting with Class 3 bicycle routes at Tapo Street, Tapo Canyon Road and Sequoia Avenue. Additionally, a portion of the Simi Valley Arroyo Bike Path meanders into the Project study area near the Simi Valley Station (City of Simi Valley 2008).

**Residential Areas.** Residences are included in the immediate Project vicinity, directly adjacent to the north and south of the railroad corridor. The residential properties range from single-family homes on large lots to higher density condominiums and apartment complexes.

**Airports.** The Van Nuys Airport is located approximately 5 miles east of the Project study area.

**Key Observation Points.** To characterize the existing visual character of the Project study area and surrounding areas, SCRRRA identified three key observation points (KOP). The mountains, ridgelines, and hillsides surrounding the valley and Project study area are visible from most roadways, particularly the major arterials such as East Los Angeles Avenue (east/west) and Tapo Canyon Road, Sycamore Drive, or Erringer Road (north/south). Distant views of both the Whiteface Escarpment to the north and the Simi Hills to the south are available from most north-south thoroughfare viewer locations along the Project alignment.

In selecting potential KOPs, two components were considered: landscape scenery and sensitive viewers. Scenery is the aggregate feature that gives character to the landscape and is comprised of vegetation, water features, color, landform and other characteristics that combine to form the landscape scenery. Sensitive viewers refer to the group of individuals who might be affected by the installation of the Project due to sensitivities to changes in the landscape. Figure 3.1-1 illustrates the KOP locations selected to support the EIR analysis. These KOPs were selected based on the existing land uses that border the Project alignment and are qualitatively described below.

Figure 3.1-1. Key Observation Point Locations



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**KOP 1:** KOP 1 provides a view of the Simi Valley Station from the parking lot, looking west (Figure 3.1-2). Multiple visual encroachments exist within the immediate foreground including the station platform, parking lot, and nearby residential structures. Multiple sources of nighttime lighting are present, including existing fixed station lighting and intermittent lighting from a combination of vehicles using the parking lot. Viewer groups for KOP 1 include those using the station for travel (commuters and tourists) and the businesses and multi-family residences nearby.

**Figure 3.1-2. Key Observation Point 1: Existing Simi Valley Station (Looking West)**



**KOP 2:** The City is situated among a series of major and minor hills, with the Santana Susana Mountains to the north and the Simi Hills and Santa Monica Mountains to the south (Figure 3.1-3). The Project study area comprises an urban area within the southern portion of the City. The hills that surround the City provide a natural topographical feature to both the citizens residing in and around the City as well as the persons traveling the major thoroughfares and Metrolink's VCL. Additionally, the natural topography includes visual elements such as major ridgelines, canyons, woodlands, rolling hillsides and knolls, oak and sycamore trees and urban parkways (City of Simi Valley 2012a).

Much like the entire rail corridor, KOP 2 is characterized by urban development with a limited number of visually sensitive land uses. KOP 2, similar to other at-grade crossings on Sequoia Avenue, Tapo Canyon Street, East Los Angeles Avenue and Hidden Ranch Drive, includes various visual encroachments typical of an urban landscape such as existing structures, traffic lights, streetlights and the rail warning signal lights. Viewer groups for KOP 2 include transit users, members of the public using roadways and sidewalks, surrounding businesses, residences, and recreationalists.

**Figure 3.1-3. Key Observation Point 2: Center of Project Alignment at Tapo Street (Looking Northeast)**



**KOP 3:** The mountains, ridgelines, and hillsides surrounding the valley can be viewed from most streets on the valley floor, particularly from the major arterials such as East Los Angeles Avenue (east/west), and Tapo Canyon Road, Sycamore Drive, or Erringer Road (north/south) (Figure 3.1-4). Distant views of both the Whiteface Escarpment to the north and the Simi Hills to the south are available from most north-south thoroughfare viewer locations along the Project alignment.

The City is situated among a series of major and minor hills, with the Santana Susana Mountains to the north and the Simi Hills and Santa Monica Mountains to the south. The Project study area is the more immediate foreground and includes urbanized areas within the southern portion of the City. The hills that surround the City provide a natural topographical feature to both the citizens residing in and around the City as well as the persons traveling the major thoroughfares.

Additionally, visual elements such as major ridgelines, canyons, woodlands, rolling hillsides and knolls, oak and sycamore trees and urban parkways make up the open space areas of the City. Existing visual encroachments include existing signals, streetlights, and overhead power lines. Viewer groups for KOP 3 include transit users, members of the public using roadways and sidewalks, surrounding businesses, residences, and recreationalists.



**Figure 3.1-4. Key Observation Point 3: West Side of Project Alignment at Intersection of Tapo Canyon Road and East Los Angeles Avenue (Looking South)**



### 3.1.3 Regulatory Setting

This section summarizes federal, state, and local regulations related to aesthetic resources that are applicable to the Project.

#### Federal

No existing federal regulations are applicable to the Project. The Bureau of Land Management (BLM) has a formal process for assessing the aesthetic impacts of projects called, “The Visual Contrast Rating,” on BLM-regulated lands. The United States Forest Service (USFS) relies on the USFS Scenery Management System, which has Landscape Character Goals and Scenic Integrity Objectives, which serve as a baseline for assessing the basic compatibility of a project with the surrounding landscape on USFS-regulated lands. These methodologies are applied to BLM and USFS federal lands and are not applicable to the Project area (BLM n.d.a, n.d.b).

#### State

##### *California Scenic Highway Program*

California’s Scenic Highway Program, administered by Caltrans, preserves and enhances eligible highways that demonstrate corridors with high scenic quality. Designated highways are protected with measures in the form of ordinances, zoning, and/or planning policies by the local governing body with jurisdiction over the area of land within the scenic corridor.

##### *California Building Standards Code*

Title 24 of the CCR, known as the California Building Standards Code (CBSC) contains the regulations that govern the construction of buildings in California. The 2019 CBSC was published on July 1, 2019, with an effective date of January 1, 2020. The CBSC is reserved for state regulations that govern the design and construction of buildings, associated facilities, and equipment. The CBSC is published by the California Building Standards Commission and it applies to all building occupancies throughout the state of California (California Building Standards Commission 2019). The CBSC has light pollution reduction measures that must be complied with through design and installation.

## Local

### *City of Simi Valley General Plan*

The General Plan (City of Simi Valley 2012b) includes goals and objectives related to visual resources in the City. Table 3.10-1 includes applicable General Plan goals and policies pertaining to aesthetic resources.

### *City of Simi Valley Municipal Code – Development Code*

The City's Development Code (Article IX of the Simi Valley Municipal Code) regulates the development of properties in the City with established standards for use. Standards such as building setbacks, floor area ratios and building heights are established for the specific zoning designation. This promotes development compatibility and aesthetic preservation among land uses.

### *City of Simi Valley Municipal Code – Tree Preservation Ordinance 1278*

The City's Tree Preservation Code (Chapter 9-38 of the Simi Valley Municipal Code) protects and preserves trees within the City and establishes regulatory review of landscape plans and design guidelines within urban developments. The City's Tree Preservation Code ensures that initial Project layout, design, and grading recognize protected trees and modify as appropriate to accommodate protection of trees.

## 3.1.4 Impact Analysis

This section describes the potential for environmental impacts related to aesthetics as a result of Project implementation. It describes the thresholds used to determine whether an impact would be significant, as well as measures to mitigate potentially significant impacts, where appropriate.

### Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to aesthetics would be considered significant if the Project would:

- A. Have a substantial adverse effect on a scenic vista;
- B. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- C. Substantially degrade the existing visual character or quality of the site or its surroundings; or,
- D. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

### Thresholds Requiring No Further Analysis

The following thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project:

- B. There are no designated scenic highways in the Project study area (Caltrans 2008). Therefore, the Project would not substantially damage scenic resources within a state scenic highway and no impact would result.

## Methodology

Aesthetic experiences can be highly subjective; therefore, Project-related impacts are evaluated based on the extent of the modifications to existing physical conditions along the railroad corridor resulting from the Project. Given the Project's context and placement within an existing railroad corridor, this analysis follows a qualitative approach to assess the Project's visual impacts. This analysis was performed by defining the Project location and setting, identifying and characterizing the existing visual resources and key viewers, and assessing resource change and viewer response for each of the KOP locations.

## Impact Analysis

*Would the Project have a substantial adverse effect on a scenic vista?*

### CONSTRUCTION

**Less than Significant Impact.** The Project is located in an urban, developed area within the southern portion of the City and within an existing railroad corridor. Distant views of both the Whiteface Escarpment to the north and the Simi Hills to the south are available from most north-south thoroughfare viewer locations along the Project alignment. During construction, increased activity and the presence of construction equipment may result in short-term visual impacts within the Project corridor. Specifically, Project construction would result in temporary impacts to views of the Whiteface Escarpment to the north and the Simi Hills to the south from north-south thoroughfare viewer locations along the Project alignment. However, these impacts would be temporary in nature, and would not result in long-term changes to scenic resources, including scenic vistas. Impacts would be less than significant. No mitigation is required.

### OPERATION

**No Impact.** Under existing conditions, the Project alignment is largely characterized by prevailing development, and viewer groups predominantly comprise transient viewers (i.e., members of the public traveling in north or south directions within these thoroughfares), who are less sensitive to temporary changes within the existing viewsheds. Upon operation, the Project features would be generally at-existing grades and would not impact scenic resources or views in the City when compared to existing conditions. Therefore, the Project would not have an adverse effect on a scenic vista. No impact would occur.

*Would the Project substantially degrade the existing visual character or quality of the site or its surroundings?*

### CONSTRUCTION

**Less than Significant with Mitigation.** The Project is located in an urban area within the southern portion of the City. The proposed improvements would be located adjacent to the existing main line track within Metrolink's existing railroad ROW. The Project spans multiple land use types including light, general, and heavy industrial; medium- and high-density residential; commercial planned development; and, open space. During construction, increased activity and the presence of construction equipment and personal may result in short-term visual impacts within the Project study area. Sensitive viewers along the Project alignment would be subjected to these impacts, which would largely be confined to the existing railroad ROW. However, these impacts would be temporary in nature and would not result in long-term changes to the existing visual character of the Project

alignment and, therefore, would not substantially degrade the visual character or quality of the site or its surroundings. Nonetheless, implementation of Mitigation Measure AES-1, which requires temporary screening during construction, would further reduce potential impacts to a less than significant level. Impacts would be less than significant with mitigation incorporated.

#### OPERATION

**Less than Significant Impact.** Upon operation, the Project would not result in significant changes to the visual character of the Project study area when compared to existing conditions, as the completed Project would be generally at grade and consistent with the existing railroad setting. Proposed improvements at the station would include a second platform and a supporting pedestrian underpass (or crossing) to enhance passenger safety. The Project would match the existing platform amenities, including lighting and materials as depicted at KOP 1 on Figure 3.1-2. Proposed improvements to the at-grade crossing would include the addition of a second at-grade crossing track to accommodate the proposed second track. Ancillary improvements would include sidewalk and pavement reconstruction, installation of pedestrian gates and warning signals, roadway restriping, and the installation of a new railroad signal house. Similar improvements would occur at the other at-grade crossings on Sequoia Avenue, Tapo Canyon Street, East Los Angeles Avenue, and Hidden Ranch Drive. These improvements would be consistent with the existing visual character of the Project study area as depicted at KOPs 2 and 3 in Figure 3.1-3 and Figure 3.1-4, respectively. In this context, the proposed improvements be consistent with existing conditions and impacts would be less than significant. No mitigation is required.

*Would the Project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** The two main causes of light pollution are light trespass and glare. Light trespass is caused by light being cast on areas outside those intended. Glare occurs when a reflective material or bright object casts uncontrolled brightness on sensitive receptors (i.e., residential neighborhoods) or nearby land uses. Glare may occur in many instances including from oncoming vehicle headlights, an unshielded light bulb, or sunlight reflecting off building materials such as glass and steel.

During nighttime construction activities, temporary lighting may be used at discrete locations for certain construction activities. The Project study area is currently in an urban area with multiple sources and types of nighttime lighting. The use of construction lighting during nighttime hours would not change the visual character of the area or degrade the visual quality because lighting would only be temporary and placed in select locations. Due to the proximity of nearby residences to the construction work zone, residences along the alignment would be exposed to elevated levels of nighttime lighting during the nighttime hours for a temporary duration throughout Project construction. This impact would be potentially significant in the absence of mitigation. Implementation of Mitigation Measure AES-2, which would minimize nighttime work and require screening, would reduce potential construction-related light and glare impacts to a less than significant level.

#### OPERATION

**Less than Significant with Mitigation.** Based on the Project components proposed (including the new platform, additional track, pedestrian undercrossing and at-grade crossing improvements), no new substantial sources of light or glare would be added to the area by the Project when compared to

existing conditions. The Project would match the existing platform amenities (canopies, seating, signage, and lighting), and would include aesthetic treatments to the ramps, stairs, and underpass walls and ceiling. Similar to the existing platform, any lighting sources at the proposed platform would be directed downward to minimize spill over onto adjacent properties.

The Project alignment traverses a largely urban setting that comprises infill development and urban infrastructure. Given the nature of the existing development surrounding the Project study area (i.e., varying industrial uses and residential land uses), daytime light and glare within the Project study area is not an existing source of nuisance, and is limited to minor glare generated from building materials such as glass and steel, which are both common in urban environments.

Once constructed, the Project would include a second platform and a supporting pedestrian undercrossing to enhance passenger safety. The Project would match the existing platform amenities, including lighting and materials. The amount of Project-related lighting would not substantially differ when compared to current station lighting; however, would increase slightly to support the expansion of the platform. A new minor source of glare could occur from the glass on the structure or from the new canopies. The additional lighting within an existing railroad ROW in an area heavily utilized by transportation would be minor and impacts related to lighting would not be expected to substantially affect the surrounding area. However, the increase in localized sources of light and glare for adjacent sensitive viewers could be significant in the absence of mitigation. Implementation of AES-3, which would require lighting to comply with building standards and be directed away from residential units, would reduce potentially significant impacts to a less than significant level.

### 3.1.5 Mitigation Measures

The following mitigation is proposed to reduce the Project's potential to impact visual quality and aesthetics.

- AES-1 Temporary Screening.** The construction contractor shall ensure that material and equipment storage areas, including storage sites for excavated materials that are visible from nearby roads, residences, and recreational areas will be visually screened using temporary screening fencing. Fencing will be of an appropriate design and color for the Project location.
- AES-2 Minimize Nighttime Work and Screen Direct Lighting.** The construction contractor shall ensure that nighttime construction activities near residential areas will be avoided to the extent feasible. If nighttime work is required, the construction contractor will install temporary lighting in a manner that directs light toward the construction area and will install temporary shields as necessary so that light does not spill over into residential areas.
- AES-3 Screen Direct Lighting and Glare.** During final design, the construction contractor shall ensure that all new or replacement lighting will comply with maximum allowable California Green Building Standards (CALGreen) glare ratings (CBSC 2019 – Title 24, Part 11) and will be designed to be directed away from residential units. Screening elements, including landscaping, will also be incorporated into the design, where feasible. Low-reflective glass and materials will also be utilized as part of the above-grade passenger concourse and the new canopies design to reduce daytime glare impacts.

### 3.1.6 CEQA Significance Conclusions After Mitigation

With implementation of Mitigation Measures AES-1 through AES-3, the Project would have a less than significant impact on aesthetics and visual resources. These measures would provide effective means of addressing new permanent and temporary sources of nighttime lighting and glare that could be generated by the Project.

## 3.2 Air Quality

### 3.2.1 Introduction

The Air Quality section describes the environmental setting and regulatory setting for air pollution in the vicinity of the Project. It also describes the impacts on air quality that would result from construction and operation of the Project and mitigation measures that would reduce significant impacts, where feasible. Cumulative impacts on air quality, in combination with planned, approved, and reasonably foreseeable projects, are discussed in Chapter 4, Cumulative Impacts.

### 3.2.2 Environmental Setting

This section summarizes the existing environmental setting related to air quality within the Project study area. The information and analysis provided in this section is based on the *Simi Valley Double Track and Platform Project Air Quality and Greenhouse Gas Technical Report* and *Simi Valley Double Track and Platform Project Health Risk Assessment Technical Report* (HRA) prepared for the Project and included herein as Appendices B and C, respectively.

#### Criteria Pollutants

Criteria pollutants are a group of six common air pollutants for which the federal and state governments have set national ambient air quality standards (NAAQS) and California ambient air quality standards (CAAQS), respectively. Ozone (O<sub>3</sub>) is considered a regional pollutant because its precursors affect air quality on a regional scale; nitrogen oxides (NO<sub>x</sub>) and reactive organic gases (ROG) react photochemically to form O<sub>3</sub>, and this reaction occurs at some distance downwind of the emissions source. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and lead are considered local pollutants that tend to accumulate in the air locally. Particulate matter is both a local and regional pollutant.

Concentrations of criteria pollutants are commonly used indicators of ambient air quality for which acceptable levels of exposure can be determined. The ambient air quality standards for these pollutants are set with an adequate margin of safety for public health and the environment (Clean Air Act [CAA] Section 109). Epidemiological, controlled human exposure, and toxicology studies evaluate potential health and environmental effects of criteria pollutants and form the scientific basis for new and revised ambient air quality standards.

The primary criteria pollutants generated by the Project are O<sub>3</sub> precursors (NO<sub>x</sub> and ROG), CO, NO<sub>2</sub>, SO<sub>2</sub>, and particulate matter.<sup>1</sup> Additional narrative on sources and health effects of these pollutants is provided in the following sections.

#### Ozone

O<sub>3</sub>, or smog, is a photochemical oxidant that is formed when ROGs and NO<sub>x</sub> (both by-products of the internal combustion engine) react with sunlight. ROGs are compounds made up primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of ROGs are emissions associated with the use of paints and solvents,

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<sup>1</sup> Lead is also a criteria pollutant, and there are state standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility particulates. However, these pollutants are typically associated with industrial sources, which are not included as part of the Project. Accordingly, they are not evaluated further.

the application of asphalt paving, and the use of household consumer products such as aerosols. The two major forms of NO<sub>x</sub> are nitric oxide and NO<sub>2</sub>. Nitric oxide is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO<sub>2</sub> is a reddish-brown irritating gas formed by the combination of nitric oxide and oxygen. In addition to serving as an integral participant in O<sub>3</sub> formation, NO<sub>x</sub> also directly acts as an acute respiratory irritant and increases susceptibility to respiratory pathogens due to impairments to the immune system.

O<sub>3</sub> poses a higher risk to those who already suffer from respiratory diseases (e.g., asthma), children, older adults, and people who are active outdoors. Exposure to O<sub>3</sub> at certain concentrations can make breathing more difficult, cause shortness of breath and coughing, inflame and damage the airways, aggravate lung diseases, increase the frequency of asthma attacks, and cause chronic obstructive pulmonary disease. Studies show associations between short-term O<sub>3</sub> exposure and nonaccidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to O<sub>3</sub> may increase the risk of respiratory-related deaths (U.S. Environmental Protection Agency [EPA] 2019). The concentration of O<sub>3</sub> at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 parts per billion (ppb) of O<sub>3</sub> and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggests that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum O<sub>3</sub> concentration reaches 80 ppb (U.S. EPA 2016).

In addition to human health effect, O<sub>3</sub> has been tied to crop damage, typically in the form of stunted growth, leaf discoloration, cell damage, and premature death. O<sub>3</sub> can also act as a corrosive and oxidant, resulting in property damage such as the degradation of rubber products and other materials.

#### *Carbon Monoxide*

CO is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. In the Project study area, high CO levels are of greatest concern during the winter, when periods of light winds combine with the formation of ground-level temperature inversions from evening through early morning. These conditions trap pollutants near the ground, reducing the dispersion of vehicle emissions. Moreover, motor vehicles exhibit increased CO emission rates at low air temperatures. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation. Exposure to CO at high concentrations can also cause fatigue, headaches, confusion, dizziness, and chest pain. There are no ecological or environmental effects associated with ambient CO (California Air Resources Board [CARB] 2020a).

#### *Nitrogen Dioxide*

NO<sub>2</sub> can be directly emitted from combustion sources, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Much of the NO<sub>2</sub> in the ambient air, however, is photochemically formed by the combination of nitric oxide and other air pollutants. For this reason, NO<sub>2</sub> levels can vary depending on direct emissions levels and changes in atmospheric conditions, particularly the amount of sunlight.

A large body of scientific literature suggests that NO<sub>2</sub> exposure can intensify responses to allergens in asthmatics. Epidemiological studies have also demonstrated an association between NO<sub>2</sub> and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory



symptoms, emergency room visits for asthma, and intensified allergic responses. Like other pollutants, children and individuals with underlying respiratory conditions (e.g., asthma) are at greater risk of experiencing adverse effects following exposure to NO<sub>2</sub>. In addition to potential human health impacts, NO<sub>2</sub> can reduce visibility. High NO<sub>2</sub> concentrations (greater than 0.2 parts per million [ppm]) over prolonged periods (100 hours or more) have also been reported to injure crops. (CARB 2020b)

### *Sulfur Dioxide*

SO<sub>2</sub> is generated by burning of fossil fuels, industrial processes, and natural sources, such as volcanoes. The major adverse health effects associated with SO<sub>2</sub> exposure pertain to the upper respiratory tract. Controlled human and epidemiological studies show that exposure to SO<sub>2</sub> near the 1-hour NAAQS of 0.075 ppm can result in asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation, such as wheezing, shortness of breath, and chest tightness. These symptoms can be more pronounced during exercise or physical activity. Exposure at elevated levels of SO<sub>2</sub> (above 1 ppm) may result in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality, especially among the elderly and people with cardiovascular disease or chronic lung disease. In addition to potential human health impacts, SO<sub>2</sub> deposition contributes to soil and surface water acidification and acid rain (CARB 2020c).

### *Particulate Matter*

Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter less than 10 microns in diameter (PM<sub>10</sub>) is about 1/7th the thickness of a human hair, while particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) is roughly 1/28th the diameter of a human hair. Major sources of PM<sub>10</sub> include motor vehicles; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. PM<sub>2.5</sub> results from fuel combustion (from motor vehicles, power generation, and industrial facilities), residential fireplaces, and wood stoves. Particulate matter also forms when gases emitted from industries and motor vehicles, such as SO<sub>2</sub>, NO<sub>x</sub>, and ROG, undergo chemical reactions in the atmosphere.

Particulate pollution can be transported over long distances and may adversely affect humans, especially people who are naturally sensitive or susceptible to breathing problems. Numerous studies have linked particulate matter exposure to premature death in people with preexisting heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms. Depending on its composition, PM<sub>10</sub> and PM<sub>2.5</sub> can also affect water quality and acidity, deplete soil nutrients, damage sensitive forests and crops, affect ecosystem diversity, and contribute to acid rain (U.S. EPA 2020a).

### *Toxic Air Contaminants*

Although ambient air quality standards have been established for criteria pollutants, no ambient standards exist for toxic air contaminants (TAC). Many pollutants are identified as TACs because of their potential to increase the risk of developing cancer or their acute or chronic health risks. For TACs that are known or suspected carcinogens, CARB has consistently found that there are no levels or thresholds below which exposure is risk free. Individual TACs vary greatly in the risks they present. At a given level of exposure, one TAC may pose a hazard that is many times greater than another. TACs are identified and their toxicity is studied by the California Office of Environmental Health Hazard

Assessment (OEHHA). The primary TAC of concern associated with the Project is diesel particulate matter (DPM).

DPM is generated by diesel-fueled equipment and vehicles. CARB estimates that DPM emissions are responsible for about 70 percent of the total ambient air toxics risk (CARB 2020d). Short-term exposure to DPM can cause acute irritation (e.g., eye, throat, and bronchial), neurophysiological symptoms (e.g., lightheadedness and nausea), and respiratory symptoms (e.g., cough and phlegm). The International Agency for Research on Cancer has classified diesel engine exhaust as “carcinogenic to humans, based on sufficient evidence that exposure is associated with an increased risk for lung cancer” (International Agency for Research on Cancer 2012).

## Existing Air Quality Conditions

### *Ambient Concentrations*

The existing conditions in the local air quality study area can be characterized by regional monitoring data. CARB and Ventura County Air Pollution Control District (VCAPCD) collect and maintain ambient air quality data through a network of air monitoring stations throughout the state. The Project study area is in Simi Valley which is located in Ventura County. The closest monitoring station in Simi Valley is the Simi Valley-Cochran Street Station (CARB 56434), located approximately 1 mile east/northeast of the eastern boundary of the Project study area. The Simi-Valley-Cochran Street Station only monitors O<sub>3</sub>, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The closest station that monitors CO is the one in Reseda, California, which is located approximately 20 miles east of the western terminus of the Project study area.

Between 2016 and 2018, monitored CO and NO<sub>2</sub> concentrations did not exceed any federal or state standards. However, the state or federal standards for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> were exceeded. As discussed above, the ambient air quality standards define clean air and represent the maximum amount of pollution that can be present in outdoor air without any harmful effects on people and the environment. Existing violations of the O<sub>3</sub> and particulate matter ambient air quality standards indicate that certain individuals exposed to this pollutant may experience certain health effects, including increased incidence of cardiovascular and respiratory ailments.

### *Regional Attainment Status*

Local monitoring data are used to designate areas as nonattainment, maintenance, attainment, or unclassified for the ambient air quality standards.

- Nonattainment: assigned to areas where monitored pollutant concentrations consistently violate the standard in question
- Maintenance: assigned to areas where monitored pollutant concentrations exceeded the standard in question in the past but are no longer in violation of that standard
- Attainment: assigned to areas where pollutant concentrations meet the standard in question over a designated period
- Unclassified: assigned to areas where data are insufficient to determine whether a pollutant is violating the standard in question

Table 3.2-1 summarizes the current attainment status of Ventura County and the portion of Los Angeles County within the South Coast Air Basin (SCAB).

**Table 3.2-1. Federal and State Attainment Status for the Project Study Area**

Criteria Pollutant	Ventura County		Los Angeles County	
	Federal Designation	State Designation	Federal Designation	State Designation
O <sub>3</sub> (8-hour)	Serious nonattainment	Nonattainment	Extreme nonattainment	Nonattainment
CO	Attainment	Attainment	Attainment/maintenance	Attainment
PM <sub>10</sub>	Attainment	Attainment	Attainment/maintenance	Nonattainment
PM <sub>2.5</sub>	Attainment	Attainment	Moderate nonattainment	Nonattainment
NO <sub>2</sub>	Attainment	Attainment	Attainment/Maintenance	Attainment
SO <sub>2</sub>	Attainment	Attainment	Attainment	Attainment
Lead	Attainment	Attainment	Nonattainment	Attainment

Sources: CARB 2020f; U.S. EPA 2020b

Notes:

CO=carbon monoxide; NO<sub>2</sub>=nitrogen dioxide; O<sub>3</sub>=ozone; PM<sub>10</sub>=particulate matter less than or equal to 10 microns; PM<sub>2.5</sub>=particulate matter less than or equal to 2.5 microns; SO<sub>2</sub>=sulfur dioxide

### 3.2.3 Regulatory Setting

This section summarizes federal, state, and local regulations related to air quality that are applicable to the Project.

#### Federal

##### *Clean Air Act*

The federal CAA and its subsequent amendments form the basis for the nation’s air pollution control effort. The U.S. EPA is responsible for implementing most aspects of the CAA and has established NAAQS for six criteria pollutants—O<sub>3</sub>, particulate matter (both PM<sub>10</sub> and PM<sub>2.5</sub>), CO, N<sub>2</sub>O, SO<sub>2</sub>, and lead. The NAAQS identify levels of air quality that are considered the maximum safe levels of ambient (background) air pollutants, within an adequate margin of safety, to protect public health and welfare.

The 1990 amendments to the CAA identify specific emission-reduction goals for areas not meeting the NAAQS. These amendments require a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or meet interim milestones. The CAA mandates that the states submit and implement a state implementation plan (SIP) for local areas not meeting those standards. The plans must include pollution control measures that demonstrate how the standards will be met.

Table 3.2-2 shows the NAAQS currently in effect for each criteria pollutant, as well as the CAAQS (discussed below).

**Table 3.2-2. Federal and State Ambient Air Quality Standards**

Criteria Pollutant	Average Time	California Standards	National Standards <sup>a</sup>	
			Primary	Secondary
O <sub>3</sub>	1-hour	0.09 ppm	— <sup>b</sup>	— <sup>b</sup>
	8-hour	0.070 ppm	0.070 ppm	0.070 ppm
PM <sub>10</sub>	24-hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>
	Annual mean	20 µg/m <sup>3</sup>	—	—
PM <sub>2.5</sub>	24-hour	—	35 µg/m <sup>3</sup>	35 µg/m <sup>3</sup>
	Annual mean	12 µg/m <sup>3</sup>	12.0 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>
CO	8-hour	9.0 ppm	9 ppm	—
	1-hour	20 ppm	35 ppm	—
NO <sub>2</sub>	Annual mean	0.030 ppm	0.053 ppm	0.053 ppm
	1-hour	0.18 ppm	0.100 ppm	—
SO <sub>2</sub> <sup>c</sup>	Annual mean	—	0.030 ppm	—
	24-hour	0.04 ppm	0.014 ppm	—
	3-hour	—	—	0.5 ppm
	1-hour	0.25 ppm	0.075 ppm	—
Lead	30-day average	1.5 µg/m <sup>3</sup>	—	—
	Calendar quarter	—	1.5 µg/m <sup>3</sup>	1.5 µg/m <sup>3</sup>
	3-month average	—	0.15 µg/m <sup>3</sup>	0.15 µg/m <sup>3</sup>
Sulfates	24-hour	25 µg/m <sup>3</sup>	—	—
Visibility-reducing particles	8-hour	— <sup>d</sup>	—	—
Hydrogen sulfide	1-hour	0.03 ppm	—	—
Vinyl chloride	24-hour	0.01 ppm	—	—

Source: CARB 2016

Notes:

<sup>a</sup> National standards are divided into primary and secondary standards. Primary standards are intended to protect public health, whereas secondary standards are intended to protect public welfare and the environment.

<sup>b</sup> The federal 1-hour standard of 12 parts per hundred million was in effect from 1979 through 2005. The revoked standard is referenced because it was employed for such a long period and is a benchmark for SIPs.

<sup>c</sup> The annual and 24-hour NAAQS for SO<sub>2</sub> only apply for 1 year after designation of the new 1-hour standard to those areas that were previously in nonattainment for 24-hour and annual NAAQS.

<sup>d</sup> CAAQS for visibility-reducing particles is defined by an extinction coefficient of 0.23 per kilometer – visibility of 10 miles or more due to particles when relative humidity is less than 70 percent.

µg/m<sup>3</sup>=micrograms per cubic meter; CAAQS=California Ambient Air Quality Standard; CO=carbon monoxide; NAAQS=National Ambient Air Quality Standard; NO<sub>2</sub>=nitrogen dioxide; O<sub>3</sub>=ozone; PM<sub>10</sub>=particulate matter less than or equal to 10 microns; PM<sub>2.5</sub>=particulate matter less than or equal to 2.5 microns; ppm=parts per million; SO<sub>2</sub>=sulfur dioxide; SIP=state implementation plan

### *Non-road Diesel Rule*

U.S. EPA established a series of increasingly strict emission standards for new off-road diesel equipment, on-road diesel trucks, and harbor craft. New construction equipment used to implement the Project, including heavy-duty trucks and off-road construction equipment, will be required to comply with the emission standards.

### *Locomotive Emissions Standards*

In March 2008, U.S. EPA adopted a three-part emissions standard program to reduce emissions from diesel locomotives. The regulation tightens emission standards for existing, remanufactured locomotives and sets exhaust emission standards for newly built locomotives of model years 2011 through 2014 (Tier 3) and 2015 and beyond (Tier 4). The regulation is expected to reduce particulate matter emissions from locomotive engines by as much as 90 percent and NO<sub>x</sub> emissions by as much as 80 percent when fully implemented.

### *Corporate Average Fuel Efficiency Standards*

Under the Energy Policy Act of 2005, as amended by the Energy Independence and Security Act, National Highway Traffic Safety Administration (NHTSA) sets fuel economy standards for passenger cars and light trucks, as well as medium and heavy-duty vehicles. These standards are set in coordination with the U.S. EPA, which sets GHG emissions standards under the CAA.

On September 19, 2019, the U.S. EPA and NHTSA issued a final action on the One National Program Rule, which is considered Part One of the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule. The One National Program Rule clarified the federal preemption of state fuel economy regulation under the Energy Policy Act of 2005, revoking the previous waiver of preemption of the California Clean Air Act (CCAA) standards.

Part 2 of SAFE Vehicles Rule, issued on March 30, 2020, revised fuel economy standards for passenger cars and light trucks, maintaining the future year standard at 40.5 miles per gallon rather than increasing to 54.5. However, Executive Order 13990, issued on January 20, 2021, instructs the Executive Director of NHTSA and the Administrator of U.S. EPA to consider suspending, revising, or rescinding the SAFE Vehicles Rule by July 2021.

### *Hazardous Air Pollutants*

In February 2007, U.S. EPA finalized a rule (Control of Hazardous Air Pollutants from Mobile Sources) to reduce hazardous air pollutants from mobile source air toxics. The rule limits the benzene content of gasoline and reduces toxic emissions from passenger vehicles and gas cans. U.S. EPA estimates that in 2030, this rule would reduce total emissions of mobile source air toxics by 330,000 tons and ROG emissions (precursors to O<sub>3</sub> and PM<sub>2.5</sub>) by more than 1 million tons. The latest revision to this rule, which added specific benzene control technologies, occurred in October 2008. U.S. EPA has not established NAAQS or provided ambient standards for hazardous air pollutants.

## State

### *California Clean Air Act*

In 1988, the state legislature adopted the CCAA, which established a statewide air pollution control program. The CCAA requires all air districts in the state to endeavor to meet the CAAQS by the earliest practical date. Unlike the federal CAA, the CCAA does not set precise attainment deadlines. Instead,

the CCAA establishes increasingly stringent requirements for areas that will require more time to achieve the standards. The CAAQS are generally more stringent than the NAAQS and incorporate additional standards for sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride. The CAAQS and NAAQS are shown in Table 3.2-2.

CARB and local air districts bear responsibility for meeting the CAAQS, which are to be achieved through district-level air quality management plans (AQMP) incorporated into the SIP. In California, U.S. EPA has delegated authority to prepare SIPs to CARB, which, in turn, has delegated that authority to individual air districts. CARB traditionally has established state air quality standards, maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emission inventories, collecting air quality and meteorological data, and approving SIPs.

The CCAA substantially adds to the authority and responsibilities of air districts. The CCAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts authority to implement transportation control measures. The CCAA also emphasizes the control of indirect and area-wide sources of air pollutant emissions. The CCAA gives local air pollution control districts explicit authority to regulate indirect sources of air pollution and to establish traffic control measures.

#### *Truck and Bus Regulation*

Originally adopted in 2005, the on-road truck and bus regulation requires heavy trucks to be retrofitted with particulate matter filters. The regulation applies to privately and federally owned diesel-fueled trucks with a gross vehicle weight rating greater than 14,000 pounds. Compliance with the regulation can be reached through one of two paths: vehicle retrofits according to engine year or phase in schedule. Compliance paths ensure that by January 2023, nearly all trucks and buses will have 2010 model-year engines or newer.

#### *Tailpipe Emissions Standards*

Like U.S. EPA at the federal level, CARB has established a series of increasingly strict emission standards for new off-road diesel equipment, on-road diesel trucks, and harbor craft operating in California. New equipment used to construct the Project would be required to comply with the standards.

#### *Carl Moyer Memorial Air Quality Standards Attainment Program*

The Carl Moyer Memorial Air Quality Standards Attainment Program is a voluntary program that offers grants to owners of heavy-duty vehicles and equipment. The program is a partnership between CARB and local air districts throughout the state to reduce air pollution emissions from heavy-duty engines. Locally, the air districts administer the Carl Moyer Memorial Air Quality Standards Attainment Program.

#### *Toxic Air Containment Identification and Control Act*

California regulates TACs (equivalent to the federal hazardous air pollutants) primarily through the TAC Identification and Control Act and the Air Toxics “Hot Spots” Information and Assessment Act of 1987 (Hot Spots Act). The act created California’s program to reduce exposure to air toxics. The Hot Spots Act supplements the TAC Identification and Control Act by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.

In August 1998, CARB identified DPM from diesel-fueled engines as a TAC. In September 2000, CARB approved a comprehensive diesel risk reduction plan to reduce emissions from both new and existing diesel-fueled engines and vehicles. The goal of the plan was to reduce DPM (respirable particulate matter) emissions and the associated health risk by 75 percent in 2010 and by 85 percent by 2020. The plan identifies 14 measures that target new and existing on-road vehicles (e.g., heavy-duty trucks and buses), off-road equipment (e.g., graders, tractors, forklifts, sweepers, and boats), portable equipment (e.g., pumps), and stationary engines (e.g., stand-by power generators).

CARB has adopted regulations to reduce emissions from both on-road and off-road heavy-duty diesel vehicles (e.g., equipment used in construction). These regulations, known as airborne toxic control measures, reduce the idling of school buses and other commercial vehicles, control DPM, and limit the emissions of ocean-going vessels in California waters. The regulations also include measures to control emissions of air toxics from stationary sources. The California toxics inventory, developed by interpolating from CARB estimates of total organic gases and particulate matter, provides emissions estimates by stationary, area-wide, on-road mobile, off-road mobile, and natural sources.

## Local

### *Ventura County Air Pollution Control District*

At the local level, responsibilities of air quality districts include overseeing stationary-source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required by CEQA. The air quality districts are also responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws and for ensuring that the NAAQS and CAAQS are met.

The Project falls under the jurisdiction of the VCAPCD. The VCAPCD is the agency principally responsible for air pollution control in Ventura County, which is within the South Central Coast Air Basin. The VCAPCD prepares plans to attain the CAAQS and NAAQS. These plans include the regional AQMP and elements of the SIP that apply to Ventura County.

VCAPCD adopted the current 2016 AQMP, which incorporates the latest scientific and technological information and planning assumptions, as well as updated emission inventory methodologies for various emission source categories (VCAPCD 2016). The 2016 AQMP is the region's clean air plan, which guides the region's air quality planning efforts to attain the CAAQS. The 2016 AQMP contains districtwide control measures to reduce O<sub>3</sub> precursors. VCAPCD also prepared a SIP to address the lead NAAQS, as well as the clean communities plan (formerly known as the air toxics control plan) to reduce toxic emissions and risk from both mobile and stationary sources.

The VCAPCD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary.

### *South Coast Air Quality Management District*

The South Coast Air Quality Management District (SCAQMD) is responsible for air pollution control in the SCAB, which includes the urbanized areas of Los Angeles, Orange, Riverside, and San Bernardino Counties. In addition to Ventura, these correspond to the member agencies of SCRRA, and the majority of Metrolink operations take place within the jurisdiction of SCAQMD. Like VCAPCD, SCAQMD adopted an AQMP in 2016.

### *Southern California Association of Governments*

SCAG is the metropolitan planning organization for Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura Counties. It is a regional planning agency and serves as a forum for regional issues relating to transportation, the economy and community development, and the environment. SCAG is the federally designated metropolitan planning organization for most of the Southern California region and is the largest metropolitan planning organization in the nation. With regard to air quality planning, SCAG prepares the RTP and Federal Transportation Improvement Program, which address regional development and growth forecasts and form the basis for the land use and transportation control portions of the AQMPs discussed above. They are also used in the preparation of the air quality forecasts and consistency analysis included in the AQMP. The RTP, the Federal Transportation Improvement Program, and the AQMPs are based on projections originating within local jurisdictions. Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality.

SCAG adopted the 2020–2045 RTP/SCS for federal air quality conformity on May 7, 2020, and the plan was fully adopted on September 3, 2020. The 2020–2045 RTP/SCS includes a commitment to reduce emissions from transportation sources to comply with Senate Bill (SB) 375, improve public health, and meet the NAAQS as set forth by the CAA. The 2020–2045 RTP/SCS meets criteria pollutant emission budgets set by U.S. EPA.

### *Southern California Regional Rail Authority*

SCRRA is committed to the goal of cleaner air in Southern California. By implementing such programs as the Tier 4 Locomotive Engine Program, Fuel Conservation Program, and Plug-In Program, SCRRA has reduced locomotive NO<sub>x</sub> and particulate matter emissions by 85 percent, reduced train idling by 35 percent systemwide, and added 55 percent more plug-in stations that supply electric ground power to railcars during testing and inspection. In addition, an electric railcar mover was purchased to perform the testing and inspections. These programs have reduced the fuel use and emissions associated with these operational activities.

## 3.2.4 Impact Analysis

This section describes the potential for environmental impacts related to air quality as a result of Project implementation. It describes the thresholds used to determine whether an impact would be significant, as well as measures to mitigate potentially significant impacts, where appropriate.

### Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to air quality would be considered significant if the Project would:

- A. Conflict with or obstruct implementation of the applicable air quality plan;
- B. Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is a nonattainment area for an applicable federal or state ambient air quality standard;
- C. Expose sensitive receptors to substantial pollutant concentrations; or,
- D. Result in other emissions (such as those leading to odors) affecting a substantial number of people.



## Thresholds Requiring No Further Analysis

No thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project.

## Methodology

The potential for significant impacts on air quality was assessed using standard and accepted software tools, techniques, and emission factors. A summary of the methodology is provided below.

### Construction

Construction of the Project would generate emissions of ROG, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> that would temporarily change ambient air quality in the Project study area. Emissions would originate from mobile and stationary construction equipment exhaust, employee vehicle exhaust, dust from land clearing, paving activities, and application of architectural coatings.

Construction is expected to begin in 2023 and would continue for 19 months. The estimated construction schedule is shown in Table 3.2-3.

Construction emissions were estimated using a combination of emission factors and methodologies from the California Emissions Estimator Model, version 2016.3.2, CARB's EMFAC2017 model, U.S. EPA's *AP-42: Compilation of Air Pollutant Emission Factors*, and U.S. EPA locomotive emission factors based on Project-specific construction data (e.g., schedule, equipment types and numbers, and truck volumes) provided by SCRRA (Appendix B of this EIR).

**Table 3.2-3. Estimated Construction Schedule**

Phase Name	Phase Start Date	Phase End Date	Days
Construct structures	1/1/2023	4/11/2023	72
Construct track work and new turnouts	4/1/2023	7/11/2023	72
Construct signal houses, signal foundations, grade crossing warning devices and associated conduits	7/1/2023	9/6/2023	48
Construct track and roadway improvements at-grade crossings	8/22/2023	11/30/2023	72
Transfer rail service onto the newly constructed MT-1	11/15/2023	12/19/2023	24
Finish installing signals at new CP Sequoia and CP Arroyo	12/9/2023	2/14/2024	48
Construct MT-2 track and upgrade existing from timber to concrete ties	2/4/2024	5/14/2024	72
Activate MT-2 track into service	5/4/2024	6/6/2024	24
Remove and reconstruct 250 feet of the existing Simi Valley Station platform and finish upgrading any remaining timber ties for concrete ties	5/27/2024	8/1/2024	48

Source: Appendix B of this EIR

Notes:

CP=control point

Emission estimates assume that all excavated materials would be hauled off site, that truck capacity is 16 cubic yards, and that all ballast material would be imported from the SCAB boundary via freight rail. Construction assumptions for the equipment use and durations at each stage of construction are summarized in Table 3.2-4.

**Table 3.2-4. Construction Equipment and Duration Assumptions**

Phase Name	Equipment	Amount	Hours/Day	Material Volumes	Truck Hauls	Workers
Construct structures	Air compressor	2	8	—	—	12
	Welder	2	8			
	Crane	1	8			
	Miscellaneous rail equipment	3	8			
Construct track work and new turnouts	Excavator	1	8	1,882 cubic yards of ballast import	—	6
	Front end loader	1	8			
	Rubber tired dozer	1	8			
	Crane	1	8			
Construct signal houses, signal foundations, grade crossing warning devices and associated conduits	Excavator	1	8	—	—	9
	Front end loader	1	8			
	Rubber tired dozer	1	8			
	Grader	2	8			
	Roller	1	8			
Construct track and roadway improvements at-grade crossings	Air compressor	2	8	6,453 cubic yards of excavation export and 1,882 cubic yards of ballast import	403	12
	Welder	2	8			
	Crane	1	8			
	Miscellaneous rail equipment	3	8			
Transfer rail service onto the newly constructed MT-1	—	—	—	—	—	6
Finish installing signals at new CP Sequoia and CP Arroyo	—	—	—	—	—	6
Construct MT-2 track and upgrade existing	Air compressor	2	8	3,764 cubic yards of ballast import	0	12
	Welder	2	8			

**Table 3.2-4. Construction Equipment and Duration Assumptions**

Phase Name	Equipment	Amount	Hours/Day	Material Volumes	Truck Hauls	Workers
from timber to concrete ties	Crane	1	8			
	Miscellaneous rail equipment	3	8			
Activate MT-2 track into service	—	—	—	—	—	6
Remove and reconstruct 250 feet of the existing Simi Valley Station platform and finish upgrading any remaining timber ties for concrete ties	Excavator	1	8	—	—	15
	Front end loader	1	8			
	Rubber tired dozer	1	8			
	Grader	2	8			
	Roller	1	8			
	Air compressor	2	8			
	Welder	2	8			

Source: Appendix B of this EIR

Notes:

CP=control point

### Operation

The Project is expected to become fully operational in 2025. Once operational, the Project would help provide for increased service capacity on the Metrolink VCL. The increase in service would affect regional emissions by increasing diesel fuel consumption associated with operating SCRRA's locomotive fleet. In addition, because the Project would offer an alternative to passenger vehicle travel on the regional transportation network, the Project could affect regional emissions by reducing emissions from passenger vehicle travel on the regional roadway network.

### TRAIN ACTIVITY

Emissions were estimated based on the net increase in fuel consumption provided by the Project engineer, which were based on 0.3425 miles per gallon (or 2.9197 gallons per mile) fuel efficiency based on SCRRA's 2018 reporting (National Transit Database 2020), Metrolink train fleet by tier by operational year (as obtained from the Project engineer), and default U.S. EPA emission factors by engine tier type (U.S. EPA 2009). U.S. EPA emission factors were converted from grams per brake-horsepower-hour into grams per gallon using U.S. EPA conversion factor of 20.8 for large line haul and passenger trains. The sulfur oxide (SO<sub>x</sub>) emission factor was calculated using U.S. EPA methodology assuming a 15-ppm sulfur content, consistent with CARB and U.S. EPA requirements. methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) emissions were estimated using CH<sub>4</sub> and N<sub>2</sub>O emission factors for locomotives within the most recent air emissions inventory from the Port of Los Angeles (Port of Los Angeles 2019).

For baseline/existing conditions, the Metrolink train fleet is assumed to be a mix of pre-Tier 0 (10 locomotives), Tier 2 (22 locomotives), and Tier 4 (22 locomotives) locomotives; for Project buildout, the fleet is expected to be comprised of entirely Tier 4 locomotives (SCRRA 2014, 2016).

The change in emissions is based on the existing and Project (2025) weekday and annual train miles, fuel consumption in gallons per mile, and emission factors for SCRRA's fleet under existing (2019) and 2024 conditions (i.e., the year that SCRRA's fleet is anticipated to be composed of entirely Tier 4 locomotives; Appendix B of this EIR).

#### DISPLACED PASSENGER VEHICLES

The Project would cause some commuters to mode-shift from automobile use to transit use. This would result in a reduction in vehicle miles traveled (VMT) associated with weekday commuter travel. Reductions in on-road vehicle emissions were quantified using average daily displaced vehicle trips and VMT in the CARB EMFAC2017 model.

The EMFAC2017 emission factors are based on a weighted average for all vehicle speeds and fuel types (gasoline, diesel, electric, and natural gas) for EMFAC's light- and medium-duty (LDA, LDT1, LDT2, MDV, MCY) vehicle operating categories. Emission factors for running exhaust (i.e., vehicle movement) are weighted by VMT, whereas emission factors for starting, resting loss, running loss, hot soak, and idle processes are weighted by vehicle trips. CARB's (2019) SAFE Rule adjustment factors were applied to the 2024 emission factors for gasoline-powered vehicles. Fugitive re-entrained road dust emissions were estimated using the U.S. EPA's *Compilation of Air Pollutant Emission Factors* (AP-42), Section 13.2.1 (U.S. EPA 2011).

Displaced passenger trips and miles were estimated for each line based on existing annual train miles and the change in weekday boardings by line under Project conditions. It is assumed that each train mile traveled by a passenger displaces a mile the passenger would have traveled in a motor vehicle (Appendix B of this EIR).

#### *Health Risk Assessment*

An analysis was conducted of potential exposure of sensitive receptors to increased concentrations of TACs. The TAC of concern is DPM, which is a complex mixture of gases and fine particles that includes over 40 substances that are listed by the U.S. EPA, CARB, and OEHHA as an air toxic (OEHHA 2001). OEHHA guidance indicates that the cancer potency factor used to evaluate inhalation cancer risks was developed based on total (gas and particulate matter) diesel exhaust, and that the surrogate for total diesel exhaust is DPM, with particulate matter less than or equal to 10 microns serving as the basis for the potential risk calculations (OEHHA 2015). Furthermore, OEHHA indicates that cancer risk from inhalation exposure to whole diesel exhaust will outweigh the risk from isolated components (OEHHA 2015). Accordingly, the DPM inventory uses particulate matter less than or equal to 10 microns exhaust emissions as a surrogate for whole, non-isolated DPM emissions.

Exposure was modelled using the U.S. EPA's AERMOD version 19191, which is U.S. EPA's preferred air dispersion model for near-field air quality impact assessment. The model was used to assess the change in annual average DPM concentrations at and near the Simi Valley Station that occur as result of operational activities associated with the Project (Appendix C of this EIR).

Modeled DPM concentrations from the AERMOD model were used to estimate cancer risk using CARB's HARP2 model. This software was originally developed to assist with the programmatic requirements of California's Air Toxics Hot Spots Program (Assembly Bill 2588) and has been extended for use in conducting HRAs under CEQA. For this study, Hotspots Analysis and Reporting

Program’s (HARP) Risk Assessment Standalone Tool was used, which calculates risk from the AERMOD modeled concentrations using the 2015 OEHHA HRA guidance.

## Impact Analysis

*Would the Project conflict with or obstruct implementation of the applicable air quality plan?*

### CONSTRUCTION

**Less than Significant with Mitigation.** Project construction would occur within the Ventura County portion of the SCAB, which is under the jurisdiction of VCAPCD. VCAPCD has set significance thresholds for emissions of O<sub>3</sub> precursors. Maximum daily emissions (pounds per day) during each year of construction of the Project are presented in Table 3.2-5. As shown, Project construction would result in emissions that exceed VCAPCD’s regional significance thresholds for NO<sub>x</sub> during the 2023 construction year. The majority of NO<sub>x</sub> emissions are due to off-road construction equipment activity, with rubber-tired dozers being the largest single source. Mitigation Measure AQ-1 proposed to reduce NO<sub>x</sub> emissions during construction includes the use of Tier 4 equipment.

The estimates of daily construction emissions after mitigation are presented in Table 3.2-6.

**Table 3.2-5. Unmitigated Regional Construction Emission Estimates**

Construction Year	Pollutant (pounds per day)					
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
2023	4	49	32	2	2	<1
2024	3	38	27	2	1	<1
VCAPCD regional thresholds	25	25	—	—	—	—
Threshold exceeded	No	Yes	—	—	—	—

Source: Appendix B of this EIR

Notes:

CO=carbon monoxide; NO<sub>x</sub>=nitrogen oxide; PM<sub>10</sub>=particulate matter less than or equal to 10 microns; PM<sub>2.5</sub>=particulate matter less than or equal to 2.5 microns; VCAPCD=Ventura County Air Pollution Control District  
SO<sub>x</sub>=sulfur oxide; ROG=reactive organic gas

**Table 3.2-6. Mitigated Regional Construction Emission Estimates**

Construction Year	Pollutant (pounds per day)					
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
2023	1	13	38	1	<1	<1
2024	1	16	31	1	<1	<1
VCAPCD regional thresholds	25	25	—	—	—	—
Threshold exceeded	No	No	—	—	—	—

Source: Appendix B of this EIR

Notes:

CO=carbon monoxide; NO<sub>x</sub>=nitrogen oxide; PM<sub>10</sub>=particulate matter less than or equal to 10 microns; PM<sub>2.5</sub>=particulate matter less than or equal to 2.5 microns; VCAPCD= Ventura County Air Pollution Control District;  
SO<sub>x</sub>=sulfur oxide; ROG=reactive organic gas

As shown, emissions after inclusion of Tier 4 equipment would be below VCAPCD regional significance thresholds. Therefore, after mitigation, construction-related criteria pollutant emissions would not exceed significance thresholds for pollutants for which the region is nonattainment under the NAAQS or CAAQS. Implementation of Mitigation Measure AQ-1, which requires the use of Tier 4 equipment, would reduce potentially significant impacts to a less than significant level.

#### OPERATION

**Less than Significant Impact.** The Project lies within the Ventura County portion of the SCAB, which is under the jurisdiction of VCAPCD. In addition, train operations enabled by the Project would take place in Los Angeles County, within the SCAB, the jurisdiction of SCAQMD. VCAPCD and SCAQMD are required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the basin is in nonattainment. The most recent plans for each district are the respective 2016 AQMPs.

The Ventura County AQMP regulates O<sub>3</sub> precursors, and the South Coast AQMP regulates particulate matter, CO, and SO<sub>x</sub>, in addition to O<sub>3</sub> precursors. The respective agencies have set significance thresholds for each pollutant. These plans identify transportation control measures that are derived from the applicable RTP. Both Ventura County and the SCAB are within the jurisdiction of SCAG and the governing RTP relevant to the Project study area is SCAG's adopted 2020–2045 RTP/SCS (SCAG 2020a).

The Project is identified in the 2020–2045 RTP/SCS under project number 720001 (SCAG 2020a). As such, the Project is considered consistent with the region's AQMP. Accordingly, the Project would not conflict with or obstruct implementation of the applicable air quality plan. Impacts would be less than significant. No mitigation is required.

*Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is a nonattainment area for an applicable federal or state ambient air quality standard?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** Maximum daily emissions (pounds per day) during each year of construction of the Project are presented in Table 3.2-5. The estimates of daily construction emissions after mitigation are presented in Table 3.2-6. As shown, emissions after inclusion of Tier 4 equipment would be below VCAPCD regional significance thresholds. Therefore, after mitigation, construction-related criteria pollutant emissions would not exceed significance thresholds for pollutants for which the region is nonattainment under the NAAQS or CAAQS. Implementation of Mitigation Measure AQ-1, which requires the use of Tier 4 equipment, would reduce potentially significant impacts to a less than significant level.

#### OPERATION

**Less than Significant Impact.** Project operation has the potential to generate long-term emissions from transit operations and changes in regional traffic patterns. Transit operations would generate emissions through locomotive diesel fuel use. Changes in regional traffic would primarily affect emissions levels through changes in fuel consumption associated with the diversion of private automobile trips to passenger rail. Project conditions take into account SCRRA's locomotive fleet turnover, which is expected to be comprised entirely of Tier 4 locomotives by 2024.

Estimated net operational emissions under existing and Project conditions are presented in Table 3.2-7. As shown, emissions for most criteria pollutants under Project conditions would be lower

than existing conditions. While the Project would increase rail fuel consumption along the Ventura County Line, the emission reductions associated with the new locomotive fleet on a per-gallon-consumed basis more than offsets the increase in fuel consumption. In addition, the emissions associated with displaced VMT from the mode shift from passenger cars to rail would lead to additional emissions reductions. Impacts would be less than significant. No mitigation is required.

**Table 3.2-7. Regional Emissions Estimates**

Emissions Scenario		Pollutant (pounds per day)					
		ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
Existing train emissions (2019)	Total	15	316	81	9	9	0
	Ventura County (SCCAB)	2	33	8	1	1	0
	Los Angeles County (SCAB)	13	284	73	8	8	0
Project train emissions (2024)	Total	7	172	221	3	3	1
	Ventura County (SCCAB)	1	18	23	0	0	0
	Los Angeles County (SCAB)	7	155	198	2	2	1
Net change in train emissions	Total	-7	-144	139	-7	-6	0
	Ventura County (SCCAB)	-1	-15	14	-1	-1	0
	Los Angeles County (SCAB)	-7	-129	125	-6	-6	0
Existing displaced VMT (2019)	Total	-20	-28	-340	-86	-23	-1
	Ventura County (SCCAB)	-9	-12	-146	-37	-10	0
	Los Angeles County (SCAB)	-1	-1	-17	-4	-1	0
Displaced VMT at Project buildout	Total	-14	-16	-238	-187	-24	-1
	Ventura County (SCCAB)	-13	-14	-213	-80	-22	-1
	Los Angeles County (SCAB)	-1	-2	-24	-9	-2	0
Net change in displaced VMT	Total	6	12	102	-101	-1	0
	Ventura County (SCCAB)	-4	-2	-67	-43	-12	-1
	Los Angeles County (SCAB)	0	-1	-7	-5	-1	0
Net change overall	Total	-1	-132	241	-108	-7	0
	Ventura County (SCCAB)	-5	-17	-53	-44	-13	-1
	Los Angeles County (SCAB)	-7	-130	118	-11	-7	0
VCAPCD threshold		25	25	N/A	N/A	N/A	N/A
Threshold exceeded?		No	No	No	No	No	No

**Table 3.2-7. Regional Emissions Estimates**

Emissions Scenario	Pollutant (pounds per day)					
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
SCAQMD threshold	55	55	550	150	55	150
Threshold exceeded?	No	No	No	No	No	No

Source: Appendix B

Notes:

CO=carbon monoxide; NO<sub>x</sub>=nitrogen oxide; PM<sub>10</sub>=particulate matter less than or equal to 10 microns; PM<sub>2.5</sub>=particulate matter less than or equal to 2.5 microns; ROG=reactive organic gas; SO<sub>x</sub>=sulfur oxide; SCAB=South Coast Air Basin; SCCAB=South Central Coast Air Basin; VMT=vehicle miles traveled

*Would the Project expose sensitive receptors to substantial pollutant concentrations?*

#### CONSTRUCTION

**Less than Significant Impact.** Construction activities associated with the Project components would be linear, occurring throughout the 2.20-mile Project alignment over the 19-month construction period. This 19-month duration is much shorter than the assumed 9-, 30-, or 70-year exposure period typically used to estimate lifetime cancer risks. Specific receptors along the Project alignment would only be exposed to emissions for a short duration when construction activities are nearby. Diesel exhaust associated with construction activities would be minimal, as diesel-vehicle activity on public roadways and within the Project boundary would be minimal and scattered, comprising delivery and material haul trips through the entire construction area. Furthermore, diesel-equipment activity on site would be short term and transitory, resulting in minimal emissions, and would occur at distances not expected to expose sensitive receptor locations to substantial pollutant concentrations. Therefore, construction-related pollutant emission concentrations would be expected to be well dispersed and minimal at any given location and would not expose any receptors to substantial pollutant concentrations. Impacts would be less than significant. No mitigation is required.

#### OPERATION

**Less than Significant Impact.** Project operation has the potential to generate long-term emissions from transit operations. Transit operations would generate emissions through locomotive diesel fuel use both at station sites and along the ROW. The increase in activity long term has the potential to increase exposure of pollutants within neighboring communities. However, SCRRRA is upgrading its locomotive fleet with cleaner, Tier 4 locomotives, offsetting increases from additional train operations. Risk was analyzed at sensitive receptor locations out to 1,000 feet from the station and track boundary in order to provide a large enough sample to analyze both the maximum and average change in health risk associated with the Project.

The assessment takes into account two metrics. First, the analysis evaluates the maximally exposed individual receptor location. Second, in order to evaluate the overall exposure to the population as whole, the risk at all receptor locations is presented. For the Project analysis, the exposure for all 516 receptor locations under Project conditions is presented as a proxy for overall average exposure (Appendix C of this EIR).

The summary of the health risk at modeled receptor locations is presented in Table 3.2-8. It should be noted that maximum exposure occurs at 82 feet from the Project boundary, but many receptors in the



Project study area are greater than 82 feet from the Project alignment and risk at these receptor locations is much lower than at maximally exposed locations. However, because sensitive receptors are adjacent to the Project alignment, the maximally exposed location is representative of some receptor locations and is included in this analysis. Although there will be an increase in rail operations, the projected cancer risk and chronic health hazard in 2025 would be less than the VCAPCD thresholds (Appendix C of this EIR). Impacts would be less than significant. No mitigation is required.

**Table 3.2-8. Estimated Health Risk from the Project**

Scenario	Risk	Cancer Risk (per million) <sup>a</sup>	Chronic Hazard Index <sup>a</sup>
Project (2025)	Maximum	5.1	<0.01
	Average	0.7	<0.01
VCAPCD threshold		10	1.0
Threshold exceeded?		No	No

Source: Appendix C of this EIR

Notes:

<sup>a</sup> Risk is conservatively calculated for the maximum exposure along the Ventura Subdivision (48 trains per day).

Since fewer trains pass through the Project study area, risk would in fact be lower than shown.

VCAPCD=Ventura County Air Pollution Control District

*Would the Project result in other emissions (such as those leading to odors) affecting a substantial number of people?*

**CONSTRUCTION**

**Less than Significant Impact.** The only potential odor source during construction would be associated with equipment exhaust. Such odors would temporary and not expected to affect a substantial number of people. Material deliveries and heavy-duty haul truck trips could create an occasional whiff of diesel exhaust for nearby receptors. These odors would not affect a substantial number of people because construction would be temporary, and construction-generated emissions dissipate rapidly with increasing distance from the source. Overall, odors associated with Project construction would be temporary and intermittent in nature and would not create a significant level of objectionable odors affecting a substantial number of people. Impacts would be less than significant. No mitigation is required.

**OPERATION**

**Less than Significant Impact.** According to the VCAPCD *Air Quality Assessment Guidelines* (2003), land uses associated with odor complaints typically include Wastewater treatment facilities, sanitary landfills, transfer stations, composting facilities, asphalt batch plants, painting and coating operations, fiberglass operations, food processing facilities, feed lots or dairies, petroleum extraction, transfer, processing, and refining operations and facilities, chemical manufacturing operations and facilities, and rendering plants. The Project, which is a passenger rail project, includes none of these land uses. Thus, Project operation is not expected to result in objectionable odors for the neighboring uses and would not adversely affect a substantial number of people. Impacts would be less than significant. No mitigation is required.

### 3.2.5 Mitigation Measures

Implementation of Mitigation Measure AQ-1 would avoid or minimize potential significant impacts on air quality.

**AQ-1 Use Tier 4 construction equipment.** Prior to all construction activities, SCRRA shall ensure that all dozing equipment; including, but not limited to, rubber-tired or front-end dozers; will be equipped with U.S. EPA Tier 4 or cleaner engines. SCRRA shall document and submit evidence to SCRRA prior to construction that Tier 4 or cleaner dozing equipment will be used during Project construction.

### 3.2.6 CEQA Significance Conclusions After Mitigation

With implementation of Mitigation Measure AQ-1, the Project would have a less than significant impact on air quality.

## 3.3 Biological Resources

### 3.3.1 Introduction

The Biological Resources section describes the existing biological resource conditions, applicable regulations, and results of biological surveys, including a general biological survey, vegetation mapping, habitat assessment, focused surveys, and jurisdictional delineation within the Project study area. This section also describes the impacts on biological resources that would result from construction and operation of the Project and mitigation measures that would reduce significant impacts, where feasible. Cumulative impacts on biological resources; in combination with planned, approved, and reasonably foreseeable projects; are discussed in Chapter 4, Cumulative Impacts.

### 3.3.2 Environmental Setting

This section summarizes the existing environmental setting related to Biological Resources with the Project study area. The information provided herein is a summary of the details presented in the corresponding *Simi Valley Double Track and Platform Project Biological Resources Technical Report* (BRTR) (Appendix D of this EIR) and *Simi Valley Double Track and Platform Project Jurisdictional Delineation Report* (JDR) for the Project (Appendix E of this EIR).

The Project study area is located in southeast Ventura County, in the City, adjacent to the northwest perimeter of the San Fernando Valley and bordered by the Santa Susana Mountains to the north and the Simi Hills to the east and south. The study area is a highly urbanized area of the county and is mostly developed, with the majority of native vegetation and natural drainages having either been removed or altered significantly. The climate is characterized as Mediterranean, with warm, dry summers and cool, moist winters. Average precipitation within the Project study area is approximately 16 inches per year, the majority of which occurs during January and February (U.S. Climate Data 2021).

#### Soils

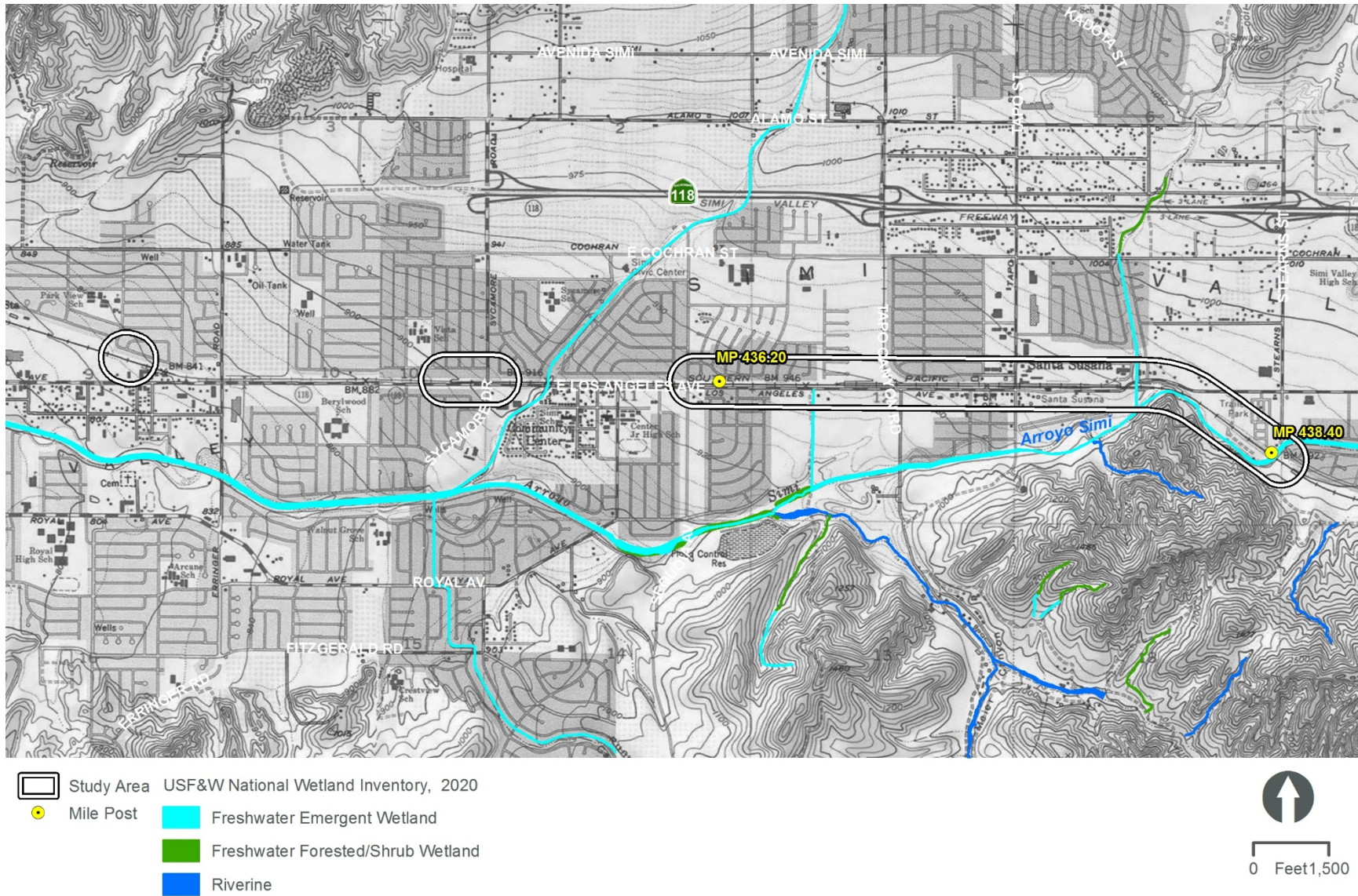
Soil associations mapped within the Project study area consist of Anacapa Series, Camarillo Series, Metz Series, Mocho Series, Pico Series, Riverwash, Soper Series, and Zamora Series. All but the Soper Series, which consists of material weathered from conglomerate and sandstone, consist of alluvial soils. Camarillo loam and Riverwash are the only soils within the Project study area that have a hydric rating. See the BRTR (Appendix D of this EIR) and Section 3.6, Geology, Soils, and Seismicity, of this EIR for details.

#### Hydrology

Simi Valley is located within the Calleguas Creek Watershed. The main hydrologic features within the vicinity of the Project study area, as shown on the National Wetland Inventory (Figure 3.3-1), are Arroyo Simi and Las Lajas Canyon channel. Las Lajas Canyon channel passes beneath East Los Angeles Avenue and the railroad ROW via a concrete box culvert. Arroyo Simi crosses into the southeastern section of the Project study area but is outside of the Project footprint. More information regarding the watershed is included in the BRTR (Appendix D of this EIR) and details regarding the hydrology in the Project study area are provided in Section 3.9, Hydrology, Flooding, and Water Quality.

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Figure 3.3-1. National Wetland Inventory Map



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## Vegetation Communities and Other Land Cover Types

Vegetation communities and other land cover types in the Project study area are identified with their acreages in Table 3.3-1, and their brief descriptions are provided below. Detailed descriptions and maps of their locations are provided in the BRTR (Appendix D of this EIR).

**Table 3.3-1. Vegetation Communities and Other Land Cover Types in the Study Area**

Vegetation Community or Other Land Cover Type	Area (acres)
<b><i>Tree-dominated habitats</i></b>	
Mixed willow riparian forest	1.50
Valley oak woodland	2.72
Native ornamental	1.64
Nonnative Ornamental	1.11
<b><i>Shrub-dominated habitats</i></b>	
California sagebrush scrub	9.47
<b><i>Herbaceous-dominated habitats</i></b>	
Cattail marsh	2.01
<b><i>Other land cover types</i></b>	
Nonvegetated channel	1.39
Disturbed	7.62
Urban/Developed	328.84
<b>Total</b>	<b>356.28</b>

Source: Appendix D of this EIR

### *Mixed Willow Riparian Forest (Salix gooddingii Woodland Alliance and Salix lasiolepis Shrubland Alliance)*

Mixed willow riparian includes a combination of areas dominated by black willow (*Salix gooddingii*) and areas dominated by arroyo willow (*Salix lasiolepis*), or a mix of the two species. Within the Project study area, willow riparian forest covers approximately 1.50 acre.

### *Valley Oak Woodland (Quercus lobata Forest and Woodland Alliance)*

Valley oak woodland is dominated by valley oak (*Quercus lobata*) with at least 35 percent relative cover in the tree canopy. Within the Project study area, valley oak woodland occurs on the southern edge of the Project study area and covers approximately 2.72 acres.

### *Native Ornamental*

The Project study area includes small areas of mature, native coast live oak and western sycamore (*Platanus racemosa*) trees that are surrounded by development and serve as ornamental trees. Mature native trees, especially oak trees, may be protected by state regulations and local ordinances and are, therefore, identified separately from nonnative ornamental trees. Within the Project study area, native trees that serve as ornamental trees occur along the rail ROW, parking lots, and roads, covering approximately 1.64 acre.

### *Nonnative Ornamental*

Areas with ornamental vegetation are typically found near development, along streets, and in parks. This vegetation usually consists of irrigated plants and trees that are not native but may include native species that are intentionally planted. Within the Project study area, stands of nonnative ornamental trees, including Peruvian pepper trees (*Schinus molle*), are located on the northeast corner of East Los Angeles Avenue and Tapo Canyon Road, covering approximately 1.11 acre.

### *California Sagebrush Scrub (Artemisia californica Shrubland Alliance)*

California sagebrush scrub is dominated by California sagebrush (*Artemisia californica*), which accounts for at least 50 percent relative cover in the shrub layer. Within the Project study area, California sagebrush scrub occurs primarily in the southern portion of the Project study area and covers approximately 9.47 acres.

### *Cattail Marsh (Typha angustifolia, domingensis, latifolia Herbaceous Alliance)*

Cattail marsh is dominated by one or more species of cattail (*Typha* spp.), with at least 50 percent relative cover in the herbaceous layer. This alliance usually occurs in semi-permanently flooded freshwater or brackish marshes. Within the Project study area, cattail marsh occurs on the southern edge of the Project study area, covering approximately 2.01 acres.

### *Nonvegetated Channel*

Nonvegetated channels are natural or artificial (e.g., concrete-lined) drainages in which water flows intermittently and that do not support vegetation. Concrete-lined or unvegetated earthen channels occur within the Project study area, covering approximately 1.39 acre.

### *Disturbed*

Areas labeled disturbed are areas where natural communities have been impacted to the extent that they no longer function naturally. These areas have been previously physically disturbed but continue to retain a soil substrate. Disturbed areas consist of predominantly nonnative weedy and ruderal species. This is not a natural community and generally does not provide habitat for wildlife or special-status species, though exceptions occur. Examples of disturbed areas include areas that have been graded for development or cleared for fuel management, staging areas, off-road vehicle trails, and abandoned home or business lots. Within the Project study area, disturbed areas occur as vacant lots and the railroad ROW, covering approximately 7.62 acres.

### *Urban/Developed*

Urban/developed land refers to areas that have been manipulated by grading and compacting soils to build infrastructure, such as roads, buildings, parks, fields, etc. These areas have no biological function or value, except that they may provide habitat for nesting birds. Within the Project study area, paved roads, associated landscaping, and portions of the Metrolink ROW were mapped as urban/developed. Urban/developed habitat occupies approximately 328.84 acres of the Project study area.

## Special-status Vegetation Communities

A special-status vegetation community is one that has a state rarity rank of critically imperiled and at very high risk (S1), imperiled and at high risk (S2), or vulnerable and at moderate risk (S3) as determined by the NatureServe Heritage Program Status Ranking system (Faber-Langendoen et al.



2012) or is identified as subject to local, state, or federal regulations (e.g., oak woodland alliance and vegetation communities meeting United States Army Corps of Engineers' (USACE) three-parameter wetland criteria). Definitions of the state ranks are as follows:

- **S1:** Critically imperiled and at a very high risk of extinction or elimination due to extreme rarity, very steep declines, or other factors.
- **S2:** Imperiled and at high risk of extinction or elimination due to a very restricted range, very few populations or occurrences, steep declines, or other factors.
- **S3:** Vulnerable and at moderate risk of extinction or elimination due to a restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors.

The Project study area supports two special-status vegetation communities: valley oak woodland and black willow thickets, both of which have a state rarity rank of S3.

## Plant Species

The general biological survey and rare plant habitat assessment documented 55 vascular plant species within the Project study area. The species detected are representative of the vegetation communities located within the Project study area. A list of all plant species observed in the Project study area is provided in Appendix D of this EIR.

### *Federally and/or State-Listed Plant Species*

Based on the results of the literature review, of the 55 special-status vascular plant species evaluated for potential to occur within the study area, 15 are federally and/or state listed. Details for these special-status plant species, including habitat, life form, blooming period, and potential to occur within the Project study area are provided in Appendix D of this EIR.

The majority of the Project study area is surrounded by urban and developed areas that would not support federally and/or state-listed plant species. A portion of the Project study area, located outside of the Project footprint, contains California sagebrush scrub, which has the potential to support one state-listed rare plant species: Santa Susana tarplant (*Deinandra minthornii*). The other 14 federally and/or state-listed plant species identified from the literature search are not expected to occur due to a lack of suitable habitat and/or soils or the Project study area is located outside of the species known elevation range.

### *Other Special-Status Plant Species*

Based on the literature review, of the 55 special-status vascular plant species evaluated for potential to occur within the Project study area, 40 are not federally or state listed, but are California Rare Plant Rank (CRPR) List 1B, 2B, 3, or 4 plants.<sup>1</sup> Details for these special-status plant species, including habitat, life form, blooming period, and potential to occur within the study area are provided in Appendix D of this EIR.

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<sup>1</sup> California Rare Plant Rank (CRPR) 1B = Plants rare, threatened, or endangered in California and elsewhere; CRPR 2B = Plants rare, threatened or endangered in California but more common elsewhere; CRPR 3 = Plants needing more information; CRPR 4 = Plants of limited distribution. Threat ranks: 0.1 = Seriously endangered in California. 0.2 = Fairly endangered in California.

Since the Project study area is highly disturbed and surrounded by developed areas, it is not expected to support any of these species. No special-status plants were observed within the Project study area during the field survey.

Of the 40 non-listed plant species identified from the literature search, 3 species have a low potential of occurring within the Project study area based on the presence of suitable habitat: Payne's bush lupine (*Lupinus paynei*, CRPR 1B.1) and Catalina mariposa lily (*Calochortus catalinae*, CRPR 4.2) within California sagebrush scrub on the slopes located in the southeastern portion of the study area; and southern California black walnut (*Juglans californica*, CRPR 4.2) in woodland and scrub communities in the Project study area, outside of the Project footprint. The other 37 special-status plant species identified from the literature search are not expected to occur due to a lack of suitable habitat and/or soils or the Project study area is located outside of the species' known elevation range.

### Wildlife Species

Wildlife species observed during the survey include species commonly found in disturbed and developed areas. A list of all wildlife species observed in the Project study area is provided in Appendix D of this EIR.

#### *Federally and/or State-listed Wildlife Species*

Based on the results of the literature review, 16 federally and/or state-listed wildlife species, or candidates under consideration for listing, are known from the vicinity of the Project study area. Of those 16 species, 5 were found to have potential to occur within the Project study area, as follows:

- Amphibians:
  - Arroyo toad (*Anaxyrus californicus*, federally endangered [FE], species of special concern [SSC])
  - California red-legged frog (*Rana draytonii*, federally threatened [FT], SSC)
- Birds:
  - Coastal California gnatcatcher (CAGN; *Polioptila californica californica*, FT, SSC)
  - Least Bell's vireo (LBVI; *Vireo bellii pusillus*, FE, state endangered [SE])
  - Southwestern willow flycatcher (SWFL; *Empidonax traillii extimus*, FE, SE)

There are no designated critical habitat areas for listed species within the Project study area. All listed wildlife species known to occur in the vicinity of the Project and their potential to occur within the Project study area are identified in Appendix D of this EIR.

The primary aquatic drainage feature within the Project study area, Arroyo Simi, provides suitable habitat for Arroyo toad, which has a moderate potential to occur, and California red-legged frog, which has a low potential to occur within the Project study area. However, suitable habitat for these two amphibian species lies outside of the Project footprint.

Due to the presence of potentially suitable nesting habitat for three listed bird species within the Project study area, protocol presence/absence surveys for CAGN, LBVI, and SWFL were conducted during the breeding season for these species, the results of which are provided below.

#### COASTAL CALIFORNIA GNATCATCHER

No CAGN were detected during protocol surveys (Appendix D of this EIR).

#### LEAST BELL'S VIREO

No LBVI were detected during protocol surveys. However, an incidental detection of LBVI occurred during the June 9, 2020, SWFL survey. There were no observations of LBVI before or after June 9, 2020, during surveys conducted for the Project and it is presumed that the individual observed on June 9 was dispersing through the Project study area (Appendix D of this EIR).

#### SOUTHWESTERN WILLOW FLYCATCHER

No SWFL were detected during protocol surveys (Appendix D of this EIR).

#### *Other Special-Status Wildlife*

Based on the results of the literature review, 21 wildlife species that are not listed under Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA) but are considered California SSCs or are fully protected (FP), including by the Bald and Golden Eagle Protection Act, occur within the Project vicinity (Appendix D of this EIR). Fourteen of these species have potential to occur within the Project study area, as follows:

- Reptiles:
  - Western pond turtle (*Emys marmorata*, SSC)
  - Coast horned lizard (*Phrynosoma blainvilli*, SSC)
  - Coastal whiptail (*Aspidoscelis tigris stejnegeri*, SSC)
  - Southern California legless lizard (*Anniella stebbinsi*, SSC)
  - California glossy snake (*Arizona elegans occidentalis*, SSC)
  - Two-striped gartersnake (*Thamnophis hammondi*, SSC)
- Birds:
  - White-tailed kite (*Elanus leucurus*, FP)
  - Yellow-breasted chat (*Icteria virens*, SSC)
  - Yellow warbler (*Setophaga petechia*, SSC)
- Mammals:
  - Pallid bat (*Antrozous pallidus*, SSC)
  - Spotted bat (*Euderma maculatum*, SSC)
  - Western mastiff bat (*Eumops perotis californicus*, SSC)
  - San Diego desert woodrat (*Neotoma lepida intermedia*, SSC)

However, suitable habitat for all of these species does not occur within the Project footprint, and direct impacts on these species are not anticipated.

During initial habitat mapping, potential suitable habitat for burrowing owl (*Athene cunicularia*) was evaluated. While ground squirrel burrows were observed in several areas of the Project study area,

none of them were considered suitable to support burrowing owl due to the lack of large enough tracts (i.e., 5 acres or greater) of open habitat suitable to support an individual or pair of burrowing owls.

The Project study area provides potential foraging habitat for white-tailed kite, a state fully protected species. However, suitable nesting habitat for this species is absent from the Project study area and suitable foraging habitat is absent from the Project footprint.

The only special-status wildlife species observed during breeding season surveys in the Project study area was yellow warbler. As stated above, suitable habitat for yellow warbler is not present within the Project footprint and, as such, direct impacts by the Project on this species are not anticipated.

### Jurisdictional Aquatic Resources

The jurisdictional study area (JSA) is located in the Calleguas Creek watershed and flows that originate within the JSA are conveyed primarily by Arroyo Simi and Las Llajas Canyon channel, a tributary to Arroyo Simi.

The only jurisdictional aquatic resources located within the immediate vicinity of the JSA are Arroyo Simi, which is located just outside of the JSA, and Las Llajas Canyon channel, which is tributary to Arroyo Simi and passes beneath the rail ROW and East Los Angeles Avenue via a concrete box culvert. There were also no potentially jurisdictional aquatic resource features observed in the areas subsequently surveyed on January 20, 2021. Detailed information on the existing site conditions related to jurisdictional areas is provided in the JDR (Appendix E of this EIR).

#### *United States Army Corps of Engineers Jurisdiction*

There are no wetland or non-wetland waters of the U.S. that would be subject to USACE jurisdiction under Section 404 of the Clean Water Act (CWA) within the JSA. The USACE confirmed, via an Approved Jurisdictional Determination on January 11, 2021, that waters of the U.S. do not occur within the Project study area. Therefore, a CWA Section 404 permit from the USACE will not be required for the Project.

#### *Regional Water Quality Control Board Jurisdiction*

There are no waters of the state that would be subject to RWQCB jurisdiction under Section 401 of the CWA or the Porter Cologne Act within the JSA.

#### *California Department of Fish and Wildlife Jurisdiction*

There are no features that exhibit streambed and stream banks and/or riparian vegetation that would be subject to CDFW jurisdiction under Section 1600 et seq. of the California Fish and Game Code within the JSA. Confirmation was received from CDFW on February 17, 2021, that a Fish and Game Code Section 1602 Lake or Streamed Alteration Agreement is not required for the Project.

### Nesting Birds

Suitable habitat to support nesting birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Section 3500 et seq. within the Project study area includes trees located outside of the ROW. There is also low potential for ground-nesting birds, such as killdeer (*Charadrius vociferus*), to nest within portions of the ROW, although the high level of disturbance and lack of nearby foraging habitat reduces the potential for nests to occur within the ROW. A number of native bird species were observed in the Project study area (Appendix D of this EIR).

## Wildlife Corridors and Habitat Linkages

Wildlife movement corridors, also called dispersal corridors or landscape linkages, are linear features whose primary wildlife function is to connect at least two significant habitat areas (Beier and Loe 1992). Other definitions of corridors and linkages are as follows:

- A corridor is a specific route used for movement and migration of species. A corridor may be different from a linkage because it represents a smaller or narrower avenue for movement. Linkage means an area of land which supports or contributes to the long-term movement of wildlife and genetic material.
- A linkage is a habitat area that provides connectivity between habitat patches, as well as year-round foraging, reproduction, and dispersal habitat for resident plants and animals.

Areas not considered as functional wildlife dispersal corridors or linkages are typically obstructed or isolated by concentrated development and heavily traveled roads, known as chokepoints.

The Project study area is highly urbanized, and the existing railroad corridor exhibits very little vegetative cover, limiting its potential for use by wildlife. The Project study area likely supports some local, nocturnal, urban-adapted animal movement. Additionally, Arroyo Simi runs parallel to, and south of, the Project footprint and provides a potential west-to-east corridor for wildlife, connecting tracts of open space. Las Lajas Canyon channel also has the potential to support urban-animal adapted movement. However, Arroyo Simi and Las Lajas Canyon channel are outside of the Project footprint.

### 3.3.3 Regulatory Setting

This section summarizes federal, state, and local regulations related to biological resources that are applicable to the Project.

#### Federal

##### *Federal Endangered Species Act*

FESA protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were formally listed during the environmental review process. Procedures for addressing impacts on federally listed species follow two principal pathways, both of which require consultation with the United States Fish and Wildlife Service (USFWS), which administers the FESA for all terrestrial species. The first pathway, a Section 10(a) incidental take permit, applies to situations where a nonfederal governmental entity must resolve potential adverse impacts on species protected under the FESA. The second pathway, a Section 7 consultation, applies to projects directly undertaken by a federal agency or private projects requiring a federal permit or approval.

##### *Migratory Bird Treaty Act*

The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 Code of Federal Regulations Part 10, including feathers, or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21).

All raptors and their nests are protected from take or disturbance under the MBTA (16 U.S. Code, Section 703 et seq.). Golden eagle and bald eagle are also afforded additional protection under the Eagle Protection Act, amended in 1973 (16 U.S. Code, Section 669 et seq.).

### *Clean Water Act – United States Army Corps of Engineers*

Section 404 of the CWA establishes a program for USACE to regulate the discharge of dredge and fill material into waters of the U.S., including wetlands. Activities regulated under this program include fills for development, water resource projects (e.g., dams and levees), infrastructure development (e.g., highways and airports), and conversion of wetlands to uplands for farming and forestry. Either an individual Section 404 permit or authorization to use an existing USACE nationwide permit must be obtained if any portion of an activity would result in dredge or fill impacts on a river or stream that has been determined to be jurisdictional under Section 404 of the CWA. When applying for a permit, a company or organization must show that they would either avoid wetlands where practicable, minimize wetland impacts, or provide compensation for any unavoidable destruction of wetlands.

As of June 22, 2020, the term waters of the U.S. is defined in the USACE regulations at 33 Code of Federal Regulations Part 328.3 as:

- a. Jurisdictional waters. For purposes of the CWA, 33 U.S. Code 1251 et seq. and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term waters of the U.S. means:
  1. The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;
  2. Tributaries;
  3. Lakes and ponds, and impoundments of jurisdictional waters; and
  4. Adjacent wetlands.
- b. Non-jurisdictional waters. The following are not waters of the U.S.:
  1. Waters or water features that are not identified in paragraph (a)(1), (2), (3), or (4) of this section;
  2. Groundwater, including groundwater drained through subsurface drainage systems;
  3. Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools;
  4. Diffuse stormwater runoff and directional sheet flow over upland;
  5. Ditches that are not waters identified in paragraph (a)(1) or (2) of this section, and those portions of ditches constructed in waters identified in paragraph (a)(4) of this section that do not satisfy the conditions of paragraph (c)(1) of this section;
  6. Prior converted cropland;
  7. Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease;
  8. Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the conditions of paragraph (c)(6) of this section;
  9. Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;

10. Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;
11. Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and
12. Waste treatment systems.

The term *ephemeral* means surface water flowing or pooling only in direct response to precipitation (e.g., rain or snow fall). The term *intermittent* means surface water flowing continuously during certain times of the year and more than in direct response to precipitation (e.g., seasonally when the groundwater table is elevated or when snowpack melts). The term *perennial* means surface water flowing continuously year-round.

When applying for a Section 404 permit, applicants may choose to proceed under the assumption that all drainage features that exhibit an Ordinary High Water Mark within a project footprint are subject to regulation if a discharge of fill is proposed. This assumption is considered a preliminary Jurisdictional Determination (JD). Alternatively, applicants may request an approved JD, which is USACE's concurrence that the jurisdictional delineation's findings are correct and is an official USACE determination that jurisdictional aquatic resources are present or absent from the subject site. An approved JD is typically valid for up to five years and allows for the USACE to exclude features that they have reviewed and deemed non-jurisdictional.

The use of a preliminary JD may expedite the permitting process when compared with the approved JD process, which requires the JD to be coordinated with U.S. EPA.

#### *Clean Water Act – Regional Water Quality Control Board*

**Section 401.** The RWQCB regulates discharge activities into waters pursuant to Section 401(a)(1) of the federal CWA. Section 401 of the CWA specifies that certification from the state is required for any applicant requesting a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities that may result in any discharge into navigable waters.

**Section 402.** As explained in Section 3.9, Hydrology, Flooding, and Water Quality, the RWQCB regulates, under Section 402 of the CWA, discharges of pollutants to waters of the U.S. and issues NPDES permits.

#### State

##### *California Endangered Species Act*

Sections 2050 through 2098 of the California Fish and Game Code outline the protection provided to California's rare, endangered, and threatened species. Section 2080 of the Fish and Game Code prohibits the taking of plants and animals listed under the CESA. Section 2081 established an incidental take permit program for state-listed species. In addition, the Native Plant Protection Act of 1977 (Fish and Game Code Section 1900 et seq.) gives CDFW authority to designate state endangered, threatened, and rare plants and provides specific protection measures for designated populations.

CDFW has also identified many SSC. Species with this status have limited distribution or the extent of their habitats has been reduced substantially such that their populations may be threatened. Thus,

their populations are monitored, and they may receive special attention during the environmental review process. While they do not have statutory protection, they may be considered rare under CEQA and are thereby warranted specific protection measures.

#### *Fully Protected Species*

CDFW has jurisdiction over FP species of birds, mammals, amphibians, reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any FP species is prohibited, and CDFW cannot authorize their take in association with a general project except under the provisions of a Natural Communities Conservation Plan (NCCP), 2081.7 or a Memorandum of Understanding for scientific purposes.

#### *Nesting Birds*

CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, eggs and nests include, sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

#### *Lake and Streambed Alteration Program*

CDFW regulates water resources under Sections 1600 et seq. of the California Fish and Game Code. CDFW has the authority to grant Streambed Alteration Agreements under Section 1602, which states:

*An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.*

CDFW jurisdiction includes ephemeral, intermittent and perennial watercourses and extends to the top of the bank of a stream or lake if unvegetated, or to the limit of the adjacent riparian habitat located contiguous to the watercourse if the stream or lake is vegetated.

Proposed actions that require a Streambed Alteration Agreement may also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

#### *Porter-Cologne Water Quality Control Act*

The Porter-Cologne Water Quality Control Act requires that each of the nine RWQCBs prepare and periodically update basin plans for water quality control. Each basin plan sets forth water quality standards for surface water and groundwater and actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to protect wetlands through the establishment of water quality objectives. The RWQCB's jurisdiction includes federally protected waters as well as areas that meet the definition of waters of the state. Waters of the state are defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The RWQCB has the discretion to take jurisdiction over areas not federally protected under Section 401 provided they meet the definition of waters of the state. Mitigation requiring no net loss of wetlands functions and values of waters of the state is typically required by the RWQCB.



### *California Environmental Quality Act*

CEQA requires state and local agencies to identify impacts on the environment that might be caused by their actions. Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) identifies a substantial reduction in numbers of a rare or endangered species as a significant impact. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. For example, plant species that are not federally or state listed but that occur on the California Native Plant Society's (CNPS) CRPR Lists 1B and 2B would also typically be considered under CEQA. Plant populations of species meeting the CRPR List 3 and 4 designations that are locally significant may also warrant consideration under CEQA.

### *California Public Resources Code Section 21083.4*

Per Public Resource Code Section 21083.4, significant impacts on coast live oak (*Quercus agrifolia*) trees greater than 5 inches diameter at breast height would require mitigation consisting of oak woodland conservation, oak woodland restoration, coast live oak planting and management, or payment to the Oak Woodland Conservation Fund.

### Local

#### *City of Simi Valley General Plan*

The City's General Plan (City of Simi Valley 2012b) includes goals and objectives related the protection of biological resources. Table 3.10-1 includes applicable General Plan goals and policies pertaining to natural resources and an assessment of whether the Project is consistent with each policy.

#### *City of Simi Valley Municipal Code*

In conjunction with the City's General Plan, the City has adopted a municipal code to implement its General Plan framework. The following chapters of the Simi Valley Municipal Code may be applicable to one or more Project components:

- **Chapter 9-32, Hillside Performance Standards**, of the City of Simi Valley Municipal Code regulates development within the City's hillside areas. The City is located among a series of major and minor hills that constitute a significant natural topographical feature of the community as they are visible to all persons traveling the major highway arteries, and also to citizens residing in and around the City. The purposes of the hillside performance standards are to implement the provisions of the General Plan as they relate to the preservation of hillside areas, the promotion of single-family, detached housing in hillside areas, the maintenance of open space, the retention of scenic and recreational resources of the City, and to further enhance the public health, safety, or welfare by regulating development in hillside areas (City of Simi Valley 2012b).
- **Chapter 9-38, Tree Preservation, Cutting and Removal**, addresses tree protection and preservation, where possible, in order to protect the health, safety, or welfare of the citizens of the City (City of Simi Valley 2012b). This chapter of the municipal code defines protected trees as "all historic trees, all mature native oak trees, or any mature trees which are associated with a proposal for urban development or are located on a vacant parcel." It also states the process for obtaining tree removal permits, which are required by the City's Public Works Department.

Mature trees are defined in the City of Simi Valley's Mature Tree Preservation Ordinance (Ordinance No. 1278) as any living native oak tree that has a diameter of 5 inches or more, or a tree of any other species that has a diameter of 9.5 or more inches as measured 4.5 feet above the root crown.

### 3.3.4 Impact Analysis

This section describes the potential for environmental impacts related to biological resources as a result of Project implementation. It describes the thresholds used to determine whether an impact would be significant, as well as measures to mitigate potentially significant impacts, where appropriate.

#### Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to biological resources would be considered significant if the Project would:

- A. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFW;
- C. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- D. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- E. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or,
- F. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

#### Thresholds Requiring No Further Analysis

The following thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project:

- F. The Project study area for biological resources is not within an established habitat conservation plan, natural community conservation plan, significant ecological area, or other approved local, regional, or state habitat conservation plan. In this context, implementation of the Project would not conflict with the provision of any of these types of plans and no impact would occur.

#### Methodology

##### *Literature Review*

A list of special-status plant and animal species that have the potential to occur within the Project study area was prepared using information provided by the USFWS' Information for Planning and

Consultation Online System (USFWS 2021), CDFW's California Natural Diversity Database Rare Find program (CDFW 2021), and CNPS's Inventory of Rare and Endangered Plants of California (CNPS 2021). Additional resources reviewed included USGS topographic maps at a minimum 1:24,000 scale (USGS 2020), USFWS National Wetland Inventory dataset (USFWS 2020), Natural Resource Conservation Service Soil Mapping (U.S. Department of Agriculture Natural Resource Conservation Service 2020), and aerial imagery available on Google Earth (Google Earth 2020).

*General Biological Field Surveys and Vegetation Mapping*

Vegetation mapping and habitat assessments for federally and/or state-listed plant and wildlife species were conducted within the Project study area on February 6, 2019, April 21, 2020, and January 20, 2021. Vegetation communities were mapped using the classification system methodology and associations described in *A Manual of California Vegetation* (Sawyer et al. 2009). This classification system was used to provide consistency with the National Vegetation Classification System and is currently the statewide standard for vegetation mapping (Section 1900 of the California Fish and Game Code).

Table 3.3-2 provides a summary of the biological surveys conducted in the Project study area.

**Table 3.3-2. Summary of Survey Dates and Surveyors**

Survey Type	Survey Date(s)	Surveyor(s)
Vegetation Mapping	2/6/19	Sarah Barrera
Rare Plant Habitat Assessment	2/6/19	Shelly Austin
General Biological Survey	4/21/20 1/20/2021	Ingrid Eich and Erin Martinelli Erin Martinelli
Jurisdictional Delineation Survey	4/21/20 1/20/2021	Ingrid Eich and Erin Martinelli Erin Martinelli
CAGN Protocol Surveys	4/21/20-6/18/20	Ingrid Eich and Erin Martinelli
LBVI Protocol Surveys	4/10/20-7/2/20	Adam Lockyer and Aaron Newton; Ingrid Eich and Erin Martinelli; Andrew Phillips
SWFL Protocol Surveys	5/26/20-7/16/20	Andrew Phillips

Notes:

CAGN=Coastal California gnatcatcher; LBVI=Least Bell's vireo; SWFL=Southwestern willow flycatcher

*Rare Plant Habitat Assessment*

A rare plant habitat assessment was conducted on February 6, 2019 in accordance with CNPS Botanical Survey Guidelines (CNPS 2001) and CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). Plant nomenclature follows the Jepson Flora Project (Jepson Flora Project 2020). The Calflora online database (Calflora 2020) was also used to assist with plant identification. Based on the results of the habitat assessment, it was determined that there was no potential for any state and/or federally listed, or other special-status, plant species to occur in the Project footprint.

### *Jurisdictional Delineation*

A jurisdictional delineation to identify and map all potential drainage features within the JSA was conducted on April 21, 2020, and January 20, 2021. The JSA is smaller than the overall Project study area and consists of the Project's physical footprint, which includes Metrolink ROW within the Project's MP limits, as well as all temporary construction easements. The complete methodology used to conduct the jurisdictional delineation is included in the JDR (Appendix E of this EIR).

### *Protocol Wildlife Surveys*

Based on the results of the vegetation mapping and habitat assessment, focused surveys were conducted in 2020 for three federally and/or state-listed wildlife.

#### **COASTAL CALIFORNIA GNATCATCHER**

Protocol breeding season surveys for federally threatened CAGN were conducted during the 2020 survey season. Surveys consisted of 6 site visits each separated by at least 7 days from April 21 to June 18, 2020, per protocol specified in the *Coastal California Gnatcatcher Presence/Absence Survey Guidelines* (USFWS 1997).

#### **LEAST BELL'S VIREO**

Protocol surveys for federally and state endangered LBVI (*Vireo bellii pusillus*) were conducted during the 2020 survey season. Surveys consisted of 8 site visits separated by at least 10 days from April 10 to July 2, 2020, per protocol specified in the *Least Bell's Vireo Survey Guidelines* (USFWS 2001).

#### **SOUTHWESTERN WILLOW FLYCATCHER**

Protocol breeding season surveys for federally and state endangered SWFL (*Empidonax trailii extimus*) were conducted during the 2020 survey season. Surveys consisted of 5 site visits separated by at least 5 days from May 26 to July 16, 2020, during the appropriate survey periods, per protocol identified in *A Natural History Summary and Survey Protocol for Southwestern Willow Flycatcher* (USGS 2010).

### Impact Significance Analysis

The results of the literature review and biological surveys presented in the BRTR (Appendix D of this EIR) were analyzed to determine the Project's potential for significant impacts. For the purpose of this analysis, all biological resources within the Project footprint are considered subject to direct impacts from one of the following: permanent easement, temporary construction easement, and railroad ROW. Habitats within the Project study area adjacent to the Project footprint would be subject to potential indirect impacts.

*Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS?*

#### **CONSTRUCTION**

**Less than Significant with Mitigation.** Project construction would predominantly occur within the existing railroad ROW and, as such, would have no direct impact on federally and/or state-listed, or special status, plant species (i.e., Santa Susana tarplant, Catalina mariposa lily, Payne's bush lupine, and Southern California black walnut). Similarly, Project construction would have no direct impact on

federally and/or state-listed wildlife species (i.e., arroyo toad, California red-legged frog, CAGN, LBVI, and SWFL) or non-listed special status species (i.e., western pond turtle, coast horned lizard, coastal whiptail, southern California legless lizard, California glossy snake, two-striped gartersnake, white-tailed kite, yellow-breasted chat, yellow warbler, pallid bat, spotted bat, western mastiff bat, and San Diego desert woodrat). However, indirect impacts on these species could occur if they happen to be present in areas adjacent to the Project footprint during construction. Indirect impacts may include decreased water quality, damage to potential foraging habitat resulting from fugitive dust associated with construction, or disruption of foraging, breeding, or communication resulting from additional noise or lighting associated with Project construction. With implementation of Mitigation Measure BIO-1, which requires use of standard construction best management practices (BMP); Mitigation Measure BIO-2, which requires a preconstruction nesting bird survey; and, Mitigation Measure AQ-1, which would require the use of U.S. EPA Tier 4 or cleaner engines, indirect impacts would be reduced to a less than significant level.

#### OPERATION

**Less than Significant Impact.** Focused surveys for CAGN, LBVI, and SWFL found that CAGN and SWFL were absent from the Project study area. Although an incidental detection of LBVI occurred during the June 9, 2020, SWFL survey, there were no observations of LBVI before or after June 9, 2020, during surveys conducted for the Project and it is presumed that the individual observed on June 9 was dispersing through the Project study area. Therefore, indirect impacts associated with operations on these listed species are not anticipated.

Although operation of the Project would involve increased train traffic and periodic maintenance in the railroad ROW, operations would not differ significantly when compared to existing conditions. Under existing conditions, the wildlife which utilize the habitats adjacent to the existing ROW have adapted to the presence of trains and periodic maintenance activities. For example, yellow warbler was observed within the Project study area during existing train operations, with trains passing through periodically. Additionally, operations and maintenance activities are also not expected to have indirect impacts on bats because activities would occur during daylight hours. Given the above, impacts would be less than significant. No mitigation is required.

*Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFW?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** Riparian habitat and other special-status vegetation communities, such as valley oak woodland, occur outside of the Project study area and would not be directly affected by the Project. The Project would result in a total of 33.90 acres of direct impacts on vegetation communities (ornamental) and other land cover types (disturbed and urban/developed) within the Project study area, as indicated in Table 3.3-3 and on Figure 3.3-2 (Sheets 1 through 7). Native vegetation communities, including, mixed willow riparian forest, valley oak woodland and California sagebrush scrub, would be avoided.

**Table 3.3-3. Potential Project Impacts on Vegetation Communities**

Vegetation Community	Total Acres	Potential Project Impacts			
		Easement	Temporary Construction Easement	ROW	Total
<b><i>Tree-dominated habitats</i></b>					
Mixed willow riparian forest	1.50	0.00	0.00	0.00	0.00
Valley oak woodland	2.72	0.00	0.00	0.00	0.00
Native ornamental	1.64	0.00	0.00	0.29	0.29
Nonnative ornamental	1.11	0.00	0.00	0.26	0.26
<b><i>Shrub-dominated habitats</i></b>					
California sagebrush scrub	9.47	0.00	0.00	0.00	0.00
<b><i>Herbaceous-dominated habitats</i></b>					
Cattail marsh	2.01	0.00	0.00	0.00	0.00
<b><i>Other land cover types</i></b>					
Nonvegetated Channel	1.39	0.00	0.00	0.00	0.00
Disturbed	7.62	0.0	2.50	1.26	3.76
Urban/developed	328.84	0.05	0.74	28.78	29.57
<b>Total</b>	<b>356.28</b>	<b>0.05</b>	<b>3.25</b>	<b>30.60</b>	<b>33.90</b>

Notes:

Totals included in this table may appear off due to rounding.

ROW=right-of-way

With implementation of Mitigation Measure BIO-1, which requires use of standard BMPs, and Mitigation Measure AQ-1, which would require the use of U.S. EPA Tier 4 or cleaner engines, there would be no indirect impacts on special-status vegetation communities during construction.

**OPERATION**

**Less than Significant Impact.** Although operation of the Project would involve increased train traffic and periodic maintenance in the railroad ROW, operations would occur within the existing ROW which already undergoes routine maintenance. Additionally, as explained in Section 3.2, Air Quality, emissions for most criteria pollutants, including diesel exhaust emissions that are harmful to sensitive natural communities, would be lower under Project operations when compared to existing conditions and overall emissions reductions would be achieved through the use of a new, more efficient locomotive fleet (U.S. EPA Tier 4 or cleaner engines). As such, Project operation would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFW. Impacts would be less than significant. No mitigation is required.

Figure 3.3-2. Proposed Project Impacts on Vegetation Communities  
(Sheet 1 of 7)



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Figure 3.3-2. Proposed Project Impacts on Vegetation Communities  
(Sheet 2 of 7)



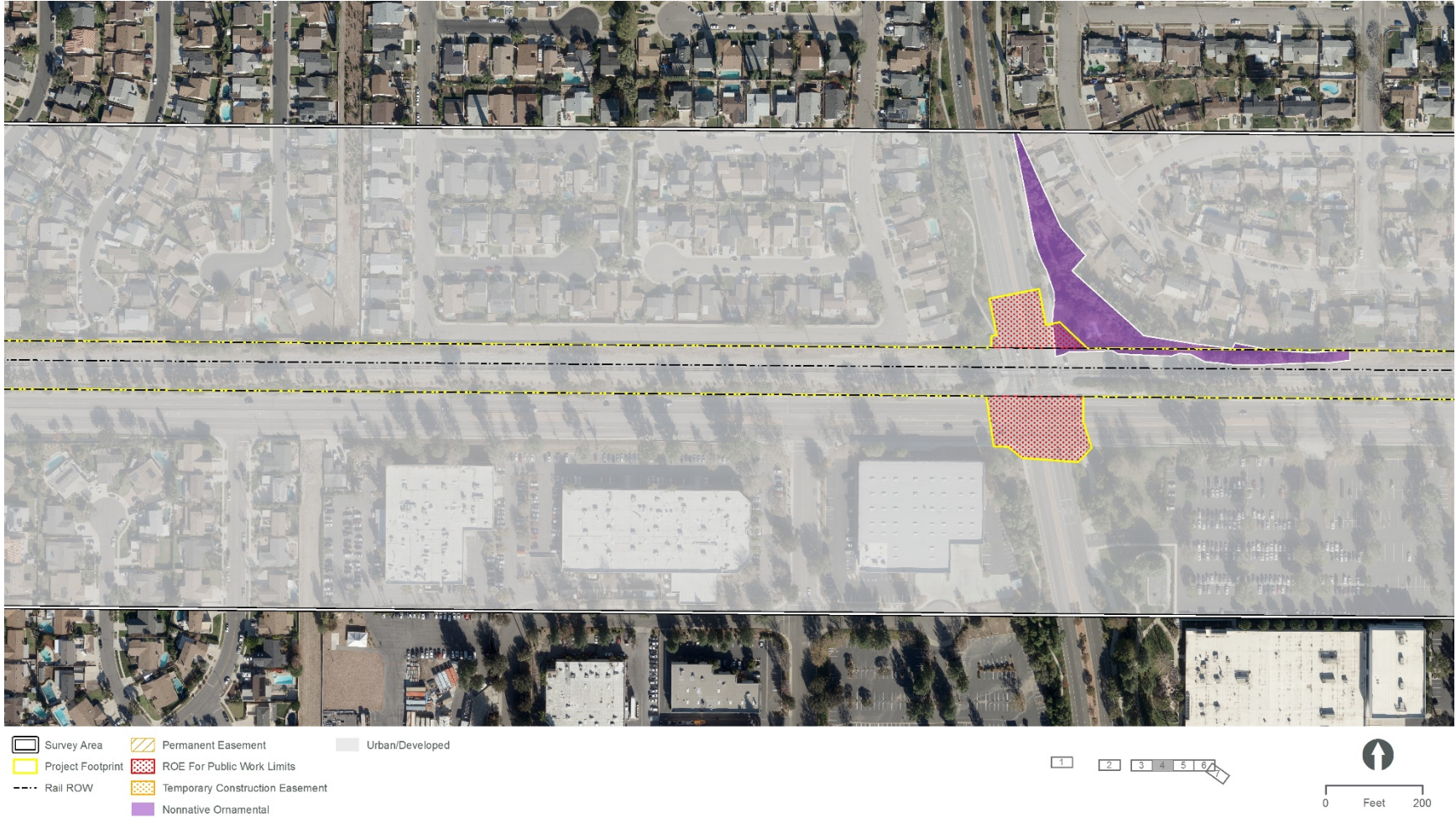
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Figure 3.3-2. Proposed Project Impacts on Vegetation Communities  
(Sheet 3 of 7)



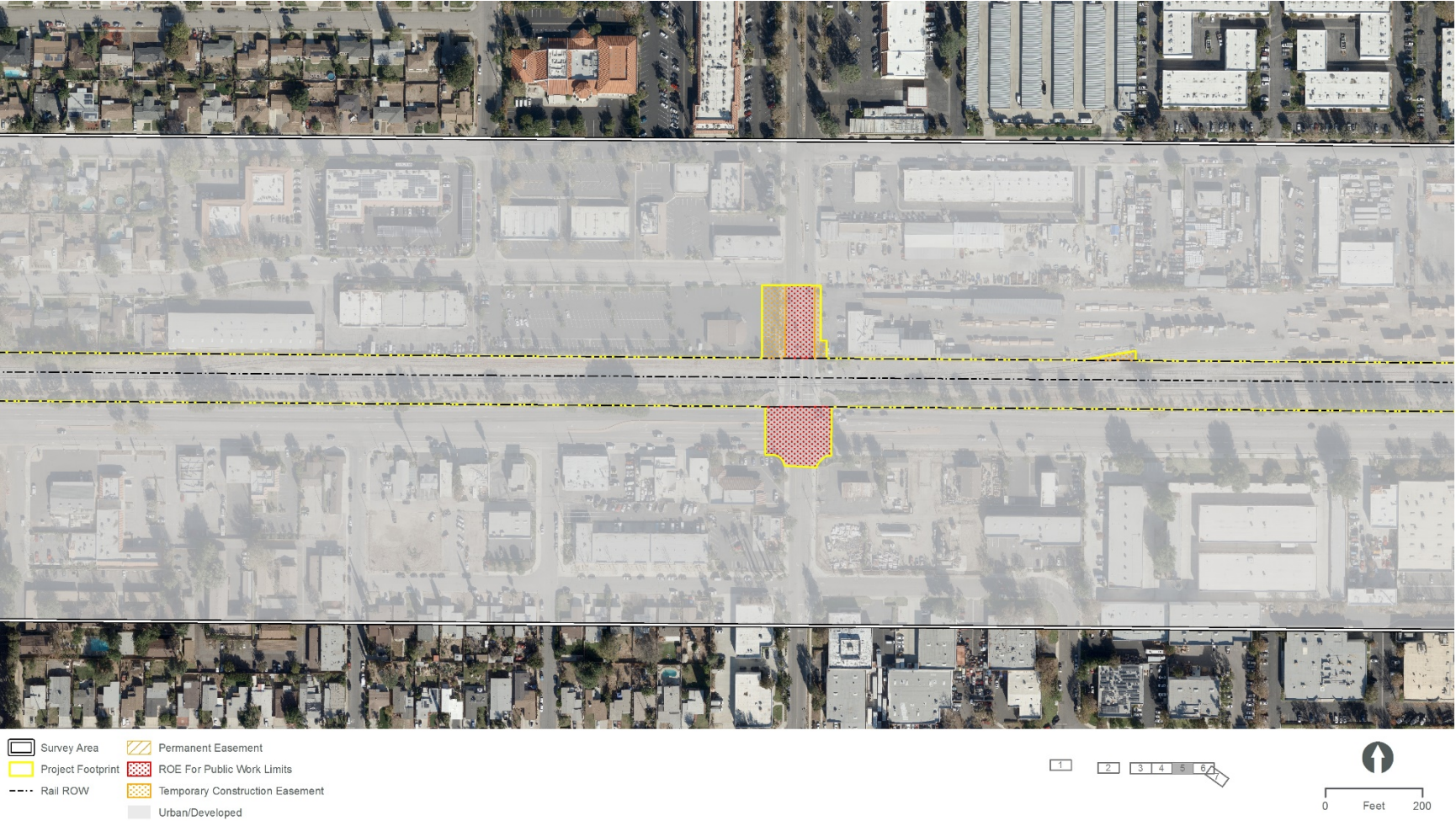
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Figure 3.3-2. Proposed Project Impacts on Vegetation Communities  
(Sheet 4 of 7)



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Figure 3.3-2. Proposed Project Impacts on Vegetation Communities  
(Sheet 5 of 7)



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Figure 3.3-2. Proposed Project Impacts on Vegetation Communities  
 (Sheet 6 of 7)



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Figure 3.3-2. Proposed Project Impacts on Vegetation Communities  
 (Sheet 7 of 7)



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*Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** State or federally protected wetlands occur outside of the Project study area and would not be directly affected by Project construction. With implementation of Mitigation Measure BIO-1, which requires use of standard BMPs, potential indirect impacts on wetlands during construction would be reduced to a less than significant level.

#### OPERATION

**Less than Significant Impact.** Although, operation of the Project would involve increased train traffic and periodic maintenance in the railroad ROW, operations would occur within the existing ROW, which already undergoes periodic maintenance. Appropriate BMPs would be incorporated into the final Project design to minimize and mitigate potential impacts to wetlands within proximity to the Project study area. As such, Project operation would not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Impacts would be less than significant. No mitigation is required.

*Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** The Project would have no direct impacts on suitable habitat for fish. The Project study area is highly urbanized and does not contain suitable corridors for wildlife movement; therefore, Project construction would have no direct impact on wildlife movement corridors. However, indirect impacts on fish and wildlife movement corridors could occur if fish or wildlife happen to be present or moving through areas adjacent to the Project study area, such as Arroyo Simi and Las Lajas Canyon channel, during construction. Indirect impacts may include decreased water quality, damage to potential habitat resulting from fugitive dust associated with construction, or disruption of movement resulting from additional noise or lighting associated with Project construction. Implementation of Mitigation Measure BIO-1, which requires use of standard BMPs, would reduce potentially indirect impacts to a less than significant level.

Suitable nesting and foraging habitat for birds protected by the MBTA and California Fish and Game Code Section 3500 et seq. occurs within and adjacent to the Project footprint. Direct impacts on an active nest, which could result from, for example, removal of vegetation or demolition of a structure which contains an active nest, would be considered significant and adverse. Indirect impacts could result from disturbance of nesting birds due to increased noise or human presence near an active nest. Implementation of Mitigation Measure BIO-2, which requires a preconstruction nesting bird survey, would reduce impacts on nesting birds to a less than significant level.

## OPERATION

**Less than Significant Impact.** Operation of the Project would involve increased train traffic and periodic maintenance in the railroad ROW. However, operations would occur within the existing ROW—which already undergoes periodic maintenance—and Project operations would not differ significantly when compared to existing conditions. The wildlife which utilize the habitats and potential corridors (i.e., Arroyo Simi and Las Lajas Canyon channel) adjacent to the ROW have adapted to the presence of trains and periodic maintenance activities. As such, Project operation would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. Impacts would be less than significant. No mitigation is required.

*Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

## CONSTRUCTION

**Less than Significant with Mitigation.** In order for construction of the Project to maintain consistency with the City of Simi Valley's Preservation ordinance, Municipal Code Chapter 9-38, an arborist, horticulturist, or registered landscape architect would be required to conduct a survey for protected trees within the Project study area to determine the potential for direct impacts on protected trees, prepare a tree report, and outline the requirements for a tree removal permit. Implementation of Mitigation Measure BIO-3, which requires preconstruction surveys for protected trees, would be required to be consistent with the City of Simi Valley's Tree Preservation Code, and potentially significant impacts on trees protected by the preservation ordinance would be reduced to a less than significant level.

## OPERATION

**No Impact.** Once construction is complete and the Project is operational, train traffic and maintenance activities would continue to occur within the existing ROW, similar to existing conditions. No impact would occur on trees protected by a preservation ordinance. Therefore, no impact would occur.

### 3.3.5 Mitigation Measures

The following mitigation is proposed to reduce the Project's potential to impact biological resources, including special status plants and wildlife within the Project study area. Mitigation Measure AQ-1 is proposed to minimize one or more effects related to construction emissions and are further described in Section 3.2.

**BIO-1 Implement biological resource protection measures during construction.** The construction contractor shall implement the following BMPs during construction to minimize direct and indirect impacts on special-status species.

- a. No work activities, materials or equipment storage or access will be permitted outside the Project limits. All parking and equipment storage by the contractor related to the Project will be confined to the Project limits. Undisturbed areas and special-status vegetation communities outside and adjacent to the Project limits will not be used for parking or equipment storage. Project-related vehicle traffic will be restricted to the Project limits and established roads and construction access points.

- b. Construction activities will be limited to daylight hours to the extent feasible. If nighttime activities are unavoidable, then workers will direct all lights for nighttime lighting into the work area and will minimize the lighting of natural habitat areas adjacent to the work area. The contractor will use light glare shields to reduce the extent of illumination into special-status vegetation communities. If the work area is located near surface waters, the lighting will be shielded such that it does not shine directly into the water.
- c. Clearing will be confined to the minimal area necessary to facilitate construction activities. Cleared vegetation and spoils will be disposed of daily at a permanent off-site spoils location or at a temporary on-site location that will not create habitat for special-status wildlife species. Spoils and dredged material will be disposed of at an approved site or facility in accordance with all applicable federal, state, and local regulations.
- d. Food-related and other garbage will be disposed of in wildlife-proof containers and will be removed from the Project study area daily during the construction period. Vehicles carrying trash will be required to have loads covered and secured to prevent trash and debris from falling onto roads and adjacent properties.
- e. The spread of dust from work sites to special-status vegetation communities or habitats for special-status species on adjacent lands will be minimized by use of a water truck. SCAQMD Rule 403 requires dirt access roads, haul roads, and spoils areas will be watered at least twice each day when being used during construction dry periods.
- f. Vehicles will be refueled in upland areas where fuel cannot enter waters of the U.S. or waters of the state and in areas that do not have suitable habitat to support federally and/or state-listed species.
- g. In the event that no activity is to occur in the work area for the weekend and/or a period of time greater than 48 hours, all portable fuel containers will be removed from the Project site.
- h. Equipment and containers will be inspected daily for leaks. Should a leak occur, contaminated soils and surfaces will be cleaned up and disposed of following the guidelines identified in the Stormwater Pollution Prevention Plan, Materials Safety Data Sheets, and any specifications required by other permits issued for the Project.
- i. Off-site maintenance and repair shops will be utilized as much as possible for maintenance and repair of equipment. If maintenance of equipment must occur on site, fuel/oil pans, absorbent pads, or appropriate containment will be used to capture spills/leaks within all areas. Where feasible, maintenance of equipment will occur in upland areas where fuel cannot enter waters of the U.S. or waters of the state and in areas that do not have suitable habitat to support federally and/or state-listed species.

**BIO-2**      **Avoid impacts on migratory and nesting birds.** If vegetation clearing or initial ground disturbance activities occur between January 15 and September 15, a preconstruction nesting bird survey (within seven days prior to construction activities) shall be conducted by a qualified biologist to determine if active nests are present

within the area proposed for disturbance to avoid the nesting activities of breeding birds/raptors. The results of the surveys will be made available to the wildlife agencies [USFWS/CDFW], upon request, prior to initiation of any construction activities. Should nesting bird species aside from European starlings (*Sturnus vulgaris*) and house sparrows (*Passer domesticus*) be found, a 300-foot (500 feet for raptors) exclusionary buffer will be established by the biologist. This buffer shall be clearly marked in the field by construction personnel under guidance of the biologist, and construction or clearing will not be conducted within this buffer zone until the biologist determines that the young have fledged or the nest is no longer active. At the discretion of the biologist, the buffer may be reduced if the nest is buffered by existing visual and noise barriers such as hills, walls, buildings, etc. visual and noise barriers are added, or the nesting species is known to tolerate higher levels of disturbance.

Mitigation Measure BIO-3 is required to comply with the City's Tree Ordinance.

**BIO-3**      **Protected trees.** Preconstruction surveys for protected trees (all historic trees, all mature native oak trees, or any mature trees which are associated with a proposal for urban development, or are located on a vacant parcel) that are subject to protection under the City's Municipal Code Chapter 9-38 Tree Preservation shall be conducted by an arborist, horticulturist, or registered landscape architect within the Project footprint pending the completion of final engineering design. Mature trees are defined in the City's Mature Tree Preservation Ordinance (Ordinance No. 1278) as any living native oak tree that has a diameter of 5 inches or more, or a tree of any other species that has a diameter of 9.5 or more inches as measured 4.5 feet above the root crown. The types, location, sizes, health, aesthetic quality, damage or disease, recommended remedial measures, replacement value, and feasibility of relocation of protected trees subject to removal will be documented in a tree protection report prior to construction. Any protected trees subject to removal from the Project will be replaced at a one to one ratio with specimen trees that adhere to the City's tree list.

### 3.3.6 CEQA Significance Conclusions After Mitigation

With implementation of Mitigation Measures AQ-1, BIO-1, BIO-2, and BIO-3, the Project would have a less than significant impact on biological resources, including special-status plant and wildlife species.



## 3.4 Cultural Resources

### 3.4.1 Introduction

The Cultural Resources section describes the environmental setting and regulatory setting for cultural resources within the Project study area. It also describes the impacts on cultural resources that would result from construction and operation of the Project and mitigation measures that would reduce significant impacts, where feasible. Cumulative impacts on cultural resources in combination with planned, approved, and reasonably foreseeable projects are discussed in Chapter 4, Cumulative Impacts.

### 3.4.2 Environmental Setting

This section summarizes the existing environmental setting related to cultural resources within the Project study area. The cultural resource information contained in this section is summarized from the *Simi Valley Double Track and Platform Project Cultural Resources Technical Report* (Appendix F of this EIR).

For the purposes of this analysis, the Project study area is the same as the Project footprint for both archaeological resources and built environment resources. The Project study area is located on the southern edge of the Simi Valley, which is an expansive east-to-west trending topographic depression with a relatively flat base. The Project study area is bounded by the Simi Hills to the south and the Santa Susana Mountains to the north which are both rugged east-to-west trending ranges with intervening canyons and valleys consisting of Cretaceous and Miocene, and younger sedimentary rock. The area is drained by Calleguas Creek and its principal tributary, Conejo Creek, both of which originate in the Santa Susana Mountains. The Arroyo Simi, a 19-mile tributary creek of the Calleguas Creek, runs westward from the Santa Susana Mountains across the valley floor. Much of the valley floor has been developed for agriculture and urban/residential use.

#### Prehistoric Setting

##### *Late Pleistocene to the Early Holocene (12,000 to 7,500 BP)*

The earliest evidence for human occupations in Southern California dates to the Terminal Pleistocene/Early Holocene period on the Channel Islands which is 15 miles off the coast of Ventura County and approximately 40 miles west of the Project study area. These early inhabitants utilized seasonal migrations to exploit various marine resources and hunted large game on the mainland and throughout the Channel Islands which indicates seafaring skills and technology developed at an early date. Early human remains dating to about 13,000 years ago were recovered from Santa Rosa Island, making them possibly the oldest skeletal remains found in North America (Appendix F of this EIR).

The earliest evidence of a more sustained presence on the mainland coastal zone is associated with the Millingstone Horizon, which began circa 9000 BP and lasted at least 2 millennia (Appendix F of this EIR). Approximately 40 sites of this age, many yielding abundant metates, manos, hammerstones, and large core tools, have been discovered, mostly in near-coastal locations. Seeds, nuts, shellfish, and mammals were commonly consumed at coastal sites of this era.

### *Middle Holocene Period (7500 to 5000 BP)*

General settlement-subsistence patterns were exemplified by a greater emphasis on seed gathering (Appendix F of this EIR). Mortars and pestles and large, side-notched projectile points were added to the collection of tools used at the time. Although the mobile hunter-gatherer lifestyle was more prominent, this marks an expansion of the diet, and important residential bases for local populations in highly favorable locations near estuaries (Appendix F of this EIR). Adaptation to various ecological niches, population growth, and an increasingly sedentary lifestyle are characteristic of the subsequent periods of cultural history in Southern California. The Topanga Complex, exemplified by sites in Topanga Canyon approximately 17 miles south of the Project study area, provide evidence of prehistoric occupation of the Los Angeles Basin during this interval.

### *Late Holocene (after 1500 BP)*

During the middle to Late Holocene (5000 to 1500 BP), cultural patterns remained similar to the Middle Holocene Period. However, artifacts such as the bow and arrow and the use of bedrock mortars and milling slicks, show that many of the coastal sites became more elaborate and complex (Appendix F of this EIR). Within the broader region, mainland sites exhibited a more balanced orientation in people's exploitation of terrestrial and marine resources, with signs of intensified fishing and marine mammal hunting, as well as new technologies such as circular shell fishhooks, stone net weights, refined mortars, and new projectile point types (Appendix F of this EIR). Developments along the mainland coast and their gradual population growth were the basis for the elaboration in ritual life, intensification of regional exchange systems, and complexity in political organization that emerged later (Appendix F of this EIR). The Southern California tribes were among the world's most populous and densely settled hunter-gatherer populations, with a sedentary lifestyle living in large permanent villages and exhibiting considerable economic, ritual, and technological complexity throughout the region by the time of European contact.

## Ethnohistory

The Santa Susana Pass lies between territories inhabited by peoples speaking three different language groups: the Ventureño Chumash, Fernandeano dialect of Gabrielino (sometimes called Tongva), and the Tataviam (Appendix F of this EIR). Spanish explorers noted differences in village organization of the Native Americans from east to west along the Santa Clara River, which crosses 9 miles north of the Project study area. The Project study area falls within the ethnographic boundaries of Ventureño (eastern coastal) Chumash territory; however, the area also has cultural significance and ties to the Tataviam and Fernandeano (northern) Gabrielino bands.

### *Ventureño Chumash*

The Ventureño Chumash inhabited the Simi Valley west to the Ventura County coastline with their settlement extending as far inland as Piru and Castaic Lake near Frazier Park. The deep linguistic divisions among the various branches in the Chumash family tree suggest that this group of native peoples may have lived in south central California for over 5,000 years (Appendix F of this EIR). Three Ventureño Chumash settlements existed in the Simi Valley in the mission period.

### *Fernandeano Gabrielino*

The Fernandeano group of Gabrielino Indians resided in the very northern portion of Gabrielino territory, extending to an area just south of present-day Newhall in Santa Clarita, California, approximately 12 miles northeast of the Project study area. The name "Fernandeano" and "Gabrielino" refer to the

groups of Native Americans living close to the missions of San Fernando Rey de España and San Gabriel Arcángel, respectively. Because of the great similarities of these two geographic groups, many anthropologists choose to describe them as one cultural group. While Gabrielinos living in the different villages across their traditional territory shared a collective identity and distinguished themselves from other surrounding tribes through linguistic, religious, kinship and cultural bonds; political identities were associated with home villages, and internal material, economic, linguistic, and metaphysical differences influenced by geography existed.

### *Tataviam*

A small group of people speaking a language with Tatic influences is believed to have migrated to the Santa Clarita Valley around AD 450. Tataviam lived in settlements to the east in the Santa Clarita region primarily on the upper reaches of the Santa Clara River, east of Piru Creek. Their territory extended from the Antelope Valley to the San Gabriel Mountains. Archaeological data indicate that subsistence patterns and ritual practices were similar to neighboring Chumash and Gabrielino culture groups; these groups were hunter-gatherers, subsisting on acorns, yucca, juniper berries, seeds, and small game (King and Blackburn 1978).

### Regional History

The history of Southern California can be broken down into three major periods: Spanish (1769–1822), Mexican (1822–1848), and American (1848–present). The Spanish colonization of California was achieved through a program of military-civilian-religious conquest. Under this system, soldiers secured areas for settlement by suppressing native and foreign resistance and established fortified structures (presidios) from which the colony would be governed. Civilians established towns (pueblos) and stock-grazing operations (ranchos) that supported the settlement and provided products for export. Ultimately, 4 presidios and 21 missions were established in Spanish California between 1769 and 1821 (City of Simi Valley 2012a). Ventura County was officially part of the “Distrito de Santa Barbara” during the Spanish period. Mission San Buenaventura, located in the City of Ventura in western Ventura County (roughly 35 miles west of the Project study area), was founded by Spanish missionaries in 1782.

The first Spanish settlement in present Simi Valley was the Rancho Simi settlement. Granted by the Spanish Crown in 1795 to Santiago de la Cruz Pico, a mestizo from Sinaloa, Rancho Simi consisted of about 113,000 acres and included a large amount of property, which stretched from the Santa Susana Mountains to well past the modern town of Moorpark. Early dwellings at the Rancho Simi are currently located at the Strathearn Historical Park, and some of the buildings in the park are National Register of Historic Places (NRHP) listed resources. The rancho as it existed in the 1830s encompassed the Simi and Little Simi Valleys from the Santa Susana Mountains westward to modern Moorpark, with El Camino Real from Mission San Fernando to Mission San Buenaventura passing by the rancho headquarters. It seems the original boundary of Rancho Simi shifted northeastward at some point between around 1820 and 1840 at the expense of sheep grazing lands in the valley used by Mission San Fernando (Appendix F of this EIR).

Ventura County was officially established on January 1, 1873. In the 1880s, Ventura County followed the pattern of the rest of Southern California: large Spanish or Mexican land grants being sold and developed for small-scale agriculture (Appendix F of this EIR). In 1887, the 96,000-acre Rancho Simi was sold to a syndicate including Thomas Bard, L. T. Garnsey, and Dan McFarland. It was hailed by the Los Angeles Tribune as the “largest individual transaction...consummated in this county since the

boom began” (Beedle et al. 2008). Additionally, in the 1880s, full-fledged settlement of Simi Valley began as Simi Land and Water Company was formed to sell parcels as a commercial venture.

The continued increase in population in Simi Valley and the adjacent areas led to a strain on the water supply and significantly increased traffic congestion during the 1960s. By 1965, the Metropolitan Water District of Southern California had completed its project of a pipeline to provide an adequate water supply, and later construction projects served to alleviate the traffic congestion into the 1990s (City of Simi Valley 2012a). The City was incorporated on October 10, 1969, and by 1972, the City adopted its first General Plan. Population and economic growth during the 1980s and 1990s swelled or remained stagnant in response to regional factors. According to the General Plan, Simi Valley has “transformed itself into a city with a broad and diverse economic base, with a population of 125,096 and 40,746 homes as of 2006” (City of Simi Valley 2012b).

### 3.4.3 Regulatory Setting

This section summarizes federal, state, and local regulations related to cultural resources that are applicable to the Project.

#### State

##### *California State Office of Historic Preservation*

The California State Office of Historic Preservation’s (OHP) responsibilities are to identify, evaluate, and register historic resources; and ensuring compliance with federal and state regulations (California State OHP 2020). The California State OHP administers the Federal Historic Preservation Tax Incentives Program and provides architectural review and technical assistance to other government agencies and the general public and maintains the California Historical Resources Information System (CHRIS) database. The CHRIS database includes statewide Historical Resources Inventory database. The records are maintained and managed under contract by eleven independent regional Information Centers. The Counties of Ventura, Los Angeles, and Orange County are served by the South Central Coastal Information Center (SCCIC), located in California State University Fullerton, California (SCCIC n.d.). The SCCIC provides information on known historic and cultural resources to governments, institutions, and individuals.

#### CEQA

CEQA requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as “unique” archaeological resources. PRC Section 5024.1 established the California Register of Historical Resources (CRHR) which lists all California properties considered to be significant historical resources or eligible for listing in the CRHR. A historical resource may be eligible for inclusion in the CRHR if it meets any of the following conditions (PRC Section 2024.1(c)):

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. Is associated with lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; and/or,
4. Has yielded, or may be likely to yield, information important in prehistory.

Any resource determined eligible for the NRHP is an historical resource for the purposes of the CEQA. Therefore, the CRHR also includes all properties listed or determined eligible for listing in the NRHP, including properties evaluated under Section 106 of the NHPA.

PRC Section 21083.2 and Section 15064.5(a) of the CEQA Guidelines provide guidance on the historical resource criteria for evaluation. The lead agency is responsible for determining whether a cultural resource is an historical resource.

*California Public Resources Code (Section 5097.5)*

Cultural resources are recognized as nonrenewable resources and receive additional protection under the PRC and CEQA; therefore, the PRCs provide additional protections under the following regulations. PRC Section 5097.5 provides for the protection of cultural resources and prohibits the removal, destruction, injury, or defacement of archaeological on any lands under the jurisdiction of state or local authorities.

*California Health and Safety Code (Section 7050.5)*

Section 7050.5 of the Health & Safety Code requires that if human remains are found, the project proponent must halt construction or excavation activity within the area of discovery until a County Coroner can determine if the remains are Native American. If the remains are determined to be Native American, the County Coroner must contact the Native American Heritage Commission (NAHC) pursuant to PRC Section 5097.98 (b) and (e), as discussed above. Confidentiality of Information on Archaeological Sites and Native American Places in California.

Sections 6253, 6254, and 6254.10 of the California Government Code authorize state agencies to exclude information on archaeological sites from public disclosure under the Public Records Act. In addition, the California Public Records Act (Government Code 6250 et seq.) and California's open meeting laws (The Brown Act; Government Code 54950 et seq.) protect the confidentiality of information on Native American cultural places.

The California Public Records Act, as amended in 2005, contains two exemptions that aid in the protection of records relating to Native American cultural places by allowing any state or local agency to deny a California Public Records Act request and withhold public disclosure of:

- Records of Native American graves, cemeteries, and sacred places and records of Native American places, features, and objects described in Sections 5097.9 and 5097.993 of the PRC maintained by, or in the possession of, the NAHC, another state agency, or a local agency (Government Code 6254[r]).
- Records that relate to archaeological site information and reports maintained by, or in the possession of, the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a California Native American tribe and a state or local agency (Government Code 6254.10).

Additionally, the CHRIS prohibits public dissemination of records and information about site locations. In compliance with these requirements, and those contained in the codes of ethics of the Society for American Archaeology, Society for California Archaeology, and Register of Professional Archaeologists, information about the location and nature of cultural resources is considered confidential information with highly restricted distribution and is not publicly accessible.

## Local

The General Plan (City of Simi Valley 2012b) and the *Ventura County General Plan* (Ventura County 2020) include goals and objectives related the preservation and protection of cultural resources. Table 3.10-1 includes applicable City General Plan and *Ventura County General Plan* goals and policies pertaining the preservation and protection of cultural resources.

### 3.4.4 Impact Analysis

This section describes the potential for environmental impacts related to cultural resources as a result of Project implementation. It describes the thresholds used to determine whether an impact would be significant, as well as measures to mitigate potentially significant impacts, where appropriate.

#### Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to cultural resources would be considered significant if the Project would:

- A. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5;
- B. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; or,
- C. Disturb any human remains, including those interred outside of formal cemeteries.

#### Thresholds Requiring No Further Analysis

No thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project.

#### Methodology

The potential for significant impacts on cultural resources was assessed by performing record searches through the SCCIC for the area within a 0.25-mile search radius of the Project study area, and by conducting intensive pedestrian surveys and visual inspections of the Project footprint and Project study area for all prehistoric or historic artifacts, ecofacts, features, buildings, and structures.

#### *Records Search*

The SCCIC houses information about historical resources and reports within Ventura, Los Angeles, and Orange Counties per CHRIS standards. A review of the SCCIC files identified 14 previous cultural resource investigations that intersect with the 0.25-mile records search radius. These previous investigations identified three previously recorded cultural resources within the 0.25-mile search radius of the Project study area (Table 3.4-1): P-56-100001, P-56-152301, and P-56-153135.

Although the recorded boundary of P-56-152301 overlaps with the Project study area at the Tapo Street and East Los Angeles Avenue intersection, historic aerial photographs indicate that the location of P-56-152301 is approximately 375 feet further east than previously plotted. Therefore, a revised boundary has been created. The revised boundary of P-56-152301 still overlaps with the Project study area and will be submitted to the SCCIC.

**Table 3.4-1. Previously Recorded Resources within 0.25 Mile of Project Study Area**

Primary Number	Resource Type	Description
P-56-100001	Prehistoric isolate	Granitic mano and a clam shell fragment
P-56-152301	Historic building	The Santa Susana Southern Pacific Railroad Depot is an example of a “Two-Story Combination Depot No. 22” design with simple wood frame vernacular structure designed in a simplified Eastlake style
P-56-153135	Historic structure	Single-span ballast deck railroad bridge with timber stringers and sill beams supported on a combination of sandstone and cast-in-place concrete abutments

Source: Appendix F of this EIR

### *Field Survey*

The intensive pedestrian field survey area consisted of the Project study area, including 2.20-mile length of railroad ROW and the adjacent staging areas, grade crossing improvement areas, and construction access locations that extend outside of the general 100-foot-wide ROW. One survey transect was walked on either side of the railroad ROW. Given the obscured ground surface from the ballast stone over most of the Project study area, this approach was adequate for survey coverage of the entirety of the railroad ROW. Additionally, open areas designated as staging areas were surveyed using parallel transects at 33-foot intervals.

During the intensive pedestrian survey, one previously unrecorded resource within the Project study area was identified: the railroad roadway associated with the opening of the Montalvo Cutoff in 1903. In addition to the active track and intact siding at the northeast corner of the Tapo Street/East Los Angeles Avenue intersection, sections of abandoned siding tracks extending from the northwest corner of the same intersection include visible remnants of the Montalvo Cutoff alignment within the Project study area. No other artifacts, ecofacts, features, human remains, or midden soil typical of prehistoric or historic occupation were observed during the survey.

### *Summary of Cultural Resources within 0.25Mile of Project Study Area*

#### **PREVIOUSLY RECORDED RESOURCES**

**P-56-100001.** P-56-100001 is a prehistoric isolated occurrence recorded during the 1991 survey by Peak & Associates, Inc. The isolate consists of a granitic mano and a clam shell fragment found on the north side of the Southern Pacific Railroad tracks (Peak & Associates, Inc. 1991). An extensive search of the surrounding area failed to uncover any additional cultural material. The recorded location of the artifacts is approximately 302 feet southeast of the Project footprint and outside of the Project study area.

**P-56-152301.** P-56-152301 marks the approximated original location of the Santa Susana Southern Pacific Railroad Depot. A portion of the recorded resource boundary overlaps with the Project study area at the Tapo Street and East Los Angeles Avenue intersection; however, aerial photographs indicate that the likely location of the depot was approximately 375 feet further east than previously plotted. The revised boundary created for P-56-152301 is still located within the Project study area and will be provided to the SCCIC. The areas where both the recorded and revised boundaries overlap with the Project study area, have been graded, landscaped, and partially paved over, and a gas line extends east-to-west through the northern edge of the revised boundary.

The Santa Susana Southern Pacific Railroad Depot opened in 1903 and served passengers until 1941. It was a standard design of Southern Pacific Railway known as a “Two-story Combination Depot No. 22” (Historic Resources Group and Jaffe 1993). In addition to the depot, a section house, several box cars used as living quarters, warehouses, and an oil loading rack were originally located in the area. Typical of a Two-story Combination Depot No. 22, the Santa Susana Southern Pacific Railroad Depot was a simple wood frame vernacular structure designed in a simplified Eastlake style. It was a one- and two-story structure with steeply pitched gabled roofs with ridges running parallel to the tracks. The depot was recommended eligible for listing on the NRHP because it was a rare example of a type of construction associated with the building of the transportation system in California that exhibited the character-defining features of its type and style. In its new location, outside of the Project study area, it has also maintained the same orientation it had to the railroad track, along the same line, as it was originally constructed. The structure is no longer standing within the Project study area.

**P-56-153135.** P-56-153135 was recorded and evaluated by HDR in 2015 as part of the Metrolink FY2013–14 Rehabilitation Project (Appendix F of this EIR). The resource consists of Metrolink Bridge 438.62, a single-span ballast deck railroad bridge with timber stringers and sill beams supported on a combination of sandstone and cast-in-place concrete abutments. The sandstone abutments likely date to circa 1901 and then were retrofitted to accommodate the timber decking circa 1934. Concrete components have been added to the substructure through the years to maintain structural integrity. Recent additions to the bridge include sandbags on the wing walls and, in the southeastern quadrant, a concrete covering to help stay the sandbags (Appendix F of this EIR). The bridge is part of the Ventura subdivision of the rail line and runs between two residential housing complexes in Simi Valley.

Modifications of the original abutments and removal of the original deck have impacted the integrity of design, materials, workmanship, and feeling to an extent that it no longer conveys the potential historic significance it may have held under Criterion 1 (i.e., its association with events that have made a significant contribution to the broad patterns of national, state, or local history). Because of the loss integrity, the investigation recommends that Bridge 438.62 is not eligible for the NRHP or the CRHR, with concurrence from the California State OHP. The resource is located approximately 0.23 mile southeast of the Project study area and will not be impacted by Project-related activities.

#### **NEWLY RECORDED RESOURCES**

**Railroad Segment (Southern Pacific’s Montalvo Cutoff).** The Project’s 2.20-mile railroad segment is associated with the Southern Pacific’s Montalvo Cutoff. The Southern Pacific’s Montalvo Cutoff opened after completion of the Santa Susana Tunnel in 1903 which is approximately 3 miles east of the Project study area. The railroad segment within the Project study area currently consists of ballast, tracks, and the railroad bed in the original Montalvo Cutoff alignment, sidings on the north side of the ROW near the Tapo Street/East Los Angeles Avenue intersection, and modern utility and signal sheds, grade crossings, and signal/warning infrastructure. With rail-related structures including the Santa Susana Southern Pacific Railroad Depot and associated facilities, the railroad segment would likely



hold significance associated with the long-term contribution of Southern Pacific rail operations in Ventura County and Simi Valley under Criterion 1.

However, the railroad segment has been in continuous operation since its construction and beyond the railroad bed and partially extant sidings, no materials or buildings from the historic period remain. Additionally, with the relocation of the Santa Susana Southern Pacific Railroad Depot outside the Project study area in 1975 and demolition/removal of associated buildings and structures, the alignment itself has no means to convey its potential significance. Therefore, the rail segment's integrity of setting, materials, workmanship, and feeling are no longer intact. While holding potential significance under Criterion 1 for Transportation, based on the findings, the investigation recommends that the 2.20-mile rail segment within the Project study area lacks the integrity necessary to recommend eligibility for CRHR listing.

Furthermore, the investigation did not find evidence that the railroad segment was associated with historically significant individuals, exhibited distinctive characteristics of rail engineering, or likely to yield new information or answer important research questions about local, state, or national history. Therefore, this railroad segment is not recommended to be eligible under Criterion 2, Criterion 3, and Criterion 4.

## Impact Analysis

*Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

### CONSTRUCTION

**Less than Significant with Mitigation.** As discussed above, the Project railroad segment associated with the Southern Pacific's Montalvo Cutoff, has been evaluated and lacks the integrity necessary to be determined eligible for listing in the CRHR. Therefore, the railroad segment is not considered to be a historical resource pursuant to Section 15064.5(a).

Data from the SCCIC identifies the Santa Susana Southern Pacific Railroad Depot and ancillary buildings (P-56-152301) as the only previously recorded and known NRHP eligible cultural resource that partially overlaps with the Project study area. However, historic aerial photographs indicate that the likely location of the depot was approximately 375 feet further east than previously recorded, and a revised boundary has been created for P-56-152301. This revised boundary still overlaps with the Project study area. No remnants of the removed depot have been recorded at its original location; and the areas where both the recorded and revised boundaries overlap with the Project study area, have been graded, landscaped, and partially paved over. A gas line also extends east-to-west through the northern edge of the revised boundary.

Prior ground disturbance from construction of the railroad line included installation of approximately 2 feet of subsurface ballast stone, and an additional approximate 6 to 10 feet of disturbance from the original grading of the ROW. All subsurface soils within the ROW that may have contained cultural material have likely been removed and replaced with artificial fill during construction of the railroad line. Because sediments within the Project study area are generally highly disturbed due to prior construction of the railroad, it is unlikely that intact subsurface deposits would be encountered during construction.

However, although unlikely, ground disturbing activities within the vicinity of resource P-56-152301 may encounter buried remnants associated with the original Santa Susana Southern Pacific Railroad Depot or the ancillary buildings. This is a potentially significant impact. Implementation

of Mitigation Measure CUL-1 would ensure that an archeological monitor is present during all ground-disturbing activities within 50 feet of P-56-152301 so that no inadvertent substantial adverse changes to the significance of a historical resource pursuant to Section 15064.5 would occur. Close interval inspection of work areas within the Project study area failed to identify any historical resources. Therefore, no additional cultural resource management measures are recommended outside of the vicinity of P-56-152301 at this time. With implementation of Mitigation Measure CUL-1, impacts to significant historical resources would be reduced to a less than significant level.

#### OPERATION

**No Impact.** Once construction is complete, operation would involve passenger train operations along the railroad corridor and periodic maintenance of the railroad within ROW. Therefore, no further ground disturbing activity that has the potential to impact historical resources during operation of the Project would occur. No impact would occur.

*Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** The revised boundary of the Santa Susana Southern Pacific Railroad Depot and ancillary buildings (P-56-152301) still overlaps with the Project study area. The areas where both the recorded and revised boundaries overlap with the Project study area, have been graded, landscaped, and partially paved over, and a gas line extends east-to-west through the northern edge of the revised boundary. Though unlikely, ground disturbing activities within the vicinity of resource P-56-15320 may encounter buried remnants or archaeological deposits associated with the original location of the Santa Susana Southern Pacific Railroad Depot and ancillary buildings, which would be considered a potentially significant impact. However, implementation of Mitigation Measure CUL-1 would ensure that an archeological monitor is present during all ground-disturbing activities within 50 feet of P-56-152301 so that no substantial adverse changes to the significance of an archeological resource pursuant to Section 15064.5 would occur.

Due to prior ground disturbance related to construction of the currently existing railroad, all subsurface soils within the ROW that may have contained cultural material have likely been removed and replaced with artificial fill during construction; and it is unlikely that intact subsurface deposits would be encountered during construction since the sediments within the Project footprint are considered to be highly disturbed. Close interval inspection of work areas within the Project study area failed to identify any archeological resources. Therefore, no additional cultural resource management measures are recommended outside of the vicinity of P-56-152301 at this time.

However, in the unlikely event that potentially significant archaeological materials are encountered during Project-related ground disturbing activities, implementation of Mitigation Measure CUL-2 would ensure that all work in the vicinity of the archaeological discovery is halted until a qualified archaeologist can visit the site of discovery and assess the significance of the archaeological resource. With implementation of Mitigation Measures CUL-1 and CUL-2, impacts to significant archaeological resources would be reduced to a less than significant level.

#### OPERATION

**No Impact.** Once construction is complete, operation would involve passenger train operations along the railroad corridor and periodic maintenance of the railroad within ROW. Therefore, no further ground

disturbing activity that could impact archeological resources during operation of the Project would occur. No impact would occur.

*Would the Project disturb any human remains, including those interred outside of formal cemeteries?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** California law recognizes the need to protect historic-era and Native American human burials, skeletal remains, and items associated with Native American interments from vandalism and inadvertent destruction. Mitigation Measure CUL-3 would ensure that Health and Safety Code 7050.5, CEQA 15064.5(e), and PRC Section 5097.98 are adhered to in the unlikely event of an accidental discovery of any human remains in a location other than a dedicated cemetery. With implementation of Mitigation Measure CUL-3, impacts would be reduced to a less than significant level.

#### OPERATION

**No Impact.** Once construction is complete, operation would involve passenger train operations along the railroad corridor and periodic maintenance of the railroad within ROW. Therefore, no further ground disturbing activity that could disturb any human remains during operation of the Project would occur. No impact would occur.

### 3.4.5 Mitigation Measures

The following mitigation is proposed to reduce the Project's potential to exacerbate existing cultural resource impacts within the Project study area.

- CUL-1 Cultural monitoring.** The Project proponent will retain a qualified archaeologist to monitor all ground disturbing activities within 50 feet of where resource P-56-152301 once stood.
- CUL-2 Unanticipated discoveries.** If buried cultural resources are discovered inadvertently during ground-disturbing activities, work will be temporarily halted in the area and within 50 feet of the find until a qualified archaeologist who meets the Secretary of Interior Standards for Archaeology can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with SCRRA. If the find is prehistoric or Native American in origin, consultation with local Native American tribes who have expressed interest and concern regarding the project will be undertaken.
- CUL-3 Human remains and associated or unassociated funerary objects.** The discovery of human remains is always a possibility during ground-disturbing activities; if human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance will occur until the county coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, all work within 50 feet of the find will be halted and the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the NAHC, which will determine and notify a most likely descendant. The most likely descendant will complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

### 3.4.6 CEQA Significance Conclusions After Mitigation

With implementation of Mitigation Measures CUL-1 through CUL-3, the Project would have a less than significant impact on cultural resources.

## 3.5 Energy

### 3.5.1 Introduction

The Energy section describes the environmental setting and regulatory setting for energy resources within the Project study area. It also describes the impacts on energy resources that would result from construction and operation of the Project and mitigation measures that would reduce significant impacts, where feasible. Cumulative impacts on energy resources, in combination with planned, approved, and reasonably foreseeable projects, are discussed in Chapter 4, Cumulative Impacts.

### 3.5.2 Environmental Setting

This section summarizes the existing environmental setting related to energy resources within the Project study area. Electrical and natural gas services for the Project are provided by Southern California Edison and Southern California Gas Company, respectively. In 2019, electricity consumption in Ventura County totaled 5,344 gigawatt-hours and natural gas consumption in Ventura County totaled 187 million therms (California Energy Commission [CEC] n. d. a, n. d. b).

The primary energy source involved in construction and operation of the Project would be petroleum-based fuels (diesel and gasoline). Transportation accounts for 39.1 percent of California's energy consumption (U.S. Energy Information Administration 2020a). Much of this energy consumption is in the form of petroleum-based fuels. In 2019, sales of motor gasoline and diesel fuels within California were approximately 4,397,000 and 1,146,400 gallons per day, respectively (U.S. Energy Information Administration 2020b, 2020c).

### 3.5.3 Regulatory Setting

This section summarizes federal, state, and local regulations related to energy resources that are applicable to the Project.

#### Federal

##### *Energy Policy Act of 2005*

The Energy Policy Act of 2005 was intended to create a comprehensive energy policy for the United States. It included tax incentives for energy efficiency in housing construction, appliances, and other technologies. It also directed NHTSA to set Corporate Average Fuel Economy (CAFE) Standards for passenger cars and light trucks, for the purpose of conserving fuel, as discussed below.

##### *Energy Independence and Security Act of 2007*

The Energy Independence and Security Act of 2007 amended the Energy Policy Act of 2005 to introduce more aggressive requirements. Key provisions include strengthened corporate average fuel economy (CAFE) Standards, the federal Renewable Fuel Standard, and federal energy efficiency standards for appliances and lighting.

##### *Corporate Average Fuel Economy Standards*

Under the Energy Policy Act of 2005, as amended by the Energy Independence and Security Act, NHTSA sets fuel economy standards for passenger cars and light trucks, as well as medium and

heavy-duty vehicles. These standards are set in coordination with the U.S. EPA, which sets GHG emissions standards under the Clean Air Act.

On September 19, 2019, the U.S. EPA and NHTSA issued a final action on the One National Program Rule, which is considered Part One of the SAFE Vehicles Rule. The One National Program Rule clarified the federal preemption of state fuel economy regulation under the Energy Policy Act of 2005, revoking the previous waiver of preemption of the California Clean Air Act standards.

Part 2 of SAFE Vehicles Rule, issued on March 30, 2020, revised fuel economy standards for passenger cars and light trucks, maintaining the future year standard at 40.5 miles per gallon rather than increasing to 54.5 miles per gallon. However, Executive Order 13990, issued on January 20, 2021, instructs the Executive Director of NHTSA and Administrator of U.S. EPA to consider suspending, revising, or rescinding the SAFE Vehicles Rule by July 2021.

## State

### *California Energy Commission*

The CEC was created in 1974 to serve as the state's primary energy policy and planning agency. The CEC is tasked with reducing energy costs and environmental impacts of energy use—such as GHG emissions—while ensuring a safe, resilient, and reliable supply of energy.

### *Assembly Bill 32: California Global Warming Solutions Act of 2006*

California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32; Health and Safety Code Sections 38500–38599), also known as the California Global Warming Solutions Act of 2006, commits the state to achieving year 2000 GHG emission levels by 2010 and year 1990 levels by 2020. To achieve these goals, AB 32 tasked the CPUC and CEC with providing information, analysis, and recommendations to CARB regarding ways to reduce GHG emissions in the electricity and natural gas utility sectors.

### *Senate Bill 100*

On September 10, 2018, SB 100 was approved and requires that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 also creates new standards for the Renewables Portfolio Standard (RPS) goals established by SB 350 in 2015. Specifically, the bill increases required energy from renewable sources for both investor-owned utilities and publicly owned utilities from 50 percent to 60 percent by 2030. Incrementally, these energy providers must also have a renewable energy supply of 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. California must procure 100 percent of its energy from carbon free energy sources by the end of 2045.

### *Low-Carbon Fuel Standard*

The Low-Carbon Fuel Standard (LCFS), established in 2007 through Executive Order S-1-07 and administered by CARB, requires producers of petroleum-based fuels to reduce the carbon intensity of their products, starting with 0.25 percent in 2011 and culminating in a 10 percent total reduction in 2020. Petroleum importers, refiners and wholesalers can either develop their own low-carbon fuel products or buy LCFS credits from other companies that develop and sell low-carbon alternative fuels, such as biofuels, electricity, natural gas, and hydrogen.

### *Advanced Clean Car Program*

The Advanced Clean Cars emissions-control program was approved by CARB in 2012. The program requires a greater number of zero-emission vehicle models for years 2015 through 2025 to control smog, soot, and GHG emissions. This program includes the low-emissions vehicle regulations to reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles; and the zero-emissions vehicle regulations to require manufactures to produce an increasing number of pure zero-emissions vehicles (meaning battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles between 2018 and 2025.

### *California Building Code (Title 24, Parts 6 and 11, Building Energy Efficiency Standards)*

California Code of Regulations Title 24 contains the CBSC. Part 6 comprises the California Energy Code, which was adopted to ensure that building construction, system design and installation achieve energy efficiency. The California Energy Code was first established in 1978 by the CEC in response to a legislative mandate to reduce California's energy consumption, and apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and nonresidential buildings.

Part 11 comprises the California Green Building Code (CALGreen). It was added in 2008 and last updated in 2019, effective January 1, 2020. CALGreen establishes standards in the following five categories: planning and design, energy efficiency (beyond the aforementioned California Energy Code requirements), water efficiency and conservation, material conservation and resource efficiency, and environmental quality.

### Local

#### *Southern California Association of Governments*

On September 3, 2020, SCAG adopted the 2020–2045 RTP/SCS (SCAG 2020a). The 2020-2045 RTP/SCS includes a strong commitment to reduce GHG emissions from transportation sources by shifting trips from automobiles to less energy-intensive modes, including transit, walking, and cycling.

#### *Simi Valley General Plan*

The General Plan (City of Simi Valley 2012b) includes a number of policies to reduce GHG emissions in the City by reducing fuel consumption, including reducing vehicle miles travelled by shifting travel from automobiles to transit or active transportation. The General Plan is further discussed in Section 3.10, Land Use and Planning, and consistency with specific policies is addressed in Table 3.10-1.

#### *Southern California Regional Rail Authority Standard Specifications*

Section 01 74 19 of SCRRA's Standard Specifications governs Construction Waste Management and Disposal, including salvaging, recycling or disposing of nonhazardous construction waste. As part of the requirements, the construction contractor is required to submit a Waste Management Plan listing each type of waste and whether it will be salvaged, recycled, or disposed of. Additional waste management regulations are discussed in Section 3.14, Utilities and Service Systems.

### 3.5.4 Impact Analysis

This section describes the potential for environmental impacts related to energy resources as a result of Project implementation. It describes the thresholds used to determine whether an impact would be significant, as well as measures to mitigate potentially significant impacts, where appropriate.

#### Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to energy would be considered significant if the Project would:

- A. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or,
- B. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

#### Thresholds Requiring No Further Analysis

No thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project.

#### Methodology

The potential for significant impacts on energy resources was assessed by estimating the consumption of fuel during construction and operation of the Project, as well as the reduction in on-road fuel consumption as a result of displacing vehicle miles. As described below, energy consumption estimates are derived from fuel consumption and GHG emissions calculations in Appendix B, *Simi Valley Double Track and Platform Project Air Quality and Greenhouse Gas Technical Report*. Additional information on these analyses is provided in Section 3.2, Air Quality, and Section 3.7, Greenhouse Gas Emissions.

#### *Construction*

Fuel consumption from construction equipment was estimated by converting the total carbon dioxide (CO<sub>2</sub>) emissions from each phase of construction to gallons using the conversion factors provided by the Climate Registry (The Climate Registry 2018). CO<sub>2</sub> emissions were estimated to assess impacts on greenhouses gases, and the methodology of estimation is described in Section 3.7, Greenhouse Gas Emissions. Gallons of diesel or gasoline were calculated by converting metric tons of CO<sub>2</sub> to kilograms CO<sub>2</sub> (CO<sub>2</sub>\*1000) and dividing by the respective conversion factor: 8.78 kilograms of CO<sub>2</sub> per gallon of gasoline and 10.21 kilograms of CO<sub>2</sub> per gallon of diesel.

#### *Train Operations*

The net increase in fuel consumption by locomotives was estimated based on the increase in train miles from existing (2019) to project (2024) conditions and a fuel efficiency of 0.3425 miles per gallon (or 2.9197 gallons per mile) from Metrolink's 2018 reporting (National Transit Database 2020).

#### *Displaced Vehicle Miles*

Reduction in on-road fuel consumption was estimated based on displaced vehicle CO<sub>2</sub> emissions (discussed further in Section 3.7). The emissions calculation included CARB's adjustment factors to account for the impact of the SAFE Vehicles Rule on fuel efficiency in 2024. Gallons of gasoline were



calculated by converting metric tons of CO<sub>2</sub> to kilograms CO<sub>2</sub> (CO<sub>2</sub>\*1000) and dividing by a conversion factor of 8.78 kilograms of CO<sub>2</sub> per gallon of gasoline.

## Impact Analysis

*Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

### CONSTRUCTION

**Less than Significant Impact.** Electricity and natural gas are not expected to be consumed in large quantities during construction-related activities, as construction equipment is expected to be fueled with diesel or gasoline. As described below, construction-related activities of the Project will result in fuel consumption from the use of construction tools and equipment, as well as transport of workers and materials to or from the construction site. This fuel consumption will be temporary and negligible relative to the overall consumption of petroleum in the state of California.

In addition, there are no unusual Project characteristics that will cause the use of construction-related equipment to be less energy efficient compared with other similar construction sites in other parts of the region. As described in Section 3.14, Utilities and Service Systems, Project construction and operation would comply with applicable waste recycling regulations, including SCRRA standards requiring a Waste Management Plan for construction. Therefore, construction-related fuel consumption by the Project will not result in inefficient, wasteful, or unnecessary energy use compared with other construction sites in the region as described in further detail below. Impacts would be less than significant.

#### Electricity

Temporary electric power from Southern California Edison would be required throughout Project construction for the operation of lighting, electrical equipment, etc. However, electricity needs during Project construction would be temporary and would contribute negligibly to the Project's overall energy consumption because typical demand would stem from smaller electrically powered hand tools and lighting. As such, Project construction would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of electricity during Project construction.

#### Natural Gas

Project construction is not anticipated to require the direct consumption of natural gas. Any natural gas used for Project construction would contribute negligibly to the Project's overall energy consumption. As such, Project construction would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of natural gas during Project construction.

#### Petroleum

Project construction would require petroleum consumption in order to operate heavy-duty construction equipment (e.g., diesel-engine trucks, haul trucks and excavation equipment) and construction workers' vehicles (gasoline-engine trucks) moving to and from the Project site. Construction is estimated to last for approximately 19 months. The estimated diesel fuel usage from construction equipment is shown in Table 3.5-1. Estimated gasoline and diesel fuel consumption for transport of workers and materials is shown in Table 3.5-2.

**Table 3.5-1. Construction Equipment Diesel Demand**

Construction Phase	Number of Equipment Pieces	Equipment CO <sub>2</sub> (MT)	Kilograms CO <sub>2</sub> /Gallon	Gallons
Construct structure	8	80.6	10.21	7,894
Construct tract work and new turnouts	4	83.7	10.21	8,198
Construct signal houses, grade crossing warning devices and associated conduits	6	63.9	10.21	6,259
Construct track and roadway improvements at grade crossings	8	81.7	10.21	8,002
Construct Main Track 2, upgrade timber to concrete ties	9	80.6	10.21	7,894
Remove, construct existing platform, finish upgrading tie	10	96.2	10.21	9,422
Total diesel consumed by construction equipment				47,669

Notes:

CO<sub>2</sub>=carbon dioxide; MT=million tons

**Table 3.5-2. Construction Worker, Vendor, and Haul Truck Fuel Consumption**

Construction Phase	Trips	CO <sub>2</sub> (MT)	Kilograms CO <sub>2</sub> /Gallon	Gallons
<b>Construct Structure</b>				
Construction worker (gasoline)	24	5.37	8.78	611.62
Construction vendor (diesel)	0	0.00	10.21	0.00
Construction haul truck (diesel)	1	0.01	10.21	0.98
<b>Construct Tract Work and New Turnouts</b>				
Construction worker (gasoline)	12	2.68	8.78	305.24
Construction vendor (diesel)	0	0.00	10.21	0.00
Construction haul truck (diesel)	1	0.01	10.21	0.98
<b>Construct Signal Houses, Grade Crossing Warning Devices and Associated Conduits</b>				
Construction worker (gasoline)	18	2.35	8.78	267.65
Construction vendor (diesel)	0	0	10.21	0.00
Construction haul truck (diesel)	0	0.01	10.21	0.98
<b>Construct Track and Roadway Improvements at Grade Crossings</b>				
Construction worker (gasoline)	24	5.44	8.78	619.59
Construction vendor (diesel)	0	0.00	10.21	0.00
Construction haul truck (diesel)	75	3.22	10.21	315.38
<b>Construct Main Track 2, Upgrade Timber to Concrete Ties</b>				
Construction worker (gasoline)	24	5.17	8.78	588.84
Construction vendor (diesel)	0	0.00	10.21	0.00

**Table 3.5-2. Construction Worker, Vendor, and Haul Truck Fuel Consumption**

Construction Phase	Trips	CO <sub>2</sub> (MT)	Kilograms CO <sub>2</sub> /Gallon	Gallons
Construction haul truck (diesel)	1	0.01	10.21	0.98
<b><i>Remove, Construct Existing Platform, Finish Upgrading Tie</i></b>				
Construction worker (gasoline)	30	4.4	8.78	501.14
Construction vendor (diesel)	0	0.00	10.21	0.00
Construction haul truck (diesel)	1	0.01	10.21	0.98
Total gasoline consumption for transportation				2894.08
Total diesel consumption for transportation				320.28

Notes:  
 CO<sub>2</sub>=carbon dioxide; MT=million tons

In summary, construction of the Project is anticipated to consume a total of approximately 2,894 gallons of gasoline and 47,989 gallons of diesel fuels over approximately 19 months. In comparison, California’s consumption of petroleum gasoline and diesel fuels in 2019 were approximately 4,397,000 and 1,146,400 gallons per day, respectively (U.S. Energy Information Administration 2020c, 2020a). As such, consumption of petroleum during Project construction would represent approximately 0.07 percent and 0.03 percent of California’s total consumption of gasoline and diesel, respectively.

Additionally, the Project’s construction contractor would ensure that construction equipment is properly tuned and maintained per the manufacturers’ specifications throughout the construction period, which would further ensure that a wasteful and inefficient use of energy would not occur during Project construction. Once construction activities cease, petroleum consumption from off-road vehicles and construction equipment would end. As such, Project construction would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of petroleum during Project construction. Impacts would be less than significant. No mitigation is required.

**OPERATION**

**Less than Significant Impact.** Electrical demands currently exist at the five at-grade crossings to facilitate the operation of signaling equipment and at the Simi Valley Station for security lighting. Project operations currently require negligible use of natural gas at the Simi Valley Station. Passenger train operations currently require the consumption of diesel fuel; however, this consumption is offset by a associated decrease in fuel consumption by passenger vehicles resulting from existing ridership and associated reductions in vehicle miles travelled.

Electricity

Beyond the existing electrical demands described above, additional demand for electricity would be required to power new signal houses, light the new platform and pedestrian underpass, and operate the pump station. The net increase in electrical consumption following implementation of the Project would be negligible in the context of existing power demands.

### Natural Gas

Project operations would not increase demands for natural gas at the existing Simi Valley Station. No new facilities (e. g. public restrooms) are proposed that would require consumption of natural gas at the station. Any minor increase in natural gas consumption from increased ridership would be negligible in the context of the existing station’s overall energy consumption.

### Petroleum

Project operation would enable a substantial increase in passenger rail service along the Metrolink VCL. SCRRA currently operates diesel-fueled locomotives as part of its existing passenger rail service. As shown in Table 3.5-3, diesel fuel consumption is expected to increase by approximately 717,428 gallons as a result of the expansion of passenger rail service enabled by the Project; however, the corresponding displacement of vehicle miles traveled would reduce on road fuel consumption by approximately 983,713 gallons of gasoline. To compare between fuel types, energy usage is typically quantified using the British thermal unit (BTU).

Table 3.5-3 shows the impact of Project operation on petroleum fuel consumption, converted to BTU using factors of 137,381 BTU per gallon and 120,286 BTU per gallon for diesel and gasoline, respectively (U.S. Energy Information Administration 2020d). The Project would result in an overall reduction in energy consumption for transportation, thereby reducing wasteful or inefficient consumption of energy resources. Thus, Project operation would result in a net reduction of energy use for transportation. Impacts would be less than significant. No mitigation is required.

**Table 3.5-3. Project Operational Fuel Consumption**

Year	Existing (2019)	Project (2024)	Change
Train miles	307,190	552,910	245,720
Fuel efficiency (gallons per mile)	2.9197	2.9197	0
Fuel consumed by train operations (gallons of diesel)	896,903	1,614,331	717,429
<b>Energy consumed by train operations (BTU)</b>	<b>123,217</b>	<b>221,778</b>	<b>98,561</b>
Displaced vehicle emission (MT CO <sub>2</sub> )	-10,053	-18,690	-8,637
Kilograms of CO <sub>2</sub> per gallon of gasoline	8.78	8.78	0
Displaced vehicle fuel consumption (gallons of gasoline)	-1,144,989	-2,128,702	-983,713
<b>Displaced vehicle energy consumption (BTU)</b>	<b>-137,726</b>	<b>-256,053</b>	<b>-118,327</b>
<b>Net impact on energy consumption (BTU)</b>			<b>-19,766</b>

Notes:  
BTU=British thermal unit; CO<sub>2</sub>=carbon dioxide; MT=million tons

*Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

### CONSTRUCTION

**Less than Significant Impact.** As described above, construction energy use would not result in an inefficient use of nonrenewable energy resources. Project construction activities will primarily occur within existing transportation ROW and would not require a substantial amount of mass grading or offsite export of materials. As discussed above and in Section 3.14, Utilities and Service Systems,

construction would comply with applicable debris recycling requirements. Impacts would be less than significant. No mitigation is required.

#### OPERATION

**Less than Significant Impact.** The City’s General Plan includes strategies to decrease vehicle miles and increase alternative transportation, thereby reducing fuel consumption. These include increasing transit frequency, improving pedestrian safety, and “complete streets” that accommodate transit and active transportation modes. Project operation would provide enhanced passenger rail service and offer opportunities for riders to mode-shift from energy-intensive single occupancy passenger vehicles to transit. Furthermore, the Project would support shifts to walking and cycling by improving safety at five at-grade crossings.

These Project benefits would also support implementation of 2020-2045 RTP/SCS, which was adopted on September 3, 2020, and supports state GHG reduction goals by promoting alternatives to energy-intensive automobile travel (SCAG 2020a). One of the core visions of the plan strengthening the region’s transit backbone is to enhance frequency on the Metrolink system through the SCORE Program (SCAG 2020a). Growing ridership, providing more frequent service, and improving connectivity are key goals for passenger rail laid out in the plan that are supported by the Project. Since the Project would reduce transportation related fuel consumption and is identified in the 2020-2045 RTP/SCS (Project number 720001), it would not conflict with the region’s energy efficiency plans (SCAG 2020b). Impacts would be less than significant. No mitigation is required.

#### 3.5.5 Mitigation Measures

The Project would have a less than significant impact on energy resources, and no mitigation is required.

#### 3.5.6 CEQA Significance Conclusions

The Project would have a less than significant impact on energy resources.

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## 3.6 Geology, Soils, and Seismicity

### 3.6.1 Introduction

The Geology, Soils, and Seismicity section describes the environmental setting and regulatory setting for geology, soils, seismicity, and paleontological resources in the Project study area. It also describes the potential impacts to geology, soils, seismicity, and paleontological resources that could result from construction and operation of the Project and mitigation measures that would reduce significant impacts, where feasible. Cumulative impacts on geology, soils, and paleontological resources, in combination with planned, approved, and reasonably foreseeable projects, are discussed in Chapter 4, Cumulative Impacts.

### 3.6.2 Environmental Setting

This section summarizes the existing environmental setting related to geology, soils, and paleontological resources within the Project study area. Information contained and considered in this section is summarized from a combination of sources including the BRTR (Appendix D of this EIR), *Simi Valley Double Track and Platform Project Paleontological Resources Constraints Analysis* (Appendix G of this EIR), the *Simi Valley Double Track and Platform Project Preliminary Geotechnical Design Report* (Appendix H of this EIR), the *City of Simi Valley General Plan* (City of Simi Valley 2012b), the *City of Simi Valley General Plan Environmental Impact Report* (City of Simi Valley 2012a), and the *Ventura County General Plan* (Ventura County 2020).

#### Geology

The City is located within the Transverse Ranges geomorphic province of California, which is characterized by east-west trending ridges and valleys formed by a combination of folding and faulting during a period of compression and uplift. Locally, Simi Valley is located on an alluvial floodplain bounded by Big Mountain and the Santa Susana Mountains to the north, the Simi Hills to the south and east and unnamed hills that separate the Simi Valley from Tierra Rejada Valley and Little Simi Valley to the west. Late Cretaceous to late Tertiary marine sedimentary units, along with minor late Cenozoic nonmarine fluvial sedimentary deposits, are exposed over most of the upland terrain. Quaternary alluvial sediments derived from erosion of the surrounding hills and mountains filled the valley and canyon bottoms throughout the Ventura Basin (Appendix H of this EIR).

As shown on Figure 3.6-1, the Project study area is generally located on a surficial deposit denoted as Young Alluvial Fan Deposits (Qyf). This deposit is described as unconsolidated to slightly consolidated, undissected to slightly dissected boulder, cobble, gravel, sand, and silt deposits issued from a confined valley or canyon. A section of the Project study area along East Los Angeles Avenue and the east of the unlined channel is located on geological unit denoted as Alluvial Wash Deposits (Qw), which is described as unconsolidated sandy and gravelly sediments deposited in recently active channels of streams and rivers. This geologic unit may contain loose to moderately loose sand and silty sand.

Geotechnical borings collected as part of the Project-specific, preliminary geotechnical report indicated that general soil conditions within the Project study area are as follows (detailed subsurface soil conditions are presented in Appendix H of this EIR):

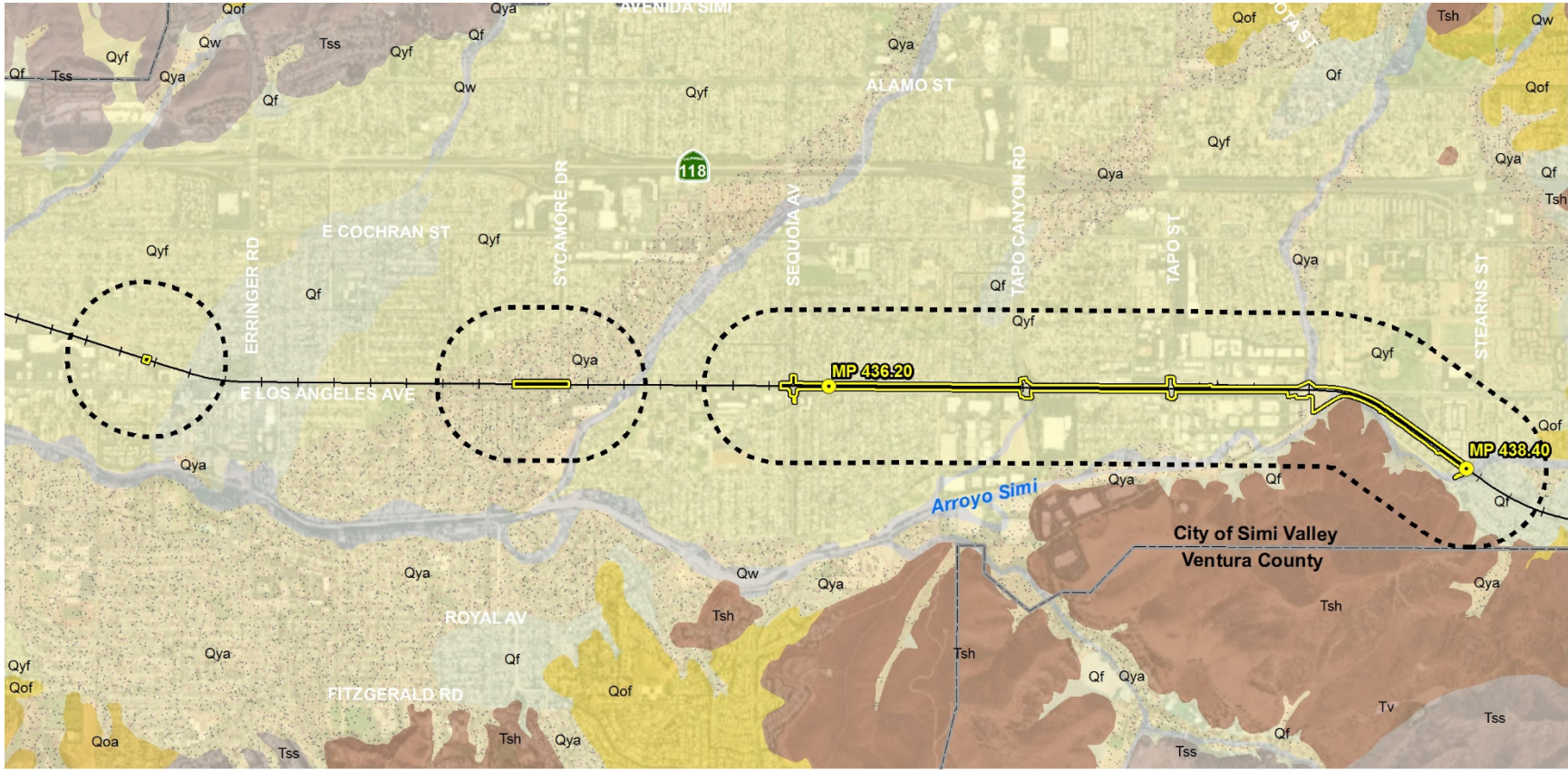
- Borings A-19-001, A-19-002, A-19-003, and A-19-004 collected in the vicinity west of Tapo Canyon Road show that alluvial deposits encountered within the upper 20 feet below ground surface level (bgs) vary from loose to stiff sandy silt to silty sands with relative densities ranging from loose to medium dense. Some clayey sands and lean clays were also encountered at depths below 15 feet bgs.
- Borings A-19-005 and A-19-006 collected in the vicinity of Simi Valley Station show that alluvial deposits consist of lean clay, sandy clay, and clay ranging in consistencies from soft to stiff between depths of 5 and 39 feet bgs. At depths greater than 39 feet bgs in Boring A-19-005, alluvial deposits consisted of medium dense sand with silt.

## Soils

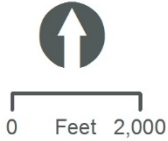
Soil associations mapped within the Project study area consist of Anacapa Series, Metz Series, Mocho Series, Pico Series, Riverwash, Soper Series, and Zamora Series (Appendix D of this EIR). All but the Soper Series, which consists of material weathered from conglomerate and sandstone, consist of alluvial soils. Riverwash is the only soil within the Project study area that has a hydric rating. Detailed descriptions of each soil series are provided in the BRTR (Appendix D of this EIR). Surficial soils may also contain artificial fill and other materials from previous construction activity within the Project study area.



Figure 3.6-1. Regional Geologic Map



- Project Footprint
- 0.25 Mile Buffer
- Mile Post
- City Boundary
- Qw - Alluvial Wash Deposits
- Qf - Alluvial Fan Deposits
- Qyf - Young Alluvial Fan Deposits
- Qya - Young Alluvial Valley Deposits
- Qof - Old Alluvial Fan Deposits
- Qoa - Old Alluvial Valley Deposits
- Tss - Coarse-grained Tertiary age formations of sedimentary origin
- Tsh - Fine-grained Tertiary age formations of sedimentary origin
- Tv - Tertiary age formations of volcanic origin



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## Seismicity

Like most of Southern California, the City is located in a seismically active region. Although the Project study area does not intersect a known active or potentially active fault, the City is in proximity to several major regional faults as shown in Table 3.6-1. As shown, multiple active and potentially active faults are located within 10 miles of the Project study area.

**Table 3.6-1. Faults in Proximity to the Project Study Area**

Fault Name	R <sub>rup</sub> <sup>a</sup> (miles)	Maximum Moment Magnitude	Fault Type
Chatsworth Fault	1.68	6.4	Reverse
Simi-Santa Rosa Fault Zone (Simi-Santa Rosa Section)	1.99	6.8	Strike-slip
Sierra Madre Fault Zone (Santa Susana Section)	5.34	6.8	Reverse
Northridge Hills	6.50	6.4	Reverse
Oak Ridge (Onshore)	8.20	7.4	Reverse
Northridge	9.38	6.8	Reverse
Holser alt 1	9.82	6.7	Reverse
Simi-Santa Rosa Fault Zone (Camarillo-Santa Rosa Section)	10.50	6.8	Strike-slip
San Cayetano	11.37	7.2	Reverse
Anacapa-Dume (alt 1)	13.92	7.2	Reverse

Source: Appendix H of this EIR

Notes:

<sup>a</sup> R<sub>rup</sub>=Closest distance from Boring A-19-003 to fault rupture plane

Km=kilometer

Local geologic, soil, and seismic hazards within the Project study area are discussed further below:

**Surface Rupture.** Surface rupture results when displacement along an active fault physically breaks the ground surface during a seismic event. The Simi-Santa Rosa fault is the only known active, Alquist-Priolo fault within the City (City of Simi Valley 2012a). The Simi-Santa Rosa fault runs in a southwest-northeast direction approximately 1.8 miles north of where the Project study area intersects Sequoia Avenue (Appendix H of this EIR; California Department of Conservation [DOC] 2020).

**Groundshaking.** The major cause of structural damage from earthquakes is groundshaking. The severity of ground motion expected at any one site can vary depending upon the distance to the fault, the magnitude of the earthquake, and the local geology. Strong seismic groundshaking can damage large infrastructure, such as freeway overpasses, and unreinforced masonry buildings (City of Simi Valley 2012a). Seismic groundshaking can also trigger a variety of secondary hazards such as liquefaction, landslides, fire, and dam failure. According to the geotechnical report prepared for the Project, groundshaking resulting from an earthquake occurring along one of the nearby faults is the principal seismic hazard that could affect the Project study area (Appendix H of this EIR).

**Expansive Soils.** Expansive soils are comprised of high fractions of clay materials that respond to changes in water content and expand upon wetting and shrink upon drying. The clay quantity in soils is directly correlated to their relative expansiveness (i.e., soils with a higher clay content tend to be more expansive). Due to the potential for expansive soils to expand/shrink, they can cause structural damage to buildings, roads, and other infrastructure that are not engineered to withstand them. Expansive index testing conducted within the Project study area indicated that, although the entire Project study area does not comprise expansive soils, the likelihood of encountering expansive soils in the vicinity of the Simi Valley Station is relatively high (Appendix H of this EIR).

**Subsidence.** Subsidence is the gradual sinking of the ground due to underground material movement, commonly associated with mining or other extractive (water, oil, and natural gas) activities (National Ocean Service 2020), but also commonly associated with earthquakes. The Project study area is not located in an area of known ground subsidence or within any delineated zones of subsidence due to groundwater pumping or oil extraction. As such, the potential for subsidence within the Project study area is considered low (Appendix H of this EIR).

**Seismically induced Settlement.** Seismically induced settlements consist of dry dynamic settlement (above groundwater) and liquefaction-induced settlement (below groundwater). This settlement occurs primarily within loose to moderately dense sandy soils due to a reduction in volume during and shortly after an earthquake event. According to the geotechnical report prepared for the Project, the probability dry dynamic settlement within the Project study area is considered relatively low due to the presence of the high groundwater table, while testing indicated that the potential for liquefaction-induced settlement, although low, is slightly higher near the proposed pedestrian underpass in the vicinity of the Simi Valley Station (Appendix H of this EIR).

**Liquefaction.** Liquefaction occurs when loose, water-saturated sediments lose strength and fail during strong ground shaking. Liquefaction is defined as the transformation of granular material from a solid state into a liquefied state as a consequence of increased pore-water pressure (California DOC 2019). Structures founded on or above potentially liquefiable soils may experience bearing capacity failures due to the temporary loss of foundation support, vertical settlements (both total and differential), and/or undergo lateral spreading. The factors known to influence liquefaction potential include soil type, relative density, grain size, confining pressure, depth to groundwater, and the intensity and duration of the seismic ground shaking. Liquefaction is most prevalent in loose to medium dense, silty, sandy, and gravelly soils below the groundwater table.

Portions of the Project study area are located within an area designated as potentially liquefiable (Appendix H of this EIR). Liquefaction analysis performed as part of the preliminary geotechnical report near the proposed pedestrian underpass concluded that granular subsurface soils in the area that are between approximate depths of 24 and 29 feet, and between 40 and 50 feet below ground surface level are susceptible to liquefaction (Appendix H of this EIR).

**Landslides.** Landslides are the downward movement of debris and materials in areas of weak soil and rock, and almost always occur on sloping terrain. The Project study area has been previously graded and is relatively flat. Additionally, the area is not mapped by the California Geological Survey (CGS) within a landslide hazard area (Appendix H of this EIR). As such, the potential risk of landslides within the Project study area is considered low.

## Paleontological Resources

A paleontological search of records maintained by Natural History Museum of Los Angeles County (LACM) was requested for the Project. The museum responded on July 3, 2020 stating that no vertebrate fossil localities are recorded within the Project study area (Appendix G of this EIR). However, there are several localities within the Project vicinity from geologic units similar to those that underlie the Project study area (Appendix G of this EIR). Specifically, localities LACM 7594, 7455, 6107, and 1406 are recorded from Pleistocene-age older sedimentary deposits.

Locality 7594, located north of the Project alignment, at Marr Ranch, near the mouth of Chivo Canyon produced fossil mastodon (*Mammut*). Locality 7455, located west-northwest of the Project alignment, in the ravine just west of Dry Canyon, produced fossil mastodon (*Mammut*). Locality 6107, located west-northwest of the Project alignment, in a small eastern tributary of Alamos Canyon, produced fossil horse (*Equus occidentalis*). Locality 1406, located in Santa Susana Pass, due east of the Project alignment, produced fossil mastodon (*Mammut*). See Appendix G of this EIR for additional details.

According to the *Simi Valley Double Track and Platform Project Paleontological Resources Constraints Analysis*, the paleontological sensitivity for each of the geologic formations within the Project study area varies, as follows:

### ARTIFICIAL FILL

Any fossil resources contained within these sediments would have been removed from their original deposition locations and lack critical stratigraphic contextual data. Therefore, these deposits are considered to have a low potential fossil yield classification (PFYC) (PFYC 2) for producing scientifically important paleontological resources based on BLM PFYC guidelines (BLM 2016).

### YOUNGER SEDIMENTARY DEPOSITS

Holocene-age sediments are typically too young to contain fossilized material (BLM 2016), but they may overlie sensitive older (e.g., Pleistocene- to Paleocene-age) deposits at variable depth. Holocene-age alluvial gravel, sand, and clay of valley and floodplain areas, and Holocene-age gravel and sand of major stream channels are considered to have a low potential (PFYC 2) for producing scientifically important paleontological resources based on BLM PFYC guidelines (BLM 2016).

### OLDER SEDIMENTARY DEPOSITS

Recorded specimens from Ventura County include flightless sea duck (*Chendytes sp.*, *Chendytes lawi*, *Chendytes milleri*), mammoth (*Mammuthus*, *Mammuthus pacificus*), bison (*Bison*), horse (*Equus*), and seal (*Pinnipedia*) (PaleoBiology Database [PBDB] 2020; University of California Museum of Paleontology [UCMP] 2020; Table 5-1). Additional localities recorded from Pleistocene-age sedimentary deposits throughout Southern California have produced specimens including mammoth (*Mammuthus*), mastodon (*Mammut*), camel (Camelidae), horse (Equidae), bison (*Bison*), giant ground sloth (*Megatherium*), peccary (*Tayassuidae*), cheetah (*Acinonyx*), lion (*Panthera*), saber-toothed cat (*Smilodon*), capybara (*Hydrochoerus*), dire wolf (*Canis dirus*), and numerous taxa of smaller mammals (Rodentia) (Appendix G of this EIR). Therefore, late Pleistocene-age older sedimentary deposits are considered to have a moderate potential (PFYC 3) for producing paleontological resources based on BLM's PFYC guidelines (BLM 2016).'

### LLAJAS FORMATION

Recorded specimens from Ventura County include gastropod (Gastropoda), bivalve (*Bivalvia*), eagle ray (*Myliobatis sp.*), mackerel shark (*Striatolamia macrora*), and sand shark (*Odontaspis sp.*) (Appendix G of this EIR). Therefore, middle Eocene-age Lajas Formation, gray micaceous claystone-siltstone and basal cobble conglomerate are considered to have a moderate potential (PFYC 3) for producing paleontological resources based on BLM PFYC guidelines (BLM 2016).

### SANTA SUSANA FORMATION

Recorded specimens from Ventura County include turtle/tortoise (Testudines), hidden neck turtle (Cryptodira), sand shark (*Carcharias clavata*), gastropod (Gastropoda), and bivalve (*Bivalvia*) (Appendix G of this EIR). Therefore, Paleocene-age Santa Susana Formation, dark gray micaceous clay shale and light to tan sandstone are considered to have a moderate potential (PFYC 3) for producing paleontological resources based on BLM PFYC guidelines (BLM 2016). Table 3.6-2 shows the paleontological literature and record search results conducted for the Project study area.

**Table 3.6-2. Paleontological Literature and Record Search Results Summary**

Institutional Locality Number or Name	Geologic Unit and Age	Taxon	Common Name	Location
LACM 7594	Older alluvium (Pleistocene)	<i>Mammut</i>	mastodon	North of the Project site, at Marr Ranch, near the mouth of Chivo Canyon
LACM 7455	Older alluvium (Pleistocene)	<i>Mammut</i>	mastodon	West-northwest of the Project site, in the ravine just west of Dry Canyon
LACM 6107	Older alluvium (Pleistocene)	<i>Equus occidentalis</i>	horse	West-northwest of the Project site, in a small eastern tributary of Alamos Canyon
LACM 1406	Older alluvium (Pleistocene)	<i>Mammut</i>	mastodon	Santa Susana Pass, almost due east of the Project site

**Table 3.6-2. Paleontological Literature and Record Search Results Summary**

Institutional Locality Number or Name	Geologic Unit and Age	Taxon	Common Name	Location
UCMP V78030; UCMP V65287; UCMP V5809; UCMP V5756; PBDB 200315	Older sedimentary deposits (Pleistocene)	<i>Chendytes sp.</i> <i>Chendytes lawi</i> <i>Chendytes milleri</i> <i>Mammuthus</i> <i>Mammuthus pacificus</i> <i>Bison</i> <i>Equus</i> <i>Pinnipedia</i>	flightless sea duck flightless sea duck flightless sea duck mammoth mammoth bison horse seal	Ventura County
Not reported	Older sedimentary deposits (Pleistocene)	<i>Mammuthus</i> <i>Mammut</i> Camelidae Equidae <i>Bison</i> <i>Megatherium</i> Tayassuidae <i>Acinonyx</i> <i>Panthera</i> <i>Smilodon</i> <i>Hydrochoerus</i> <i>Canis dirus</i> Rodentia	mammoth mastodon camel horse bison giant ground sloth peccary cheetah lion saber-toothed cat capybara dire wolf rodent	Southern California
UCMP 3310; UCMP 7019; PBDB 51922; PBDB 8012:	Llajas Formation (middle Eocene)	Gastropoda <i>Bivalvia</i> <i>Myliobatis sp.</i> <i>Striatolamia macrota</i> <i>Odontaspis sp.</i>	gastropod bivalve eagle ray mackerel shark sand shark	Ventura County
UCMP V5061; UCMP 3754; PBDB 193035; PBDB 177668	Santa Susana Formation (Paleocene)	<i>Testudines</i> <i>Cryptodira</i> <i>Carcharias clavata</i> Gastropoda <i>Bivalvia</i>	turtle/tortoise hidden neck turtle sand shark gastropod bivalve	Ventura County

### 3.6.3 Regulatory Setting

This section summarizes federal, state, and local regulations related to geology and soils that are applicable to the Project.

#### Federal

##### *Track Safety Standards*

Section 213.239, Special Inspections, of 49 Code of Federal Regulations (CFR) Part 213 requires that, in the event of fire, flood, severe storm, or other occurrence which might have damaged track structure, a special inspection will be made of the track involved as soon as possible after the occurrence and, if possible, before the operation of any train over that track.

##### *Earthquake Hazards Reduction Act*

The U.S. Congress passed the Earthquake Hazards Reduction Act in October 1977 to reduce the risks to life and property from future earthquakes through the establishment and maintenance of an effective earthquake hazards reduction program. To accomplish this goal, the act established the National Earthquake Hazards Reduction Program (NEHRP). At the time of its creation, Congress' stated purpose for NEHRP was "to reduce the risks of life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program." This program was substantially amended in November 1990 by the NEHRP, which refined the description of agency responsibilities, program goals, and objectives (NEHRP 2016).

The NEHRP designates the Federal Emergency Management Agency (FEMA) as the lead agency of the program, and assigns several planning, coordinating, and reporting responsibilities. Other NEHRP agencies include the National Institute of Standards and Technology, National Science Foundation, and the United States Geological Survey (USGS).

##### *Uniform Building Code*

The Uniform Building Code (UBC) is published by the International Conference of Building Officials and forms the basis for California's building code, as well as approximately half of the state building codes in the U.S. It has been adopted by the California Legislature to address the specific building conditions and structural requirements for California, as well as provide guidance on foundation design and structural engineering for different soil types.

##### *Paleontological Resources Preservation Act*

The Paleontological Resources Preservation Act (43 CFR Section 49: Paleontological Resources Preservation, November 21, 2016) provides standards for a coordinated approach to the management of paleontological resources on federal, public lands. The rule clarifies how bureaus will manage paleontological resources to ensure they are available for current and future generations to enjoy as part of America's national heritage.

##### *Bureau of Land Management Potential Fossil Yield Classification System*

The BLM's PFYC system is a tool through which paleontological sensitivity assignments can be determined (BLM 2016) (Appendix G of this EIR). The PFYC tool classifies geologic units based on their likelihood of containing paleontological resources on a scale of 1 (very low potential) to 5 (very



high potential). Table 3.6-3 shows the assignment criteria and corresponding description for each PFYC designation.

**Table 3.6-3. Potential Fossil Yield Classification**

BLM PFYC Designation	Assignment Criteria Guidelines and Management Summary (PFYC System)
1=Very Low Potential	The geologic units are not likely to contain recognizable paleontological resources.
	The units are igneous or metamorphic in nature and are not likely to contain recognizable paleontological resources apart from air-fall and reworked volcanic ash units.
	The units are Precambrian in age.
	Management concern is usually negligible, and impact mitigation is unnecessary except in rare or isolated circumstances.
2=Low Potential	The geologic units are not likely to contain paleontological resources.
	Field surveys have verified that scientifically important paleontological resources are not present or are rare.
	The units are generally younger than 10,000 years before present.
	The units are recent eolian deposits.
	The sediments exhibit substantial physical and chemical changes (i.e., diagenetic alteration) that make fossil preservation unlikely.
	Management concern is generally low, and impact mitigation is usually unnecessary except in occasional or isolated circumstances.
3=Moderate Potential	The geologic units are sedimentary in origin, and the fossil content varies in significance, abundance, and predictable occurrence.
	The units are marine in origin with sporadic known occurrences of paleontological resources.
	Paleontological resources may occur intermittently, but these occurrences are widely scattered.
	The potential for authorized land use to impact a scientifically important paleontological resource is known to be low to moderate.
	Management concerns are moderate. Management options could include record searches, predisturbance surveys, monitoring, mitigation, or avoidance. Opportunities may exist for hobby collecting. Surface-disturbing activities may require sufficient assessment to determine whether scientifically important paleontological resources occur in the area of a proposed action, and whether the action could affect the paleontological resources.
4 = High Potential	The geologic units are known to contain a high occurrence of paleontological resources.
	Scientifically important paleontological resources have been documented in the units but may vary in occurrence and predictability.

**Table 3.6-3. Potential Fossil Yield Classification**

BLM PFYC Designation	Assignment Criteria Guidelines and Management Summary (PFYC System)
	<p>Rare or uncommon fossils, including nonvertebrate (such as soft body preservation) or unusual plant fossils, may be present in the units.</p> <p>Illegal collecting activities may impact some areas of the unit.</p> <p>Management concern is moderate to high depending on the proposed action. A field survey by a qualified paleontologist is often needed to assess local conditions. On-site monitoring or spot-checking may be necessary during land-disturbing activities. Avoidance of known paleontological resources may be necessary.</p>
5=Very High Potential	<p>The geologic units are highly fossiliferous and consistently and predictably produce scientifically important paleontological resources.</p> <p>Scientifically important paleontological resources have been documented and occur consistently in the units.</p> <p>Paleontological resources in the units are highly susceptible to adverse impacts from surface disturbing activities.</p> <p>The unit is frequently the focus of illegal collecting activities.</p> <p>Management concern is high to very high. A field survey by a qualified paleontologist is almost always needed, and on-site monitoring may be necessary during land use activities. Avoidance or resource preservation through controlled access, designation of areas of avoidance, or special management designations should be considered.</p>
U=Unknown Potential	<p>The geologic units cannot receive informed PFYC assignments.</p> <p>The geological units may exhibit features or preservational conditions that suggest scientifically important paleontological resources could be present, but little information about the actual paleontological resources of the unit or area is known.</p> <p>The geologic units represented on a map are based on lithologic character or basis of origin but have not been studied in detail.</p> <p>Scientific literature for the units does not exist or does not reveal the nature of paleontological resources in the units.</p> <p>Reports of paleontological resources in the units are anecdotal or have not been verified.</p> <p>The area or geologic unit is poorly or under-studied.</p> <p>BLM staff has not yet been able to assess the nature of the geologic unit.</p> <p>Until a provisional assignment is made, geologic units with unknown potential have medium to high management concerns. Field surveys are normally necessary, especially prior to authorizing a ground-disturbing activity.</p>

Source: BLM 2016

Notes:

BLM=Bureau of Land Management; PFYC=Potential Fossil Yield Classification

## State

### *Alquist-Priolo Earthquake Fault Zoning Act*

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) (California PRC Sections 2621-2630) was enacted in 1972 to reduce the hazard of surface faulting to structures designed for human occupancy. Under the Alquist-Priolo Act, the State Geologist is required to establish regulatory zones known as Earthquake Fault Zones around the surface traces of active faults and issue appropriate maps, which are distributed to all affected cities, counties, and state agencies for their use in planning efforts. Before a new project is permitted, cities and counties require a geologic investigation to demonstrate that proposed buildings will not be constructed on active faults.

### *Seismic Hazards Mapping Act*

The Seismic Hazards Mapping Act of 1990 (California PRC Sections 2690–2699.6) directs the California DOC's CGS to map areas of earthquake hazard, including areas of liquefaction and seismically induced landslides. The act established a mapping program for areas that have the potential for liquefaction, landslides, strong ground shaking, or other earthquake and geologic hazards. The Seismic Hazards Mapping Act requires the State Geologist to establish regulatory zones (Zones of Required Investigation) and to issue appropriate maps (Seismic Hazard Zone maps). These maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling construction and development (California DOC 2019).

As required by the act, the CGS has issued official Seismic Hazard Zone Maps that indicate zones of required investigation for earthquake faulting, landslides, and liquefaction. Prior to approving specific types of development, local permit authorities require a project's applicant to submit a geotechnical investigation report for review and approval by the jurisdiction.

### *California Building Code*

Title 24 of the CCR, known as the CBSC or "Title 24," contains the regulations that govern the construction of buildings in California. The 2019 CBSC (CCR, Title 24) was published July 1, 2019, with an effective date of January 1, 2020. The CBSC is reserved for state regulations that govern the design and construction of buildings, associated facilities, and equipment. The CBSC is published by the California Building Standards Commission, and it applies to all building occupancies throughout the state of California (California Building Standards Commission 2019).

### *CEQA Guidelines for Protection of Paleontological Resources*

California PRC Section 21000 et seq., the CEQA Guidelines (14 CCR Section 15064.5) provide guidance for determining the significance of impacts on historic and unique archaeological resources, including paleontological resources. The procedures, types of activities, persons, and public agencies required to comply with CEQA are defined in the Guidelines for Implementation of CEQA (CEQA Guidelines), as amended on March 18, 2010 (Title 14, Section 15000 et seq. of the CCR), and further amended January 4, 2013, and December 28, 2018. One of the questions listed in the CEQA Environmental Checklist is: "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (CEQA Guidelines Appendix G, Section VII, Part F).

### *California Public Resources Code*

The California Public Resources Code (Chapter 1.7), Sections 5097 and 30244, include additional state-level requirements for the assessment and management of paleontological resources. These statutes require reasonable mitigation of adverse impacts on paleontological resources resulting from development on state lands, and define the excavation, destruction, or removal of paleontological sites or features from public lands without the express permission of the jurisdictional agency as a misdemeanor. As used in Section 5097, state lands refer to lands owned by, or under the jurisdiction of, the state or any state agency. Public lands are defined as lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

### Local

#### *Ventura County General Plan*

The *Ventura County General Plan* (Ventura County 2020) includes goals and objectives related to the protection of public health and safety from local geologic and seismic hazards. Table 3.10-1 includes applicable *Ventura County General Plan* goals and policies pertaining to geology, soils, seismicity, and paleontological resources.

#### *City of Simi Valley General Plan*

The City's General Plan (City of Simi Valley 2012b) includes goals and objectives related the protection of public health and safety from local geologic and seismic hazards. Table 3.10-1 includes applicable *City of Simi Valley General Plan* goals and policies pertaining to geology, soils, seismicity, and paleontological resources.

#### *City of Simi Valley Municipal Code*

The Simi Valley Municipal Code, Title 8, incorporates the CBSC by reference. Section 8-1.02 states that the purpose of the code is to establish minimum standards to safeguard the public health, safety and general welfare by regulating and controlling the design, construction, quality of materials, use and occupancy and location of all buildings and structures within the City and certain equipment specifically regulated in the code.

The Simi Valley Municipal Code, Title 9, Chapter 9-32 outlines the City's hillsides performance standards, including the drainage, grading, and erosion control standards that are intended to preserve the natural terrain and hydrologic characteristics of a subject site. The purpose of the hillside performance standards is to implement the provisions of the General Plan as they relate to the preservation of hillside areas, the maintenance of open space, the retention of scenic and recreational resources of the City, and to further enhance the public health, safety, or welfare by regulating development in hillside areas.

#### *City of Simi Valley Multi-Hazard Mitigation Plan*

The *Simi Valley Multi-Hazard Mitigation Plan* provides a strategy planning tool for the reduction of or prevention of injury and damage from hazards identified within the City. The primary goal related to geologic and seismic hazards as identified in the *Simi Valley Multi-Hazard Mitigation Plan* is to reduce deaths, injuries, structural damage and losses from earthquakes and other geologic hazards. This can be achieved by developing a comprehensive approach to reducing earthquake-induced structural damage; protecting existing assets with the highest relative vulnerability to earthquakes; acquiring and

maintaining information about vulnerability of assets from earthquakes; establishing and maintaining closer working relationships with federal, state, and local governments and districts; and encouraging other organizations to incorporate hazard mitigation activities (City of Simi Valley 2012a).

### 3.6.4 Impact Analysis

This section describes the potential for environmental impacts related to geology, soils, and paleontological resources as a result of Project implementation. It describes the thresholds used to determine whether an impact would be significant, as well as measures to mitigate potentially significant impacts, where appropriate.

#### Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to geology and soils would be considered significant if the Project would:

- A. Directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault
  - ii. Strong seismic ground shaking
  - iii. Seismic-related ground failure, including liquefaction
  - iv. Landslides
- B. Result in substantial soil erosion or the loss of topsoil
- C. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse
- D. Be located on expansive soil, as defined in Table 18-1-B of the UBC (1994), creating substantial direct or indirect risks to life and property
- E. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater
- F. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

#### Thresholds Requiring No Further Analysis

The following thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project:

- E. The Project consists of a railroad infrastructure project that would not require the use of new septic tanks or alternative wastewater disposal systems. The existing Simi Valley Station is connected to municipal sanitary sewer infrastructure and no substantial increase in sanitary sewer flows would result from the Project. Additionally, no new sanitary sewer infrastructure would be required. In this context, no impact would result.

## Methodology

The potential for significant impacts on geology and soils was assessed through the following means:

- Review of geotechnical maps and reports available at online agency databases;
- A subsurface exploration consisting of drilling, logging, and sampling of six hollow-stem auger borings to depths ranging between 20 and 50 feet bgs;
- Geotechnical laboratory testing on selected soil samples;
- Geotechnical evaluation of the collected data; and,
- Preparation of the geotechnical report to evaluate localized geologic conditions and present preliminary findings and geotechnical recommendations for the proposed improvements (Appendix H of this EIR).

## Impact Analysis

*Would the Project directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

### CONSTRUCTION

**Less than Significant Impact.** Based on the *City of Simi Valley SEMS Multi-Hazard Functional Plan*, the Simi-Santa Rosa fault runs through the City along the northern foothills, approximately 1.8 mile north of the Project study area (City of Simi Valley 2001; Appendix H). According to the preliminary geotechnical report (Appendix H of this EIR), the Project is in the vicinity of several other known active and potentially active earthquake faults (Table 3.6-1); however, none of these faults traverse the Project study area. As such, the probability of surface fault rupture within the Project study area during construction is considered low and Project construction would not increase or exacerbate existing hazards related to fault rupture. Project construction would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving rupture of a major fault as delineated on the most recent Alquist-Priolo Fault Zoning map. Impacts would be less than significant. No mitigation is required.

### OPERATION

**Less than Significant Impact.** The Project is a railroad improvements project that would not introduce any habitable structures, and all railroad improvements would be carried out in accordance with the Project-specific geotechnical report (Appendix H of this EIR), the SCRRA DCM (as amended) (Metrolink 2021), the CBSC, and the City's Municipal Code, all of which include seismic design requirements. Upon operation, the Project would not result in any significant changes related to the risk of seismic hazards in the Project area when compared to existing conditions, nor would Project operation increase or exacerbate the potential for fault rupture to occur. As such, Project operation would not directly cause potential substantial adverse effects, including the risk of loss, injury or death involving rupture of a major fault as delineated on the most recent Alquist-Priolo Fault Zoning map and impacts would be less than significant. No mitigation is required.

*Would the Project directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** According to the Simi Valley General Plan EIR, the potential for strong seismic ground shaking in Simi Valley is high (City of Simi Valley 2012a). Ground shaking within Simi Valley could occur as a result of displacement of regional and/or local faults (City of Simi Valley 2012a). As stated above, the Project study area is located within Southern California, a seismically active region that is known for its many active faults and historic seismicity. Therefore, seismic ground shaking could potentially impact the Project study area.

The intensity of ground shaking during a seismic event at any one location is determined by several factors, including: magnitude of the earthquake; distance from the epicenter (source); subsurface material beneath the location; and topography. Ground shaking could result in significant damages to buildings, roads, and other infrastructure, and may also result in associated safety hazards to people living and working in the vicinity; this is a potentially significant impact.

However, the Project is a railroad improvements project that would not introduce any habitable structures, and all railroad improvements would be constructed in accordance with the Project-specific geotechnical report (Appendix H of this EIR), the SCRRRA DCM (as amended) (Metrolink 2021), the CBSC, and the City's Municipal Code, all of which include seismic design requirements. Although Project construction would be temporary in nature and unlikely to directly result in substantial adverse effects, due to the seismic nature of the region, the potential for strong seismic ground shaking within the Project study area remains. Implementation of Mitigation Measure GEO-1, which requires the preparation of a final geotechnical report in support of the Project's final design, would reduce potentially significant impacts to a less than significant level.

#### OPERATION

**Less than Significant Impact.** As stated above, the Project study area is located within Southern California, a seismically active region that is known for its many active faults and historic seismicity. Therefore, seismic ground shaking could potentially impact the Project over the course of its life.

However, the Project would be implemented in accordance with the applicable geotechnical and seismic design standards, and, upon operation, the Project would not result in any significant changes related to the risk of seismic hazards in the Project area when compared to existing conditions, nor would Project operation increase or exacerbate the potential for strong seismic ground shaking to occur. Impacts would be less than significant. No mitigation is required.

*Would the Project directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** Seismic-related ground failure includes hazards such as liquefaction, landslides, and settlement. As explained in Section 3.6.2, portions of the Project study area are located within an area designated as potentially liquefiable (Appendix H of this EIR). Liquefaction analysis performed as part of the preliminary geotechnical report near the proposed pedestrian underpass concluded that granular subsurface soils between approximate depths of 24 and 29 feet, and between 40 and 50 feet bgs are susceptible to liquefaction (Appendix H of this EIR); this is a potentially significant impact.

However, the Project is a railroad improvements project that would not introduce any habitable structures, and all railroad improvements would be carried out in accordance with the Project-specific geotechnical report (Appendix H of this EIR), the SCRRA DCM (as amended) (Metrolink 2021), the CBSC, and the City's Municipal Code, all of which include seismic design requirements. Additionally, Project construction would be temporary in nature and would not increase or exacerbate the potential for ground failure, including liquefaction.

Although Project construction would be temporary in nature and unlikely to directly result in substantial adverse effects, due to the seismic nature of the region, the potential for seismic-related ground failure, including liquefaction, remains. Implementation of Mitigation Measure GEO-1, which requires the preparation of a final geotechnical report in support of the Project's final design, would reduce potentially significant impacts to a less than significant level.

#### OPERATION

**Less than Significant Impact.** As stated above, liquefaction analysis performed as part of the preliminary geotechnical report near the proposed pedestrian underpass concluded that granular subsurface soils between approximate depths of 24 and 29 feet, and between 40 and 50 feet below ground surface level are susceptible to liquefaction (Appendix H of this EIR).

The Project would be implemented in accordance with the applicable geotechnical and seismic design standards, and, upon operation, the Project would not result in any significant changes related to the risk of seismic hazards in the Project area when compared to existing conditions, nor would Project operation increase or exacerbate the potential for seismic-related ground failure, including liquefaction. Impacts would be less than significant. No mitigation is required.

*Would the Project directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

#### CONSTRUCTION

**Less than Significant Impact.** According to the preliminary geotechnical report prepared for the Project, the Project study area is relatively flat and is not mapped by CGS as within a landslide zone (Appendix H of this EIR). As such, the risk of landslide in the Project study area is low. The Project is a railroad improvements project that would not introduce any habitable structures, and all railroad improvements would be carried out in accordance with the Project-specific geotechnical report (Appendix H of this EIR), the SCRRA DCM (as amended) (Metrolink 2021), the CBSC, and the City's Municipal Code, all of which include seismic design requirements. Additionally, Project construction would be required to comply with the Occupational Health and Safety Administration's (OSHA) regulations that require excavations of 5 feet or more be shored before construction personnel are allowed onsite. Given the above, impacts would be less than significant. No mitigation is required.

#### OPERATION

**Less than Significant Impact.** As stated above, the risk of landslide within the Project study area is low. The Project would be implemented in accordance with the applicable geotechnical and seismic design standards, and, upon operation, the Project would not result in any significant changes related to the risk of seismic hazards in the Project area when compared to existing conditions, nor would Project operation increase or exacerbate the potential for seismic-related ground failure, including landslides. Impacts would be less than significant. No mitigation is required.



*Would the Project result in substantial soil erosion or the loss of topsoil?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** Project construction would involve grading and excavation. The Project study area is generally located on a surficial deposit characterized as unconsolidated to slightly consolidated, undissected to slightly dissected boulder, cobble, gravel, sand, and silt deposits, and, as such, loose soils exposed by excavation could be susceptible to erosion as a result of inclement weather (rain, wind etc.) and construction activity (e.g., movement of vehicles and people on the construction site). Given that the Project would disturb an approximately 36.69-acre area, the Project would be required to implement a stormwater pollution prevention plan (SWPPP), prepared under the State Water Resources Control Board's (SWRCB) General Construction Activity NPDES Permit (Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ, NPDES No. CAS000002) and the SCRRA DCM (as amended) (Metrolink 2021).

The Project-specific SWPPP would include BMPs to control on- and off-site erosion (see Section 3.9, Hydrology, Flooding, and Water Quality for details). BMPs may include general housekeeping practices including, but not be limited to, covering stockpiles, retaining eroded sediment onsite, containing non-stormwater at the Project site, utilizing sandbag barriers, etc. Additionally, grading activities carried out under the Project would require permit approvals from the City, which would require conformance with City regulations pertaining to erosion and sediment control, including Section 6-12.508 of the City's Municipal Code, *City Requirements for Construction Sites and Industrial Facilities Requiring a General Permit*. See Section 3.9, Hydrology, Flooding, and Water Quality for details.

With implementation of Project-specific SWPPP and associated erosion and sediment control BMPs, per Mitigation Measure HWQ-1 (see Section 3.9, Hydrology, Flooding, and Water Quality), and per the guidelines established by the City, Project construction would not result in substantial soil erosion or the loss of topsoil. Impacts would be less than significant with mitigation incorporated.

#### OPERATION

**No Impact.** Upon operation, the Project would not result in significant changes to the physical environment when compared to existing conditions; the Project is a railroad improvement that would improve the safety and efficiency of the existing VCL. Typical operations and maintenance activities would be carried out in accordance with the *SCRRA Facilities Management Plan* (SCRRA 2014), and would include landscaping, spraying of herbicides to reduce weeds, maintenance of drainage features and signal infrastructure. These activities would not require grading or excavation and would not result in soil disturbance or associated soil erosion. As such, no Project-related operational impacts involving erosion or the loss of topsoil are anticipated.

*Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** The Project site is not located in an area of known landslide zones, ground subsidence, or lateral spreading (Appendix H of this EIR). However, a portion of the Project study area intersects a known liquefaction zone (Appendix H of this EIR). As such, the potential for ground failure exists within the Project study area. However, the Project is a railroad improvements project that would not introduce any habitable structures, and all railroad improvements would be

carried out in accordance with the Project-specific geotechnical report (Appendix H of this EIR), the SCRRA DCM (as amended) (Metrolink 2021), the CBSC, and the City's Municipal Code, all of which include seismic design requirements.

Although Project construction would be temporary in nature and unlikely to directly result in substantial adverse effects, due to the seismic nature of the region, the potential for seismic-related ground failure, including liquefaction, remains. Implementation of Mitigation Measure GEO-1, which requires the preparation of a final geotechnical report in support of the Project's final design, would reduce potentially significant impacts to a less than significant level.

#### OPERATION

**Less than Significant Impact.** As stated above, the Project site is not located in an area of known landslide zones, ground subsidence, or lateral spreading (Appendix H of this EIR). However, liquefaction analysis performed as part of the preliminary geotechnical report near the proposed pedestrian underpass concluded that granular subsurface soils between approximate depths of 24 and 29 feet, and between 40 and 50 feet below ground surface level are susceptible to liquefaction (Appendix H of this EIR).

However, the Project would be implemented in accordance with the applicable geotechnical and seismic design standards, and, upon operation, the Project would not result in any significant changes related to the risk of seismic hazards in the Project area when compared to existing conditions, nor would Project operation increase or exacerbate the potential for seismic-related ground failure, including liquefaction. Impacts would be less than significant. No mitigation is required.

*Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life and property?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** Expansive soils are clayey soils that tend to increase significantly in volume when they become saturated and shrink when the water is drawn away. Expansive soils can result in structural damage to buildings, particularly in response to repeated wetting and drying. As stated in Section 3.6.2, portions of the Project study area are underlain by expansive soils, including the portion of the Project study area around the Simi Valley Station. As such, the potential for expansive soils and associated hazards, although moderate, exists within the Project study area. However, the Project is a railroad improvements project that would not introduce any habitable structures, and all railroad improvements would be carried out in accordance with the Project-specific geotechnical report (Appendix H of this EIR), the SCRRA DCM (as amended) (Metrolink 2021), the CBSC, and the City's Municipal Code, all of which include extensive construction and facility design requirements (Metrolink 2021).

Although Project construction would be temporary in nature and unlikely to directly result in substantial adverse effects within the Project study area, the potential for direct or indirect risks to life and property as a result of expansive soils, remains. Implementation of Mitigation Measure GEO-1, which requires the preparation of a final geotechnical report in support of the Project's final design, would reduce potentially significant impacts to a less than significant level.

#### OPERATION

**Less than Significant** As stated above, portions of the Project study area are underlain by expansive soils, and, as such, the potential for expansive soils and associated hazards, although moderate,

exists within the Project study area. However, the Project would be implemented in accordance with the applicable geotechnical and seismic design standards, and, upon operation, the Project would not result in any significant changes related to the risk of expansive soils in the Project study area when compared to existing conditions. Impacts would be less than significant. No mitigation is required.

*Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

## CONSTRUCTION

**Less than Significant with Mitigation.** Impacts on paleontological resources can generally be classified as direct, indirect, or cumulative. Direct adverse impacts on surface or subsurface paleontological resources are the result of destruction by breakage and crushing as the result of surface disturbing actions, including construction excavations. In areas that contain paleontologically sensitive geologic units, ground disturbance has the potential to adversely impact surface and subsurface paleontological resources of scientific importance. Without mitigation, these fossils, and the paleontological data they could provide if properly recovered and documented, could be adversely impacted (damaged or destroyed), rendering them permanently unavailable to science and society.

Indirect impacts typically include those effects that result from the continuing implementation of management decisions and resulting activities, including normal ongoing operations of facilities constructed within a given project site. They also occur as the result of the construction of new roads and trails in areas that were previously less accessible. This increases public access, and therefore, increases the likelihood of the loss of paleontological resources through vandalism and unlawful collecting. Human activities that increase erosion also cause indirect impacts on surface and subsurface fossils as the result of exposure, transport, weathering, and reburial.

Subsequent to the LACM records search review, the BLM's PFYC system (BLM 2016) was utilized to predict the paleontological sensitivity of the geologic units within the Project study area, and their likelihood to contain paleontological resources on a scale of 1 (very low potential) to 5 (very high potential).

The Holocene-age alluvial gravel, sand, and clay of valley and floodplain areas, and Holocene-age gravel and sand of major stream channels mapped within the Project study area have a low paleontological potential (PFYC 2) at the surface (e.g., upper 6 feet of the Project site). However, moderate potential (PFYC 3) middle Eocene-age Lajas Formation is mapped in a portion of the Project study area towards the eastern terminus between Simi Valley Station and Tapo Canyon Road at-grade crossing. Additionally, moderate potential (PFYC 3) sediments belonging to the Pleistocene-age older sedimentary deposits, middle Eocene-age Lajas Formation, and Paleocene-age Santa Susana Formation may underlie the Holocene-age deposits at depth (e.g., depths greater than 6 feet deep). As such, excavations within the Project study area that impact middle Eocene-age Lajas Formation at the surface (between Simi Valley Station and Tapo Canyon Road at-grade crossing), or excavations that impact, Pleistocene-age older sedimentary deposits, middle Eocene-age Lajas Formation, or Paleocene-age Santa Susana Formation at depth could encounter scientifically important paleontological resources. Surface grading or shallow excavations entirely within artificial fill or Holocene-age sediments are unlikely to uncover scientifically important fossil vertebrate remains since any recovered resources will lack stratigraphic context. However, these deposits may shallowly overlie older sedimentary deposits, and adverse impacts could occur if excavations occur where older sedimentary deposits occur at depth (i.e., buried below the surface).

Given the above, Project-related construction activities have the potential to unearth previously unrecorded paleontological resources. This is a potentially significant impact. Implementation of Mitigation Measures PAL-1 through PAL-4 would reduce potential impacts to paleontological resources to a less than significant level. Impacts would be less than significant with mitigation incorporated.

#### OPERATION

**Less than Significant Impact.** Typical operations and maintenance activities include landscaping, spraying of herbicides to reduce weeds, maintenance of drainage features and signal infrastructure, car and locomotive maintenance and repair, and train car washing. These activities would not require grading or excavation and would not take place in areas of paleontological sensitivity. As such, Project operation would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Impacts would be less than significant. No mitigation is required.

### 3.6.5 Mitigation Measures

Implementation of the following measure(s) would avoid or minimize potential significant impacts on paleontological resources.

**GEO-1 Final Geotechnical Report.** Prior to construction, the Project proponent will retain a qualified geotechnical engineer to prepare a final geotechnical report in support of the Project's final design. The final geotechnical report will implement the recommendations made in the *Simi Valley Double Track and Platform Project Preliminary Geotechnical Design Report* including, but not limited to, the following observations and testing:

- Plans and specifications review
- Over-excavation and soil removal and/or exposed excavation bottom
- Pumping or unstable subgrade
- Placement of compacted fill
- Footing excavations
- Unusual subsurface conditions encountered

**PAL-1 Paleontological Monitoring.** The Project proponent will retain a qualified paleontologist to perform full-time monitoring during excavations impacting geologic units with moderate paleontological potential (PFYC 3), either at the surface (e.g., upper 6 feet of the Project site) or at depth (e.g., present below the surface at depths greater than 6 feet deep). Paleontological monitoring will occur full-time during excavation east of Tapo Street, as shown on Figure 2-3 in Appendix G of this EIR.

Excavations determined to be entirely within previously disturbed sediments do not require monitoring.

**PAL-2 Paleontological Spot Checks.** The Project proponent will retain a qualified paleontologist to perform initial spot checks during all excavations that exceed depths of 6 feet into geologic units with low paleontological potential (PFYC 2) to determine if paleontologically sensitive sediments (PFYC 3) are present in the subsurface. If paleontologically sensitive deposits are observed, full-time monitoring should be implemented in those areas in accordance with Mitigation Measure PAL-1. Spot-checking locations are shown on Figure 2-3 in Appendix G of this EIR.

Excavations determined to be entirely within previously disturbed sediments do not require spot checks.

**PAL-3 Unanticipated Discovery of Paleontological Resources.** In the event that paleontological resources are observed, work will be halted within 20 feet of the discovery until they can be evaluated by the qualified paleontologist. If determined to be scientifically important, the paleontological resources will be recovered, prepared to the point of curation, identified, and curated at the LACM or another accredited repository along with associated field data.

**PAL-4 Paleontological Reporting.** At the completion of ground-disturbing activities, a report documenting the methods and results of paleontological monitoring will be prepared by the qualified paleontologist.

### 3.6.6 CEQA Significance Conclusions After Mitigation

With implementation of Mitigation Measures GEO-1, PAL-1 through PAL-4, and HWQ-1 the Project would have a less than significant impact on geology and soils, including paleontological resources.

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## 3.7 Greenhouse Gas Emissions

### 3.7.1 Introduction

The Greenhouse Gas Emissions section describes the environmental setting and regulatory setting for GHG emissions in the vicinity of the Project. It also describes the impacts on GHG emissions that would result from construction and operation of the Project and mitigation measures that would reduce significant impacts, where feasible. Cumulative impacts on GHG emissions, in combination with planned, approved, and reasonably foreseeable projects, are discussed in Chapter 4, Cumulative Impacts.

### 3.7.2 Environmental Setting

This section summarizes the existing environmental setting related to GHG emissions within the Project study area. Information in this section is summarized from the Air Quality/GHG Report prepared for the Project and included herein as Appendix B of this EIR.

#### Greenhouse Gases

The principal anthropogenic (human made) GHGs contributing to global warming are CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, sulfur hexafluoride, hydrofluorocarbons (HFC), and perfluorocarbons. Water vapor, the most abundant GHG, is not included in this list because its natural concentrations and fluctuations far outweigh its anthropogenic sources. The primary GHGs of concern associated with the Project are CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O, as described below.

- CO<sub>2</sub> enters the atmosphere via the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees, and wood products, and as a result of other chemical reactions (e.g., manufacture of cement). CO<sub>2</sub> is also removed from the atmosphere (or sequestered) when it is absorbed by plants as part of the biological carbon cycle.
- CH<sub>4</sub> is emitted during the production and transport of coal, natural gas, and oil. CH<sub>4</sub> emissions also result from livestock and other agricultural practices and the decay of organic waste in municipal solid waste landfills.
- N<sub>2</sub>O is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.

Methods have been set forth to describe emissions of GHGs in terms of a single gas to simplify reporting and analysis. The most accepted method to compare GHG emissions is the global warming potential (GWP) methodology defined in Intergovernmental Panel on Climate Change (IPCC) reference documents. IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of carbon dioxide equivalent (CO<sub>2</sub>e), which compares the gas in question with that of the same mass of CO<sub>2</sub> (CO<sub>2</sub> has a GWP of 1 by definition).

Table 3.7-1 lists the GWP of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O and their lifetimes in the atmosphere. The GWPs are from the IPCC's fourth assessment report, consistent with statewide GHG emissions reporting protocol (CARB 2020).

**Table 3.7-1. Global Warming Potentials and Lifetimes of Key Greenhouse Gases**

GHG	GWP (100 years)	Lifetime (years)
CO <sub>2</sub>	1	—
CH <sub>4</sub>	25	12
N <sub>2</sub> O	298	114

Source: CARB 2020

CH<sub>4</sub>=methane; CO<sub>2</sub>=carbon dioxide; GHG=greenhouse gas; GWP=global warming potential; N<sub>2</sub>O=nitrous oxide

All GWPs used for CARB’s GHG inventory, and to assess attainment of the state’s GHG reduction targets, are considered over a 100-year timeframe (as shown in Table 3.7-1). However, the CARB recognizes the importance of short-lived climate pollutants (SLCP) and reducing these emissions to achieve the state’s overall climate change goals. SLCPs have atmospheric lifetimes on the order of a few days to a few decades, and their relative climate forcing impacts, when measured in terms of how they heat the atmosphere, can be tens, hundreds, or even thousands of times greater than that of CO<sub>2</sub> (CARB 2017a). Recognizing their short-term lifespan and warming impact, SLCPs are measured in terms of CO<sub>2</sub>e using a 20-year time period. The use of GWPs with a time horizon of 20 years better captures the importance of the SLCPs and gives a better perspective on the speed at which SLCP emission controls will impact the atmosphere relative to CO<sub>2</sub> emission controls. The SLCP Reduction Strategy, which is discussed further below, addresses the three primary SLCPs—CH<sub>4</sub>, HFC gases, and anthropogenic black carbon. CH<sub>4</sub> has lifetime of 12 years and a 20-year GWP of 72. HFC gases have lifetimes of 1.4 to 52 years and a 20-year GWP of 437 to 6,350. Anthropogenic black carbon has a lifetime of a few days to weeks and a 20-year GWP of 3,200 (CARB 2017a).

### Global Climate Change

The process known as the greenhouse effect keeps the atmosphere near Earth’s surface warm enough for the successful habitation of humans and other life forms. The greenhouse effect is created by sunlight that passes through the atmosphere. Some of the sunlight striking Earth is absorbed and converted to heat, which warms the surface. The surface emits a portion of this heat as infrared radiation, some of which is re-emitted toward the surface by GHGs. Human activities that generate GHGs increase the amount of infrared radiation absorbed by the atmosphere, thus enhancing the greenhouse effect and amplifying the warming of Earth.

Increases in fossil fuel combustion and deforestation have exponentially increased concentrations of GHGs in the atmosphere since the Industrial Revolution (IPCC 2007). Rising atmospheric concentrations of GHGs in excess of natural levels result in increasing global surface temperatures—a process commonly referred to as global warming. Higher global surface temperatures, in turn, result in changes to Earth’s climate system, including increased ocean temperature and acidity, reduced sea ice, variable precipitation, and increased frequency and intensity of extreme weather events (IPCC 2018). Large-scale changes to Earth’s system are collectively referred to as climate change.

The IPCC was established by the World Meteorological Organization and United Nations Environment Programme to assess scientific, technical, and socioeconomic information relevant to the understanding of climate change, its potential impacts, and options for adaptation and mitigation. The IPCC estimates that human-induced warming reached approximately 1 degree Celsius above preindustrial levels in 2017, increasing at 0.2 degree Celsius per decade. Under the current nationally



determined contributions of mitigation from each country until 2030, global warming is expected to rise to 3 degrees Celsius by 2100, with warming to continue afterward (IPCC 2018). Large increases in global temperatures could have substantial adverse effects on the natural and human environments worldwide and in California.

### 3.7.3 Regulatory Setting

This section summarizes federal, state, and local regulations related to GHG emissions that are applicable to the Project.

#### Federal

There is currently no federal overarching law specifically related to climate change or the reduction of GHG emissions. However, the U.S. EPA issued an endangerment and cause or contribute finding, as well as issued a mandatory reporting rule and fuel economy standards (discussed below).

#### *The Endangerment Finding and the Cause or Contribute Finding*

On December 7, 2009, the U.S. EPA signed the Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the CAA. Under the Endangerment Finding, the U.S. EPA finds that the current and projected concentrations of the six key well-mixed GHGs—CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, perfluorocarbons, sulfur hexafluoride, and HFCs—in the atmosphere threaten the public health and welfare of current and future generations. Under the Cause or Contribute Finding, the U.S. EPA finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare. However, unlike some criteria pollutants and TACs, GHG emissions do not directly impact human health. Rather, elevated GHG concentrations in excess of natural levels induce large-scale climate shifts, which can expose individuals to increased public health risks. For example, increases in ambient temperature can lead to heat-related illnesses and death, whereas changes in disease vectors may lead to increased risk of infectious diseases. Climate change and air pollution are also closely coupled. O<sub>3</sub> and particulate pollution, both of which can negatively impact human health, are strongly influenced by weather and can be concentrated near Earth's surface during extreme heat events. These findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite to finalizing national CAFE Standards for light-duty vehicles in conjunction with NHTSA, as discussed below.

#### *Mandatory Greenhouse Gas Reporting Rule*

On September 22, 2009, the U.S. EPA released its final Mandatory GHG Reporting Rule. The Mandatory GHG Reporting Rule is a response to the fiscal year 2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161), which required the U.S. EPA to develop “mandatory reporting of greenhouse gasses above appropriate thresholds in all sectors of the economy...” The Mandatory GHG Reporting Rule would apply to most entities that emit 25,000 metric tons of CO<sub>2</sub>e or more per year. Starting in 2010, facility owners were required to submit an annual GHG emissions report with detailed calculations of facility GHG emissions. The reporting rule also would mandate recordkeeping and administrative requirements for the U.S. EPA to verify annual GHG emissions reports.

#### *Corporate Average Fuel Economy Standards*

Under the Energy Policy Act of 2005, as amended by the Energy Independence and Security Act, NHTSA sets fuel economy standards for passenger cars and light trucks, as well as medium and

heavy-duty vehicles. These standards are set in coordination with the U.S. EPA, which sets GHG emissions standards under the CAA.

On September 19, 2019, the U.S. EPA and NHTSA issued a final action on the One National Program Rule, which is considered Part One of the SAFE Vehicles Rule. The One National Program Rule clarified the federal preemption of state fuel economy regulation under the Energy Policy Act of 2005, revoking the previous waiver of preemption of the CCAA standards.

Part 2 of SAFE Vehicles Rule, issued on March 30, 2020, revised fuel economy standards for passenger cars and light trucks, maintaining the future year standard at 40.5 miles per gallon rather than increasing to 54.5 miles per gallon. However, Executive Order 13990, issued on January 20, 2021, instructs the Executive Director of NHTSA and the Administrator of U.S. EPA to consider suspending, revising, or rescinding the SAFE Vehicles Rule by July 2021.

#### *Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles*

On September 15, 2011, the U.S. EPA and NHTSA issued a final rule of *Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium and Heavy-Duty Engines and Vehicles* (76 Federal Register [FR] 7106). This final rule is tailored to each of three regulatory categories of heavy-duty vehicles—combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles—and applies to model years 2014 through 2018. The U.S. EPA and NHTSA signed Phase 2 of these standards on August 16, 2016, which apply to model years 2019 through 2027 medium- and heavy-duty vehicles.

#### State

California established various regulations to address GHG emissions. The most relevant of these regulations to the Project are described below.

#### *Legislative Reduction Targets*

AB 32, the Global Warming Solutions Act of 2006, requires the state to reduce GHG emissions to 1990 levels by 2020. SB 32 (2016) requires the state to reduce emissions to 40 percent below the 1990 level by 2030. The state's plan to reach these targets is presented in periodic scoping plans. CARB adopted the *2017 Climate Change Scoping Plan* in November 2017 to meet the GHG reduction requirement set forth in SB 32 (CARB 2017b). It proposes continuing the major programs of the previous scoping plan, including cap-and-trade regulation; low carbon fuel standards; more efficient cars, trucks, and freight movement; Renewables Portfolio Standard; and reducing CH<sub>4</sub> emissions from agricultural and other wastes. The current scoping plan articulates a key role for local governments, recommending they establish GHG reduction goals for both their municipal operations and the community consistent with those of the state.

#### *Executive Order Reduction Targets*

In 2005, Executive Order S-3-05 established goals to reduce California's GHG emissions to 2000 levels by 2010 (achieved), 1990 levels by 2020, and 80 percent below the 1990 levels by 2050. In 2018, Executive Order B-55-18 established a new state goal to achieve carbon neutrality as soon as possible, and no later than 2045, achieve and maintain net negative emissions thereafter. executive orders are binding on state government agencies but are not legally binding on cities and counties or on private development.

### *Scoping Plan*

The AB 32 Scoping Plan identifies specific measures to reduce GHG emissions to 1990 levels by 2020 and requires CARB and other state agencies to develop and enforce regulations and other initiatives to reduce GHG emissions. The AB 32 Scoping Plan, first adopted in 2008, comprises the state's roadmap for meeting AB 32's reduction target. Specifically, the scoping plan articulates a key role for local governments by recommending that they establish GHG emissions-reduction goals for both their municipal operations and the community that are consistent with those of the state (i.e., approximately 15 percent below current levels) (CARB 2008). The AB 32 Scoping Plan was updated in 2014 to reflect the economic downturn (CARB 2014).

The 2017 Scoping Plan Update represents the state's roadmap to achieving long-term GHG reduction targets of SB 32. The scoping plan integrates various CARB regulations and strategies, including Cap-and-Trade, Low Carbon Fuel Standard, SB 350, Sustainable Freight Action Plan, Mobile Source Strategy, and the SLCP Reduction Strategy. The Scoping Plan Update proposes meeting the 2030 goal by accelerating the focus on zero and near-zero technologies for moving freight, continued investment in renewables, greater use of low-carbon fuels including electricity and hydrogen, stronger efforts to reduce emissions of SLCPs (CH<sub>4</sub>, black carbon, and fluorinated gases), further efforts to create walkable communities with expanded mass transit and other alternatives to traveling by car, continuing the Cap-and-Trade Program, and ensuring that natural lands become carbon sinks to provide additional emissions reductions and flexibility in meeting the target. The Scoping Plan Update also recommends that local governments aim to achieve community-wide efficiency of 6 metric tons of CO<sub>2</sub>e per capita by 2030 and 2 metric tons of CO<sub>2</sub>e per capita by 2050 to be used in local climate action planning (CARB 2017b).

### *Renewables Portfolio Standard*

SBs 1078 (2002), 107 (2006) 2 (2011) and 100 (2015) govern California's Renewables Portfolio Standard under which investor-owned utilities, energy service providers, and Community Choice Aggregators must procure additional retail sales per year from eligible renewable sources. The current goals for renewable sources are 33 percent by 2020, 40 percent by 2024, 50 percent by 2026, 60 percent by 2030, and 100 percent carbon-free by 2045.

### *Vehicle Efficiency Standards*

AB 1493 (2002) (Pavley I) requires CARB to develop and implement regulations to reduce automobile and light-truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the model year 2009. Additional strengthening of the Pavley standards (referred to previously as *Pavley II* and now referred to as the Advanced Clean Cars measure) was adopted for vehicle model years 2017–2025 in 2012. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon in 2025.

### *Low Carbon Fuel Standard*

The Low Carbon Fuel Standard mandates a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In September 2018, the Low Carbon Fuel Standard regulation was amended to increase the statewide goal to a 20 percent reduction in carbon intensity of California's transportation fuels by at least by 2030.

### *Regional Land Use and Transportation Planning to Reduce Vehicle Miles Travelled*

SB 375 requires the state's 18 metropolitan planning organizations to develop the SCSs as part of their RTP through integrated land use and transportation planning and to demonstrate an ability to attain the GHG emissions reduction targets that CARB established for the region by 2020 and 2035. This would be accomplished through either the financially constrained SCS as part of the RTP or an unconstrained alternative planning strategy. A financially constrained SCS refers to an SCS with committed, available, or reasonably available revenue sources for implementation. If regions develop integrated land use, housing, and transportation plans that meet the SB 375 targets, new projects in these regions can be relieved of certain CEQA review requirements.

### *CEQA Requirements to Assess Vehicle Miles Travelled*

SB 743 (2013) requires revisions to the CEQA Guidelines that establish new impact analysis criteria for the assessment of a project's transportation impacts. The intent behind SB 743 and revising the CEQA Guidelines is to integrate and better balance the needs of congestion management, infill development, active transportation, and GHG emissions reduction. The Office of Planning and Research recommends that VMT serves as the primary analysis metric, replacing the existing criteria of delay and level of service. In 2018, OPR released a technical advisory outlining potential VMT significance thresholds for different project types.

### *Short-Lived Climate Pollutants*

SB 605 directed CARB, in coordination with other state agencies and local air districts, to develop a comprehensive SLCP Reduction Strategy. SB 1383 directed CARB to approve and implement the SLCP Reduction Strategy to achieve the following reductions in SLCPs:

- 40 percent reduction in CH<sub>4</sub> below 2013 levels by 2030
- 40 percent reduction in HFC gases below 2013 levels by 2030
- 50 percent reduction in anthropogenic black carbon below 2013 levels by 2030

The bill also establishes the following targets for reducing organic waste in landfills and CH<sub>4</sub> emissions from dairy and livestock operations:

- 50 percent reduction in organic waste disposal from the 2014 level by 2020
- 75 percent reduction in organic waste disposal from the 2014 level by 2025
- 40 percent reduction in CH<sub>4</sub> emissions from livestock manure management operations and dairy manure management operations below the dairy sector's and livestock sector's 2013 levels by 2030

CARB adopted the SLCP Reduction Strategy in March 2017 as a framework for achieving the CH<sub>4</sub>, HFC, and anthropogenic black carbon reduction targets set by SB 1383. The SLCP Reduction Strategy includes 10 measures to reduce SLCPs, which fit within a wide range of ongoing planning efforts throughout the state. CARB and the California Department of Resources Recycling and Recovery (CalRecycle) are currently developing regulations to achieve these goals.

## Local

### *Southern California Association of Governments*

SCAG is the metropolitan planning organization for Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura Counties. It is a regional planning agency and serves as a forum for regional issues relating to transportation, the economy and community development, and the environment.

On September 3, 2020, SCAG adopted the 2020–2045 RTP/SCS (SCAG 2020a). The 2020–2045 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375. The 2020–2045 RTP/SCS would successfully achieve and exceed the GHG emission-reduction targets set by CARB by achieving an 8 percent reduction by 2020 and 19 percent reduction by 2035 compared with the 2005 level on a per capita basis.

### *Simi Valley General Plan*

The City's General Plan (City of Simi Valley 2012b) includes a number of policies to reduce GHG emissions in the City by reducing fuel consumption, including reducing VMT by shifting travel from automobiles to transit or active transportation. The General Plan is further discussed in Section 3.10, Land Use and Planning, and consistency with specific policies is addressed in Table 3.10-1.

## 3.7.4 Impact Analysis

This section describes the potential for environmental impacts related to GHG emissions as a result of Project implementation. It describes the thresholds used to determine whether an impact would be significant, as well as measures to mitigate potentially significant impacts, where appropriate.

### Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to GHG emissions would be considered significant if the Project would:

- A. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or,
- B. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

### Thresholds Requiring No Further Analysis

No thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project.

### Methodology

The potential for significant impacts on GHG emissions was assessed by and quantified (where applicable) using standard and accepted software tools, techniques, and emission factors. The California Emissions Estimator Model and U.S. EPA emissions factors were used to estimate GHG emissions from construction activity, train operations, and displaced vehicle miles using the same methodology to assess criteria pollutant emissions (Appendix B of this EIR). Additional description of the methodology is provided in Section 3.2.4.

*Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

#### CONSTRUCTION

**Less than Significant Impact.** Project construction would generate direct emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O from mobile and stationary construction equipment exhaust, as well as employee haul truck vehicle exhaust. Estimated construction emissions associated with the Project are summarized in Table 3.7-2. As shown, construction of the Project would generate a total of 523 metric tons of CO<sub>2e</sub> during the 19-month construction period. VCAPCD recommends using the California Air Pollution Control Office Association (CAPCOA) guideline documents for quantifying and mitigation GHG emissions. The document *Quantifying Greenhouse Gas Mitigation Measures* (CAPCOA 2010) states that thresholds are set by the Lead Agency and since VCAPCD does not have a threshold, SCAQMD guidance was applied (SCAQMD 2008). Consistent with SCAQMD guidance, emissions are amortized over a 30-year project life and added to operational emissions below. Construction emissions are negligible relative to operational emissions and would be more than offset by emissions reductions from reduction in vehicle miles travelled. Impacts would be less than significant. No mitigation is required.

**Table 3.7-2. Construction Greenhouse Gas Emissions**

Year	CO <sub>2e</sub> (metric tons)
2023	333
2024	190
<b>Total</b>	<b>523</b>
<b>Amortized emissions over 30 years</b>	<b>17</b>

Source: Appendix B of this EIR

Notes:

CO<sub>2e</sub>=carbon dioxide equivalent

#### OPERATION

**Less than Significant Impact.** Project operation has the potential to generate long-term GHG emissions from transit operations and changes in regional traffic patterns. Transit operations would generate GHG through locomotive diesel fuel use. Changes in regional traffic would primarily affect emissions levels through changes in fuel consumption associated with the diversion of private automobile trips to passenger rail.

Estimated net operational emissions under existing and Project conditions are presented in Table 3.7-3.

**Table 3.7-3. Regional Greenhouse Gas Impact of the Project**

Source	CO <sub>2</sub> e (metric tons per year)
<b>Amortized construction</b>	<b>17</b>
<i>Annual train emissions</i>	—
Existing (2019)	9,307
Project (2024)	16,751
<b>Change in train emissions</b>	<b>7,444</b>
<i>Displaced vehicles</i>	—
Existing (2019)	-10,147
Project (2024)	-18,826
<b>Change in displaced vehicles</b>	<b>-8,679</b>
<b>Net change with Project</b>	<b>-1,218</b>

Source: Appendix B

Notes:

VCL=Ventura County Line; CO<sub>2</sub>e=carbon dioxide equivalent; VMT=vehicle miles traveled

As shown in Table 3.7-3, Project implementation would result in an increase in rail emissions in addition to emissions from construction, but this increase in rail emissions would be more than offset by emissions displaced by removing vehicle miles from the roadway network. The Project would reduce operational GHG emissions and provide a net GHG and environmental benefit to the region. Impacts would be less than significant. No mitigation is required.

*Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?*

**CONSTRUCTION**

**Less than Significant Impact.** Encouraging mode shift from automobiles to transit, walking, or cycling are key strategies in the City’s General Plan to reduce GHG emissions (City of Simi Valley 2012c, 2012b). Construction activities would result in temporary disruptions to transit and active transportation within the City (discussed in Section 3.12, Transportation and Traffic). However, implementation of Mitigation Measures TRA-1 and TRA-3 would reduce these to a less than significant level. As described above, direct construction emissions would be negligible relative to the reduction in GHG emissions as a result of Project operation. Impacts would be less than significant. No mitigation is required.

**OPERATION**

**Less than Significant Impact.** Project operation would provide new commuter rail service and offer opportunities for commuters to mode-shift from passenger vehicles to transit. The scoping plans and local climate action plans include strategies to reduce single-occupancy vehicle usage and increase

alternative transportation. These Project benefits also would support implementation of the 2020-2045 RTP-SCS, the region's SCS adopted pursuant to SB 375 (SCAG 2020a). The GHG emission reductions achieved by Project operation would facilitate attainment of state and local GHG reduction goals and would be consistent with the trajectory of statewide climate change planning, as represented by the California EO S-03-05 long-term goal of reducing statewide emissions by 80 percent below 1990 levels by 2050 and the California EO S-55-18 long-term goal of being carbon neutral by 2045.

Since the Project is identified in the 2020-2045 RTP-SCS (Project number 720001), Project emissions would not conflict with any plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Impacts would be less than significant. No mitigation is required.

### 3.7.5 CEQA Significance Conclusions

The Project would have a less than significant impact on GHG emissions. No mitigation is required.



## 3.8 Hazards and Hazardous Materials

### 3.8.1 Introduction

The Hazards and Hazardous Materials section describes the environmental setting and regulatory setting for hazards and hazardous materials in the vicinity of the Project study area and potential impacts from construction and operation of the Project. This section also provides an evaluation of hazards as they relate to wildfires, proximity to airports, and interference with adopted emergency response plans. Cumulative impacts on hazards and hazardous materials, in combination with planned, approved, and reasonably foreseeable projects, are discussed in Chapter 4, Cumulative Impacts.

### 3.8.2 Environmental Setting

Information contained and considered in this section is summarized from a combination of sources including the *Simi Valley Double Track and Platform Project Phase I Environmental Site Assessment* (Phase I ESA) (Appendix I of this EIR), the *Simi Valley Double Track and Platform Project Preliminary Geotechnical Design Report* (Appendix H of this EIR), the *Simi Valley Double Track and Platform Project Water Quality Assessment Report* (Appendix J of this EIR), the *City of Simi Valley General Plan* (City of Simi Valley 2012b), the *City of Simi Valley General Plan Environmental Impact Report* (City of Simi Valley 2012a), the *Simi Valley Multi-Hazard Mitigation Plan*, and the *Ventura County General Plan* (Ventura County 2020). This section summarizes the existing physical environment within the Project study area as a precursor to hazards and hazardous materials, lists the known hazardous materials sites and hazardous materials cleanup sites within 0.50 mile of the Project study area, and provides a brief description of other potential sources of hazardous materials or wastes within the Project study area. The environmental setting for hazards and hazardous materials also describes any schools and public use airports within 0.25 and 2 miles of the Project study area, respectively.

#### Geology and Hydrology

The City is located within the Transverse Ranges geomorphic province of California, which is characterized by east west trending ridges and valleys formed by a combination of folding and faulting during a period of compression and uplift. Locally, Simi Valley is located on an alluvial floodplain bounded by Big Mountain and the Santa Susana Mountains to the north, the Simi Hills to the south and east and unnamed hills that separate the Simi Valley from Tierra Rejada Valley and Little Simi Valley to the west.

The region receives an average of 14.5 inches of annual rainfall, with the majority of rainfall occurring between December and March. The area is mildly sloped, and surface water appears to generally drain to the west of the Project study area (Appendix J of this EIR). Historical groundwater levels within the Project study area range from 15 feet below ground surface (bgs) near the existing Simi Valley Station and proposed underpass, to greater than 50 feet bgs along the Project alignment west of the existing station (Appendix J of this EIR). Recent soil borings revealed groundwater levels of 20 to 22 feet bgs near Simi Valley Station; groundwater was not encountered at borings throughout the western portion of the Project study area (the maximum depth explored is 20 feet bgs; Appendix H of this EIR). A full summary of the Project study area's geological and hydrological setting is provided in

Section 3.6, Geology, Soils, and Seismicity, and Section 3.9, Hydrology, Flooding, and Water Quality, respectively.

Although the Project study area's geology and hydrology may exacerbate the spread of hazardous materials release into the environment, the City is predominantly developed with urban infrastructure, and, as such, the potential for the accidental release of hazardous materials into the environment as a result of human activity is the primary concern.

#### Oil Field and Wells

The Project study area is not located within any oil fields. No gas, oil, or geothermal wells were identified within the Project footprint (Appendix I of this EIR).

#### Known Hazardous Materials Release and Cleanup Sites

According to the Phase I ESA prepared for the Project, the Environmental Data Resource (EDR) database search resulted in 524 regulatory listings within a 0.50-mile buffer of the Project alignment (Appendix I of this EIR). Table 3.8-1 summarizes these sites.

**Table 3.8-1. Summary of Environmental Database Search Results within 0.50 Mile of the Project Alignment**

Database	Description	Records Listed within the EDR Buffer Zone	Potential Concern to the Project Footprint
<b><i>Federal</i></b>			
SEMS	Superfund Enterprise Management System (formerly known as the Comprehensive Environmental Response, Compensation, and Liability Information System). The list contains data on potentially hazardous waste sites that have been reported to the U.S. EPA.	2	0
SEMS-ARCHIVE	Superfund Enterprise Management System Archive (formerly known as the Comprehensive Environmental Response, Compensation, and Liability Information System-No Further Remedial Action Planned). Archived sites have been removed from the SEMS inventory.	1	0
RCRA Generators	The U.S. EPA regulates all Hazardous Waste Generators subject to the RCRA. They are classified by the quantity of hazardous waste generated. A small quantity generator generates between 100 kg and 1,000 kg of waste per month. A large quantity generator generates over 1,000 kg of waste per month. A Very small quantity generator small quantity generator generates less than 100 kg of waste per month.	24 (small quantity generator) 7 (LQG) 2 (very small quantity generator)	0 (small quantity generator) 0 (LQG) 0 (CEQQG)
RCRA-NonGen/NLR	The RCRA enacted by Congress in 1976; Amended in 1984 with the Hazardous and Solid Waste Amendments. Database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste. Nongenerators do not presently generate hazardous waste, or no-longer reported.	147	0
<b><i>State, Local, and Tribal</i></b>			
ENVIROSTOR	California DTSC Site Mitigation and Brownfields Reuse Program's EnviroStor database identifies sites that have known contamination or sites that may require further investigation. The database includes the following site types: Federal Superfund sites (NPL), State Response, including Military Facilities and State Superfund, Voluntary Cleanup, and School sites. EnviroStor provides information including, identification of formerly contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts on public health and the environment at contaminated sites.	10	0

**Table 3.8-1. Summary of Environmental Database Search Results within 0.50 Mile of the Project Alignment**

Database	Description	Records Listed within the EDR Buffer Zone	Potential Concern to the Project Footprint
CA SWF/LF	The solid waste facilities/landfill sites come from the Integrated Waste Management Board's Solid Waste Information System that contains inventory of solid waste disposal facilities and landfills	1	0
CA LUST	LUST Incident Report – SWRCB LUST records contain an inventory of reported LUST incidents.	58	0
CA CPS-SLIC	The spills, leaks, investigations, and cleanup program is designated to protect and restore water quality from spills, leaks and similar discharges. Statewide spills, leaks, investigations, and cleanup cases are maintained by the SWRCB.	6	0
CA UST	UST as regulated under Subtitle I of the RCRA, data source from the SWRCB Hazardous Substance Storage Container Database.	16	0
CA AST	AST - SWRCB provides listing of ASTs Waste Management Unit Database System – SWRCB maintains a list of waste management systems, including active and inactive, permitted and nonpermitted solid waste disposal facilities, transfer stations and waste haulers.	8	0
CA VCP	Contains low threat level properties with either confirmed or unconfirmed releases and the proposed action proponents have request that California DTSC oversee investigation and/or cleanup activities.	2	0
CA SWRCY	A listing of solid waste recycling facilities in the state of California, provided by the Department of Conservation.	3	0
CA CERS HAZ WASTE	List of California EPA regulated sites for hazardous chemical management, hazardous waste on-site treatment, household hazardous waste collection, and hazardous waste generator programs	60	0
SWEEPS UST	Statewide Environmental Evaluation and Planning System. This UST listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.	10	0

**Table 3.8-1. Summary of Environmental Database Search Results within 0.50 Mile of the Project Alignment**

Database	Description	Records Listed within the EDR Buffer Zone	Potential Concern to the Project Footprint
HIST UST	The Hazardous Substance Storage Container Database is a historical listing of UST sites previously maintained by SWRCB. Current data can be found in the State or local UST database.	13	0
FID UST	The Facility Inventory Database contains active and inactive UST locations.	7	0
CA CERS TANKS	California Environmental Reporting System Tanks – the California EPA AST and UST program	11	0
FINDS	The Facility Index Database System is an U.S. EPA/National Technical Information Service database that contains both facility information and “pointers” to other sources of information that contain more detail.	2	0
ECHO	Enforcement and Compliance History Information provides integrated compliance and enforcement information for approximately 800,000 facilities nationwide.	1	0
CA CORTESE	Cortese hazardous waste and substances sites list designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LF), and California DTSC (Cal-Sites)	35	0
CA DRYCLEANERS	A list of drycleaner related facilities that have U.S. EPA identification numbers	3	0
CA HAZNET	Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by California DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments.	3	0
CA HIST CORTESE	Cortese Hazardous Waste & Substances Sites – The California EPA Office of Emergency Information previously maintained a list of sites designated as LUST, solid waste facilities/landfill or Cal-Sites. The list is no longer updated, and cases are maintained by the SWRCB, Integrated Waste Management Board and California DTSC.	26	0
CA NPDES	Listing of all NPDES permits including stormwater.	1	0
CA CIWQS	California Integrated Water Quality System to track environmental permits and violations	1	0

**Table 3.8-1. Summary of Environmental Database Search Results within 0.50 Mile of the Project Alignment**

Database	Description	Records Listed within the EDR Buffer Zone	Potential Concern to the Project Footprint
CA CERS	California EPA regulated site portal database that combines data from a variety of state and federal sources	9	0
CA HWTS	Hazardous Waste Tracking System	5	0
VENTURA CO. BWT	The Business Plan, Hazardous Waste Producers, and Operating Underground Tanks Site Address List indicates by site address whether Environmental Health Division has a Business Plan, Waste Producer, and/or Underground Tank information	34	0
<b>EDR Proprietary Records</b>			
EDR US Hist Auto	Historical Auto Stations – Gas stations/filling stations/service station establishments.	16	0
EDR US Hist Cleaners	Historical Cleaners – Dry cleaners, cleaners, laundry, Laundromat, cleaning/laundry, wash and dry establishments.	6	0
CA RGA LUST	This database provides a list of LUST incidents derived from historical databases and includes records that no longer appear in current government’s lists.	2	0
Total Regulatory Listings		524	0

Source: Appendix I of this EIR

Notes:

AST=aboveground storage tank; DTSC=Department of Toxic Substances Control; EDR=Environmental Data Resources; EPA=Environmental Protection Agency; LUST=leaking underground storage tank; NPDES=National Pollutant Discharge Elimination System; NPL=National Priorities List; RCRA=Resource Conservation and Recovery Act; SWRCB=State Water Resources Control Board; U.S.=United States; UST=underground storage tank

## Other Potential Sources of Hazardous Materials

Some environmental conditions typical of railroad ROW that are not necessarily representative of a point-source release to the environment were identified during the Phase I ESA and include:

- **Aerially deposited lead impacts on shallow soil.** Aerially deposited lead is typically found in shallow soil located adjacent to a major roadway that has existed since the decades when leaded gasoline was in widespread use. Much of the Project footprint is located adjacent to East Los Angeles Avenue, a major road that matches this description (Appendix I of this EIR).
- **Lubricating oil or hydraulic oil from locomotives dripping onto ballast.** Lubricating and hydraulic oils typically impact the crushed rock base that makes up the ballast directly beneath the tracks. The tracks that traverse the Project footprint are not used for locomotive storage or maintenance; however, field reconnaissance conducted under the Phase I ESA identified some ballast exhibited staining (Appendix I of this EIR). However, no significant staining or indications of major releases were present.
- **Wooden ties treated with creosote or other wood preservative chemicals.** Wooden railroad ties, historically treated with creosote, pentachlorophenol, or other wood preservative chemicals to prevent rot and insect infestation, require disposal as treated wood waste after removal. The chemicals also have the potential to impact soil directly in contact with the ties by slowly leaching over decades. While the ballast directly in contact with the ties is not likely to be significantly contaminated, the wooden ties themselves within the Project footprint would likely require special handling and disposal (Appendix I of this EIR).
- **Herbicide/pesticide use prior to the development of modern organic herbicides and pesticides.** Prior to the 1950s, herbicides and pesticides were generally composed of toxic metals, such as lead and arsenic. While modern herbicides and pesticides tend to be either water soluble or short lived in the environment, heavy metal compounds persist and have been adsorbed into soil. Because the railroad tracks have existed within the Project footprint since at least 1903, shallow soil may still be impacted by lead and arsenic (Appendix I of this EIR).

## Schools

There are four schools within a 0.50 mile of the Project study area, including Apollo High School (0.32 mile southwest of the Project's western terminus at Sequoia Avenue); Garden Grove Elementary School (0.30 mile northwest of the Tapo Canyon Road at-grade crossing); Santa Susana Elementary School (0.50 mile northwest of Tapo Street at-grade crossing); and, Katherine Elementary School (0.30 mile southeast of the Project's eastern terminus). None of these schools are within 0.25 mile of the Project.

## Airports

The closest airport to the Project study area is Van Nuys Airport, which is located approximately 20 roadway miles southeast of the Project's eastern terminus. The Project study area is not located in an airport land use compatible zone.

## Fire Hazard Severity Zones

PRC Sections 4201 and 4204, and Government Code 51175 89 directed the California Department of Forestry and Fire Protection (CALFire) to map areas of significant fire hazards within the State based on variables including fuels, terrain, weather, and other relevant factors. These zones are referred to

as fire hazard severity zones and represented as very high, high and moderate. The maps are divided into local responsibility areas and state responsibility areas; the Project study area is within a local responsibility area (CALFire 2010). As further described in Section 3.15, Wildfire, of this EIR, portions of the Project study area between Tapo Street and Stearns Street are mapped as within a Very High Fire Hazard Severity Zone (VHFHSZ). Section 3.15, Wildfire, provides additional details and related mapping.

### 3.8.3 Regulatory Setting

This section summarizes federal, state, and local regulations related to hazards and hazardous materials that are applicable to the Project.

#### Federal

##### *The Comprehensive Environmental Response, Compensation, and Liability Act*

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites; provides for liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party can be identified. CERCLA generally authorizes two kinds of cleanup response: short-term removals, where immediate (i.e., emergency) cleanup action is warranted, and long-term remedial response, where threats of release or the release of hazardous materials require remediation but are not an immediate threat to human health.

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants.

CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986, and is further described below.

#### **NATIONAL CONTINGENCY PLAN**

The NCP is the federal plan for responding to oil spills and hazardous substances releases. The NCP establishes the National Response Team and its roles in the National Response System, which include planning and coordinating response to major discharges of oil or hazardous waste, providing guidance to Regional Response Teams, coordinating a national program of preparedness planning and response, and facilitating research to improve response activities. The U.S. EPA has pending revisions to the NCP in order to align with the National Response Framework. These revisions have not been approved to date.

#### **SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT**

CERCLA enlarged and reauthorized the SARA (Public Law 99 499). Under SARA, the U.S. EPA is required to compile a National Priorities List (NPL) of the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the U.S. and its territories. SARA also required the U.S. EPA to incorporate revisions to the existing Hazard Ranking System to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites that may be placed on the NPL.



### *Oil Pollution and Prevention Regulation*

The U.S. EPA's oil spill prevention program includes the Spill Prevention, Control, and Countermeasure (SPCC) and the Facility Response Plan rules. The SPCC rule helps facilities prevent a discharge of oil into navigable waters or adjoining shorelines. The Facility Response Plan rule requires certain facilities to submit a response plan and prepare to respond to a worst-case oil discharge.

### *Resource Conservation and Recovery Act*

Under the Resource Conservation and Recovery Act (RCRA), the U.S. EPA has the authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste by large quantity generators (1,000 kilograms/month or more). Under the RCRA regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. Additionally, all hazardous waste transporters are required to be permitted and must have an identification number. In California, the U.S. EPA has delegated RCRA enforcement to the California Environmental Protection Agency's (CalEPA) Department of Toxic Substances Control (DTSC).

### *Toxic Substances Control Act*

The Toxic Substances Control Act (TSCA) of 1976 provides U.S. EPA with authority to require reporting, record keeping, and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. TSCA addresses the production, import, use, and disposal of specific chemicals including polychlorinated biphenyls, asbestos, radon, and lead-based paint (LBP). The Frank R. Lautenberg Chemical Safety for the 21st Century Act was implemented on June 22, 2016 as an update to the TSCA.

### *Right to Know Laws and Pollution Prevention Requirements*

Executive Order 12856 was issued on August 3, 1993, directing federal agencies to conduct their facility management and acquisition activities to minimize the quantity of toxic chemicals entering any waste stream, including releases to the environment; report to the public on toxic chemicals entering any waste stream from their facilities, including releases to the environment; improve local emergency planning, response, and accident notification; and encourage markets for clean technologies and safe alternatives to extremely hazardous substances or toxic chemicals.

### *Hazardous Materials Transport*

The United States Department of Transportation (USDOT), along with the California Highway Patrol (CHP) and Caltrans, regulates transportation of hazardous materials between states. Together, these agencies determine the appropriate container types that should be used and license hazardous waste haulers for transportation of hazardous waste on public roads. FRA enforces the Hazardous Materials Regulations, which include requirements that railroads and other transporters of hazardous materials, as well as shippers, have and adhere to security plans and also train their employees involved in offering, accepting, or transporting hazardous materials on both safety and security matters.

### *Occupational Safety and Health Act of 1970*

The Occupational Safety and Health Act, which is implemented by OSHA, contains requirements, as set forth in Title 29 of the CFR Section 1910, that are designed to promote worker safety, worker

training, and a worker's right to know. OSHA requirements would be in effect during construction and operation of the Project to ensure the safety of workers. Title 49, Section 172 et. sec. of the CFR requires that every individual or bulk carrier who transports hazardous materials adhere to minimum safety requirements pertaining to the transport of hazardous materials, including: training to recognize and identify hazardous materials and become familiar with hazardous materials requirements, the preparation and implementation of safety and security plans, and marking and labeling hazardous materials sufficiently for safe transport and handling.

## State

### *California Environmental Protection Agency*

CalEPA and SWRCB establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable state and local laws include the following:

- Aboveground Petroleum Storage Tank Act
- Asbestos Containing Material Regulations
- California Accidental Release Prevention Program
- Emergency Response to Hazardous Materials Incidents
- Hazardous Substances Information and Training Act
- Hazardous Waste Control Law
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs (i.e., Tiered Permitting)
- Public Safety/Fire Regulations/Building Codes
- Safe Drinking Water and Toxic Enforcement Act
- TSCA
- Underground Storage of Hazardous Substances Act

Within CalEPA, the DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law.

### *Hazardous Materials Release Response Plans and Inventory Act (Business Plan Act)*

The Business Plan Act requires businesses using hazardous materials to prepare a hazardous materials release response plan (HMBP) that describes their facilities, inventories, emergency response plans, and training programs. A HMBP includes an inventory of hazardous materials handled, facility floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). Per the requirements of this act, the preparation of a HMBP would be required for the safe storage, containment, and disposal of chemicals and hazardous materials related to Project operations, including waste materials.

### *Railroad Safety*

CPUC is the state agency that oversees rail safety in California. CPUC regulates privately owned railroad, railroad transit, and passenger transportation companies via the Safety and Enforcement Division, which is responsible for the inspection, surveillance, and investigation of the railroad ROW, facilities, equipment, and operations of railroads and public mass transit guideways, and for enforcing state and federal laws, regulations, orders, and directives relating to transportation of persons or commodities, or both, of any nature or description by rail. The Safety and Enforcement Division is legislated by Section 309.7 of the California Public Utilities Code.

All rail transit agencies are required to submit an initial System Safety Program Plan to CPUC for approval.

### Local

#### *City of Simi Valley General Plan*

The General Plan (City of Simi Valley 2012b) includes goals and objectives related to hazards mitigation, emergency response, and disaster recovery and implementation to carry out these policies. Table 3.10-1 includes applicable General Plan goals and policies pertaining to hazards and hazardous materials.

#### *Simi Valley Municipal Code*

The Simi Valley Municipal Code, Title 6, Chapter 10, Section 6-10.01 et seq. defines liability for unauthorized hazardous waste disposal releases and outlines the City's approach to corrective action against liable parties responsible for the unauthorized release of hazardous waste into the environment.

#### *Ventura County General Plan*

The *Ventura County General Plan* (Ventura County 2020) includes goals and objectives designed to protect human life, minimize property damage, and maintain and restore services during disasters and emergencies in Ventura County (Ventura County 2020). Table 3.10-1 includes applicable *Ventura County General Plan* goals and policies pertaining to hazards and hazardous materials.

## 3.8.4 Impact Analysis

This section describes the potential for environmental impacts related to hazards and hazardous materials as a result of Project implementation. It describes the thresholds used to determine whether an impact would be significant, as well as measures to mitigate potentially significant impacts, where appropriate.

### Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to hazards and hazardous materials would be considered significant if the Project would:

- A. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

- B. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- C. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school;
- D. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- E. For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area;
- F. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or,
- G. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

### Thresholds Requiring No Further Analysis

The following thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project:

- C. The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school. There are no existing or planned schools within 0.25 mile of the Project footprint. No impact would occur, and no further analysis or discussion is warranted.
- E. The Project is not located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport. The nearest airport is approximately 20 miles from the Project study area. No new habitable structures are proposed as part of the Project. In this context, the Project would not result in a safety hazards from aircraft. operations No impact would occur, and no further analysis or discussion is warranted.

### Methodology

The potential for significant impacts as a result of hazards and hazardous materials is summarized from the Phase I ESA (Appendix I of this EIR), which relies on the following methodology:

- Review of reasonably ascertainable regulatory information published by federal, state, local, tribal, health, and environmental agencies pertaining to the Project study area.
- Review of historical data sources for the Project study area, including aerial photographs, topographic maps, fire insurance maps, other readily available development data, environmental liens, and previous environmental investigations, if provided.
- Area reconnaissance and an environmental review of the Project study area and adjoining properties with a focus on indications of hazardous substances, petroleum products, polychlorinated biphenyls, wells, storage tanks, solid waste disposal pits and sumps, and utilities.

The potential for hazards and hazardous materials impacts on schools and airports in proximity to the Project study area was assessed through a desktop review of such facilities.

The potential for the Project to expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires was analyzed using publicly available mapping, reports, and information for the Project study area (see Section 3.15, Wildfires).

## Impact Analysis

*Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

### CONSTRUCTION

**Less than Significant with Mitigation.** During Project construction, the routine handling, use, transportation, and disposal of hazardous substances would occur and may pose a significant hazard to the public or the environment if not properly managed. Hazardous materials used during construction would include commercially available hazardous materials such as lubricants (grease and oils), petroleum fuels, cleaning solvents, and paints—all of which are commonly used in urban construction projects.

The handling, use, transport, and disposal of such materials would be subject to federal, state, and local health and safety requirements. Construction workers who may handle hazardous materials and substances would be required to adhere to OSHA and Cal/OSHA health and safety regulations, which provide oversight for the implementation of procedures for handling, using, and disposing of hazardous substances on a construction site. Additionally, hazardous materials used during Project construction would be transported, stored, and disposed of in accordance with local, state, and federal regulations including the RCRA and Business Plan Act.

The Project would be subject to SCRRA's DCM (as amended) and the SWRCB's NPDES Construction General Permit, which include Project-specific BMPs. BMPs, including stockpiling, site inspections, and workforce training are designed to facilitate the safe storage, transport, and disposal of hazardous materials and wastes generated onsite during construction of the Project. In addition, a SWPPP, per Mitigation Measure HWQ-1, would be required for Project construction to prevent the runoff of polluted stormwater into the existing public stormwater collection system and waterways (Section 3.9, Hydrology, Flooding, and Water Quality).

Compliance with existing regulations governing the safe transportation, handling, use, and disposal of hazardous materials and wastes is mandatory. Implementation of Mitigation Measure HAZ-1, which requires the preparation of a Hazardous Materials Management Plan (HMMP), would further ensure that potential impacts associated with the routine transport, use, or disposal of hazardous materials during Project construction are reduced to a less than significant level. Impacts would be less than significant with mitigation incorporated.

### OPERATION

**Less than Significant Impact.** Under existing conditions, the railroad is utilized by both passenger and freight rail service. While passenger rail service, operated by Metrolink and Amtrak Pacific Surfliner, would involve the routine use of some hazardous materials such as fuels, lubricants, and solvents to power and maintain the locomotives, the use of these materials would not represent unusually hazardous conditions and any hazardous substances utilized during passenger rail

operation would be handled, transported, and disposed of in accordance with federal, state, and local regulations.

Freight rail service, operated by UPRR, also utilizes the existing railroad. Hazardous materials routinely transported by UPRR may include bulk fuels and petroleum products, fertilizers, and other harmful and potentially flammable chemicals. The routine transport, use, and disposal of these hazardous materials is heavily regulated and, as such, continued operation of freight rail service through the Project study area would not represent a significant hazard to people or the environment when compared to existing conditions. Pursuant to federal and state regulations, including 49 CFR, Subchapter C, Section 171 et. sec., UPRR implements numerous safety regulations pertaining to chemical transportation safety. Additionally, the Project is a rail infrastructure improvements project that would add a second mainline track and implement at-grade crossing improvements—all of which would improve the safety and reliability of the VCL, including the safety and reliability of routine hazardous materials transport through the Project study area.

Given the above, the Project would not result in any significant changes in regards to the transportation of hazardous materials when compared to existing conditions. Rather, the Project would provide improved safety, reliability, and capacity within the VCL rail corridor. As such, the Project is not anticipated to result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during operation. Impacts would be less than significant. No mitigation is required.

*Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** The Project includes the addition of a station platform, second track, and at-grade railroad crossing improvements to an operating segment of railroad. As stated in Section 3.8.2, field reconnaissance of the Project study area identified the following potential sources of hazardous materials:

- Aerially deposited lead impacts on shallow soil.
- Lubricating oil or hydraulic oil from locomotives dripping onto ballast.
- Wooden ties treated with creosote or other wood preservative chemicals.
- Herbicide/pesticide use prior to the development of modern organic herbicides and pesticides.

According to the Phase I ESA, during Project construction, grading and excavation activities may result in the disturbance of hazardous materials in soil, ballast, and other railroad structures, and, although unlikely, could result in the release of hazardous materials into the environment. This constitutes a potentially significant impact. However, implementation of Mitigation Measures HAZ-2, which requires that construction is halted if significantly stained soil is encountered during subsurface excavation, and Mitigation Measure HAZ-3, which requires the preparation and implementation of a soils management plan and a health a safety plan, would reduce potentially significant impacts to a less than significant level during Project construction.

The EDR database search resulted in 524 regulatory listings (Table 3.8-1) within the EDR 0.50-mile buffer zone; however, no regulatory listings were noted in the EDR report as of potential concern to

the Project footprint (Appendix I of this EIR). The Project study area is not located within any oil fields. No gas, oil, or geothermal wells were identified within the Project study area (Appendix I of this EIR).

During construction, the Project would involve the handling, use, transportation, storage, and disposal of hazardous substances, all of which have the potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions. Additionally, the Project study area is located within several flood hazard areas and, in the unlikely event of Project inundation during construction, hazardous materials could be released into the environment. This is a potentially significant impact. However, implementation of Mitigation Measures HWQ-1 and HAZ-1 through HAZ-3 would reduce impacts to a less than significant level. As such, impacts would be less than significant with mitigation incorporated.

#### OPERATION

**Less than Significant Impact.** As stated above, passenger rail operations would not represent unusually hazardous conditions and any hazardous substances utilized during passenger rail operation would be handled, transported, and disposed of in accordance with federal, state, and local regulations.

Conversely, freight rail service, operated by UPRR, also utilizes the existing railroad. Hazardous materials routinely transported by UPRR may include bulk fuels and petroleum products, fertilizers, and other harmful and potentially flammable chemicals. However, the transport, use, storage, and disposal of these hazardous materials is heavily regulated and, as such, continued operation of freight rail service through the Project study area would not represent a significant hazard to people or the environment when compared to existing conditions. Pursuant to federal and state regulations, including 49 CFR, Subchapter C, Section 171 et. sec., UPRR implements numerous safety regulations pertaining to chemical transportation safety. Additionally, the Project is a rail infrastructure improvements project that would add a second mainline track and implement at-grade crossing improvements—all of which would improve the safety and reliability of the VCL, including the safety and reliability of routine hazardous materials transport through the Project study area.

Given the above, the Project would not result in any significant changes in regard to the transportation of hazardous materials when compared to existing conditions. Rather, the Project would provide improved safety, reliability, and capacity within the VCL rail corridor. As such, the Project is not anticipated to result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during operation. Impacts would be less than significant. No mitigation is required

*Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** As shown in Table 3.8-1, the EDR database search recorded 524 regulatory listings within the 0.50-mile buffer zone. However, no regulatory listings were noted in the EDR report as representing a potential concern to the Project footprint (Appendix I of this EIR).

Notwithstanding, there is a potential for construction to encounter subsurface contaminants. During Project construction, grading and excavation activities may result in the disturbance of hazardous materials in soil, ballast, and other railroad structures, and, although unlikely, could result in the release of hazardous materials into the Project study area. This constitutes a potentially significant impact.

However, implementation of Mitigation Measures HAZ-2, which requires that construction is halted if significantly stained soil is encountered during subsurface excavation, and Mitigation Measure HAZ-3, which requires the preparation and implementation of a soils management plan and a health and safety plan, would reduce potentially significant impacts to a less than significant level during Project construction. Impacts would be less than significant with mitigation incorporated.

#### OPERATION

**Less than Significant Impact.** As stated above, although the EDR database search recorded 524 regulatory listings within the 0.50-mile buffer zone, no regulatory listings were noted in the EDR report as representing a potential concern to the Project footprint (Appendix I of this EIR). Upon operation of the Project, passenger rail service would not result in any significant changes when compared to existing conditions.

Although freight rail service utilizes the existing railroad, the transport, use, storage, and disposal of these hazardous materials is heavily regulated and, as such, continued operation of freight rail service through the Project study area would not represent a significant hazard to people or the environment when compared to existing conditions. Moreover, the Project's proximity to hazardous materials regulatory listings would not result in, or exacerbate the potential for, significant hazards to people or the environment through continued transportation of hazardous materials through the Project study area via freight rail. Additionally, the Project is a rail infrastructure improvements project that would add a second mainline track and implement at-grade crossing improvements—all of which would improve the safety and reliability of the VCL, including the safety and reliability of routine hazardous materials transport through the Project study area.

Upon operation, the Project would not include any activities that could result in significant risk to the public or the environment due to proximity to hazardous materials and hazardous waste cleanup sites compiled pursuant to Government Code Section 65962.5. Impacts would be less than significant. No mitigation is required.

*Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** The City has adopted the *SEMS Multi-Hazard Functional Plan* to manage emergency response operations within the City's jurisdiction (City of Simi Valley 2001). The *SEMS Multi-Hazard Functional Plan* addresses the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies (City of Simi Valley 2001). Emergency evacuation routes are identified along portion of East Los Angeles Avenue, Royal Drive, Sycamore Avenue, State Route 118, and Kuehrer Drive (Ventura County Star 2019).

During Project construction, the increased movement of construction vehicles and equipment through the area may result in temporary impacts on surrounding roadways and associated delays in emergency service providers' response times. These impacts would be minor and temporary in nature and, as such, are not anticipated to result in significant impacts including the impairment or interference with the City's *SEMS Multi-Hazard Functional Plan*. However, on a localized basis, delays in emergency response could result if construction detours and/or temporary closures are not properly coordinated. Implementation of Mitigation Measure TRA-1 would address this concern and would require that a Traffic Management Plan be prepared to maintain designated emergency evacuation



routes (by continuing to operate at an acceptable level during Project construction) (Section 3.12, Transportation and Traffic). With the implementation of Mitigation Measure TRA-1, Project construction would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and the corresponding impact would be reduced to a less than significant level.

#### OPERATION

**Less than Significant with Mitigation.** Upon operation, Metrolink service within the Project area would increase from 33 trains per weekday up to 48 revenue trains per weekday on Metrolink VCL. As described and evaluated further in Section 3.12, Transportation and Traffic, with the inclusion of the proposed SSMs as described in Chapter 2, Project Description, and with the implementation of the traffic management plan outlined in Mitigation Measure TRA-1, the Project would not adversely impact local roadway operations. Impacts would be less than significant with mitigation incorporated.

*Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** A portion of the Project study area between Tapo Street and Stearns Street is within a VHFHSZ and is within a local responsibility area (CALFire 2010). Although Project construction would not include any activities that are typically associated with increased fire hazard risk, Project construction within a VHFHSZ, although unlikely, could indirectly expose construction workers to an increased risk of loss, injury, or death involving wildland fires. This is a potentially significant impact. Implementation of Mitigation Measure WLD-1 would require that appropriate fire suppression equipment and associated equipment training is provided for construction activities within the VHFHSZ (Section 3.15, Wildfire). Impacts would be less than significant with mitigation incorporated.

#### OPERATION

**Less than Significant Impact.** The Project does not include the construction of habitable structures. Upon operation, the Project would not result in significant changes within the existing railroad corridor when compared to existing conditions. Existing vegetation maintenance and clearing with SCRRA's ROW would continue. In this context, the Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Impacts would be less than significant. No mitigation is required.

### 3.8.5 Mitigation Measures

The following mitigation is proposed to reduce the Project's potential to avoid or minimize potentially significant impacts related to hazards and hazardous materials within the Project study area. Mitigation Measures HWQ-1, TRA-1, and WLD-1 are proposed to minimize one or more effects related to hazards and hazardous materials and further described in Sections 3.9, 3.12 and 3.15, respectively.

**HAZ-1** **HMMP.** Prior to construction, an HMMP will be prepared by the Project proponent that outlines provisions for safe storage, containment, and disposal of chemicals and hazardous materials, contaminated soils, and contaminated groundwater used or exposed during construction, including the proper locations for disposal. The HMMP will be prepared to address the area of the Project footprint, and include, but not be limited to, the following:

- A description of hazardous materials and hazardous wastes used (29 CFR 1910.1200)
- A description of handling, transport, treatment, and disposal procedures, as relevant for each hazardous material or hazardous waste (29 CFR 1910.120)
- Preparedness, prevention, contingency, and emergency procedures, including emergency contact information (29 CFR 1910.38)
- A description of personnel training including, but not limited to: (1) recognition of existing or potential hazards resulting from accidental spills or other releases; (2) implementation of evacuation, notification, and other emergency response procedures; (3) management, awareness, and handling of hazardous materials and hazardous wastes, as required by their level of responsibility (29 CFR 1910)
- Instructions on keeping Safety Data Sheets on site for each on site hazardous chemical (29 CFR 1910.1200)
- Identification of the locations of hazardous material storage areas, including temporary storage areas, which will be equipped with secondary containment sufficient in size to contain the volume of the largest container or tank (29 CFR 1910.120)

**HAZ-2** **Unanticipated encounters with contaminated soils.** The construction contractor will immediately stop subsurface activities in the event that previously unidentified significantly stained soil is found during construction. The construction contractor will follow the guidelines outlined in the Project-specific soil management plan and applicable regulations regarding discovery, response, and disposal for hazardous materials or stained soil encountered during the construction process.

**HAZ-3** **Soil management plan.** The construction contractor will ensure that a Soil Management Plan will be prepared and implemented by a qualified geologist prior to approval of the Project's grading permit. The Soil Management Plan will summarize soil profiling procedures (prior to construction/soil excavation), provide guidance for managing any soil excavated from the Project study area, and request site closure contingent upon completion of soil excavation and off-site disposal. The Soil Management Plan will outline a health and safety plan and all work involving potentially impacted soils will be conducted in accordance with the site-specific health and safety plan.

### 3.8.6 CEQA Significance Conclusions After Mitigation

With implementation of Mitigation Measure HAZ-1 through HAZ-3, HWQ-1, TRA-1, and WLD-1, the Project would have a less than significant impact related to hazards and hazardous materials.

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## 3.9 Hydrology, Flooding, and Water Quality

### 3.9.1 Introduction

The Hydrology, Flooding and Water Quality section describes the regulatory and environmental setting for hydrology and water quality in the Project study area, analyzes impacts on hydrology, flooding, and water quality that would result from implementation of the Project, and provides mitigation measures, if applicable, to reduce the effects of any potentially significant impacts. Cumulative impacts on hydrology, flooding, and water quality, in combination with planned, approved, and reasonably foreseeable projects, are discussed in Chapter 4, Cumulative Impacts.

### 3.9.2 Environmental Setting

This section provides a discussion of the existing conditions related to hydrology, flooding, and water quality within the Project study area. The information provided in this section is predominantly summarized from the *Simi Valley Double Track and Platform Project Water Quality Assessment Report (WQAR)* (Appendix J of this EIR), the *Simi Valley Double Track and Platform Project Preliminary Geotechnical Design Report* (Appendix H of this EIR), and the *Simi Valley Double Track and Platform Project Preliminary Drainage Report* (Appendix K of this EIR).

#### Climate, Precipitation, and Topography

The City is situated within the eastern portion of the Calleguas Creek watershed, which extends from the Santa Susana Mountains to the Pacific Ocean. It is a temperate region with temperatures typically ranging between 50- and 70-degrees Fahrenheit in winter and summer, respectively (Appendix J). The region receives an average of 14.5 inches of annual rainfall, with the majority of rainfall occurring between December and March (Appendix J).

The Project study area traverses the southern edge of Simi Valley, a large, east-trending alluvial plain that lies north and parallel to the Arroyo Simi drainage. The Project study area and surrounding area is a low-lying area surrounded by mountainous topography. The existing ground surface elevation in the Project study area ranges from approximately 945 to 988 feet North American Vertical Datum 88 (NAVD 88)<sup>1</sup>. The area is mildly sloped, and surface water appears to generally drain to the west of the Project study area (Appendix J).

#### Hydrology

##### *Surface Water Hydrology*

The Project study area is located within the 33,162-acre (or 51.8 square miles) Upper Simi Arroyo sub-watershed (Hydrologic Unit Code 180701030101), which is within the Calleguas Creek watershed, (Hydrologic Unit Code 1807010301), a 198,394-acre (310 square miles) area that ultimately drains to the Pacific Ocean at Mugu Lagoon. The Project study area primarily drains to Arroyo Simi (Calleguas Creek, Reach 7), with partial drainage to Tapo Canyon Creek (Calleguas

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<sup>1</sup> North American Vertical Datum of 1988 (NAVD 88) consists of a vertical leveling reference system on the North American Continent, affixed to a single origin point on the continent. In 1993 NAVD 88 was affirmed as the official vertical datum in the National Spatial Reference System for the Conterminous United States (U.S.) and Alaska (National Geodetic Survey 2012).

Creek, Reach 8). Tapo Canyon Creek confluences with Arroyo Simi upstream of Sycamore Drive and marks the downstream boundary of the Upper Simi Arroyo sub-watershed.

Analysis of the existing drainage and floodplain conditions for the Project study area indicate that existing grades direct flow westward away from the tracks and into the surrounding areas (Appendix J). Existing drainage ditches are limited to a trackside ditch on the south side of the track near the existing station, trackside ditches on both sides of the track at Hidden Ranch Drive, and a small concrete ditch at the western limit of the Project study area. There are no underdrains within the Project study area (Appendix J).

Generally, water flows in a westward direction adjacent to the tracks. Drainage north of the existing track is periodically intercepted by culverts that direct flow south of the track and toward the storm drain system and Arroyo Simi. Along most of the Project alignment, the area south of the existing track drains southward to East Los Angeles Avenue and the storm drain system at various inlets. Between the East Los Angeles Avenue crossing and MP 438.01, the track parallels Arroyo Simi and the area south of the track drains to open area and ultimately to Arroyo Simi. The storm drain system within the Project study area is maintained by the City and includes a collection of subterranean pipes and channels that drain to Arroyo Simi. According to the preliminary drainage analysis and design plans provided in the Drainage Report (Appendix K), multiple existing drainage structures intersect the existing track, including those summarized in Table 3.9-1.

**Table 3.9-1. Existing Drainage Structures**

Existing Drainage Structure	MP Location
120-inch by 24-inch rectangular concrete channel	MP 436.08 to MP 436.10
2-inch by 16-inch corrugated metal pipe storm drain	MP 436.28
18-inch corrugated metal pipe storm drain	MP 436.42
25-inch by 16-inch corrugated metal pipe storm drain	MP 436.46
25-inch by 16-inch corrugated metal pipe storm drain	MP 436.50
2-inch by 36-inch corrugated metal pipe culvert	MP 436.53
30-inch reinforced concrete pipe	MP 436.85
108-inch by 66-inch reinforced concrete box storm drain	MP 436.85 and MP 436.88
240-inch by 36-inch concrete channel	MP 436.91 and MP 436.92
6-foot right culvert	MP 436.92
23-inch concrete v-ditch	MP 436.92 to MP 436.91
54-inch reinforced concrete pipe storm drain	MP 436.96 and MP 436.95
66-inch reinforced concrete box storm drain	MP 436.98
48-inch reinforced concrete pipe	MP 437.31
60-inch reinforced concrete pipe storm drain	MP 437.33

**Table 3.9-1. Existing Drainage Structures**

Existing Drainage Structure	MP Location
6-foot by 13-foot reinforced concrete box culvert	MP 437.76
10-foot by 7-foot reinforced concrete box storm drain	MP 437.85 to MP 437.82
24-inch reinforced concrete pipe storm drain	MP 437.92
36-inch reinforced concrete pipe storm drain	MP 437.96
24-inch reinforced concrete pipe storm drain	MP 437.98

Source: Appendix K

Notes:

MP=mile post

### *Groundwater Hydrology*

The Project study area is located within the boundaries of groundwater basin 4-009, Simi Valley Basin. The Simi Valley Basin is approximately 12,155 acres (19 square miles), and its extents are confined primarily to the City, with peripheral regions extending into the City of Moorpark and unincorporated areas of Ventura County (Appendix J). The Basin is composed of unconsolidated alluvial deposits reaching thicknesses up to 800 feet in the central portion of the basin, with water elevations ranging between 820 and 840 feet above mean sea level according data form the most recent Ventura County 2015 Annual Report of Groundwater Conditions (Appendix J). According to the Project-specific geotechnical report, historical groundwater levels within the Project study area range from 15 feet bgs near the existing Simi Valley Station and proposed underpass, to greater than 50 feet bgs along the Project alignment west of the existing station (Appendix H). Recent soil borings revealed groundwater levels of 20 to 22 feet bgs near Simi Valley Station; groundwater was not encountered at borings throughout the western portion of the Project study area (the maximum depth explored is 20 feet bgs; Appendix H).

There are 42 known active production groundwater wells within Simi Valley Basin (Appendix J):

- Six dewatering facilities that are owned by County of Ventura Waterworks Districts Number 8 are located in the western end of basin where water levels are above ground level. The average annual volume pumped from these wells between 2007 and 2015 was approximately 1,700 acre-feet. Dewatering water is discharged into storm drain and ultimately to Arroyo Simi, downstream of the Project study area. These wells are all more than 1 mile downstream of the Project study area.
- Two municipal wells owned by Golden State Water Company are used for water supply. The average annual volume pumped from these wells between 2006 and 2014 was 750 acre-feet. These wells are more than 1 mile away from the Project study area, upstream of the confluence of Tapo Canyon and Arroyo Simi.
- Thirty four unmetered wells, comprised of 26 agricultural wells, 7 domestic wells, and 1 well with unknown purpose. The average annual pumping volume is unknown but assumed to be small comparative to the pumping volumes of the dewatering and municipal supply wells. Five

of these wells (1 domestic, 4 agricultural) are within 1 mile of the Project study area; all 5 wells are upstream of the Project study area.

Groundwater recharge within the basin occurs via irrigation return flow, water and septic system losses, stream recharge, and subsurface groundwater inflow (Appendix J).

## Water Quality

### Surface Water

Pollutants entrained in municipal stormwater runoff degrades the water quality of receiving waters, harms human health, and degrades aquatic ecosystems. Findings listed in the Ventura County Municipal Separate Storm Sewer System (MS4) Permit (see Section 3.9.3, Regulatory Setting) state that, based on the Ventura Countywide Storm Water Monitoring Program's Water Quality Monitoring Reports, which were required under Order No. 00-108, the pollutants of concern in urban stormwater include chloride, fecal indicator bacteria, conventional pollutants (e.g. pH, total dissolved solids [TDS], metals, fertilizers, including nitrogen, etc.), organic compounds, and pesticides. Many of the pollutants of concern listed are responsible for impairments identified on the CWA 303(d) list of impaired waterbodies.

Water quality in the vicinity of the Project study area is directly affected by stormwater runoff that contains nitrogen compounds, pesticides and various toxic compounds, metals, sediment with associated pollutants from soil erosion, indicator bacteria, and trash. Pollutant laden stormwater discharges, particularly during first flush storm events, may cause an exceedance of the water quality standards and infringe upon beneficial uses.

Water bodies downstream of the Project study area and their respective designated beneficial uses are shown in Table 3.9-2.

**Table 3.9-2. Beneficial Uses for Water Bodies Downstream of the Project Study Area**

Waterbody	Designated Beneficial Uses
Calleguas Creek, Reach 7	REC-1, REC-2, MUN*, IND, GWR, FRSH,WARM, WILD
Calleguas Creek, Reach 8	REC-1, REC-2,MUN*,PROC,AGR,GWR,WARM,WILD
Simi Valley Basin, Confined Aquifers	MUN, IND, PROC, AGR
Simi Valley Basin, Unconfined Aquifers	MUN, IND, PROC, AGR

Source: Los Angeles RWQCB 2014

Notes:

\* Designated under SB 88-63 and Resolution Number 89-03. Some designations may be considered for exemption at a later date

AGR: Agricultural Supply  
 FRSH: Freshwater Replenishment  
 GWR: Groundwater Recharge  
 IND: Industrial Service Supply  
 MUN: Municipal and Domestic Supply

PROC: Industrial Process Supply  
 REC-1: Water Contact Recreation  
 REC-2: Noncontact Water Recreation  
 WARM: Warm Freshwater Habitat  
 WILD: Wildlife Habitat



The 303(d)-listed impairments for waterways in the Project study area are shown in Table 3.9-3 and are based on the 2014/2016 California Integrated Report.

**Table 3.9-3. Water Quality Impairments within the Project Study Area**

<b>Waterbody</b>	<b>303(d) Listed Impairments</b>	<b>Source</b>	<b>U.S. EPA TMDL Report Completion</b>
Calleguas Creek, Reach 7	Ammonia (5B)	Nonpoint source, point source	2003
Calleguas Creek, Reach 7; Calleguas Creek, Reach 8	Boron (5B)	Atmospheric deposition, domestic use of ground water, groundwater loadings, irrigated crop production, major municipal point source - dry weather discharge, surface runoff	2008
Calleguas Creek, Reach 8	Chlordane (5B)	Source unknown	2006
Calleguas Creek, Reach 7; Calleguas Creek, Reach 8	Chloride (5B)	Atmospheric deposition, domestic use of ground water, groundwater loadings, irrigated crop production, major municipal point source - dry weather discharge, surface runoff	2008
Calleguas Creek, Reach 7; Calleguas Creek, Reach 8	Chlorpyrifos (5B)	Source unknown	2006
Calleguas Creek, Reach 7; Calleguas Creek, Reach 8	Diazinon (5B)	Source unknown	2006
Calleguas Creek, Reach 8	Dichlorodiphenyltrichloroethane (5B)	Source unknown	2006
Calleguas Creek, Reach 8	Dieldrin (5B)	Source unknown	2006
Calleguas Creek, Reach 7	Indicator Bacteria (5A)	Source unknown	2019
Calleguas Creek, Reach 7	Organophosphorus Pesticides (5B)	Agriculture, municipal point sources	2006
Calleguas Creek, Reach 8	Polychlorinated biphenyls (5B)	Source unknown	2006
Calleguas Creek, Reach 7	Sedimentation/Siltation (5A)	Source unknown	2006
Calleguas Creek, Reach 8	Sedimentation/Siltation (5A)	Source unknown	2015

**Table 3.9-3. Water Quality Impairments within the Project Study Area**

Waterbody	303(d) Listed Impairments	Source	U.S. EPA TMDL Report Completion
Calleguas Creek, Reach 7; Calleguas Creek, Reach 8	Sulfates (5B)	Atmospheric deposition, domestic use of ground water, groundwater loadings, irrigated crop production, major municipal point source - dry weather discharge, surface runoff	2008
Calleguas Creek, Reach 7; Calleguas Creek, Reach 8	TDS (5B)	Atmospheric deposition, domestic use of ground water, groundwater loadings, irrigated crop production, major municipal point source - dry weather discharge, surface runoff	2008
Calleguas Creek, Reach 8	Toxaphene (5B)	Source unknown	2006
Calleguas Creek, Reach 7	Toxicity (5B)	Source unknown	2006
Calleguas Creek, Reach 7	Trash (5A)	Source unknown	2021

Source: SWRCB 2018

Notes:

EPA=Environmental Protection Agency; TDS=total dissolved solids; TMDL=total maximum daily load; U.S.=United States

Five separate Total Maximum Daily Loads (TMDL) have been adopted by the Los Angeles RWQCB and approved by the U.S. EPA to address water quality impairments within the Calleguas Creek watershed as described below:

1. Calleguas Creek Watershed Nitrogen Compounds and Related Effects TMDL was adopted by the Los Angeles RWQCB on October 24, 2002, and approved by the U.S. EPA on June 20, 2003. It was then revised by the Los Angeles RWQCB in September 2008 and reapproved by the U.S. EPA October 15, 2009. The effective date is October 15, 2009. This TMDL includes numeric targets, waste load allocations (WLA), and load allocations (LA) for concentrations of total ammonia as nitrogen and nitrate and nitrite as nitrogen within the Callguas Creek Watershed.
2. Calleguas Creek Watershed Toxicity TMDL was adopted by Los Angeles RWQCB on July 7, 2005, and approved by the U.S. EPA on March 14, 2006. The effective date is March 24, 2006. This TMDL includes numeric targets for concentrations of chlorpyrifos, diazinon, and toxicity in the water column and sediment. It also includes WLAs and LAs for concentrations of chlorpyrifos, diazinon, and toxicity in discharges from point and nonpoint sources.
3. Calleguas Creek Watershed Organochlorine Pesticides, Polychlorinated Biphenyls, and Siltation TMDL was adopted by the Los Angeles RWQCB on July 7, 2005, and approved by the U.S. EPA on March 14, 2006. The effective date is March 24, 2006. This TMDL includes numeric targets for concentrations of numerous organochlorine pesticides (including

chlordane, dichlorodiphenyltrichloroethane, dieldrin, and toxaphene) and polychlorinated biphenyls in surface water, fish tissue, and sediment. It also includes WLAs and LAs for concentrations of these pollutants in sediment and siltation limits for discharges from point and nonpoint sources.

4. Calleguas Creek Watershed Metals and Selenium TMDL was adopted by the Los Angeles RWQCB on October 25, 2006, and approved by the U.S. EPA on March 26, 2007. It was then revised by the Los Angeles RWQCB on October 13, 2016, and reapproved by the U.S. EPA on June 9, 2017. The effective date is March 26, 2007. This TMDL includes numeric dry and wet weather numeric targets for surface water concentrations of mercury, nickel, selenium, and zinc. In addition to surface water concentrations, sediment concentration targets for 303d listed segments, bird egg concentrations for mercury and selenium, and fish tissue concentrations for mercury are applicable. The TMDL also includes WLAs and LAs for dry and wet weather concentrations of copper, nickel, and selenium, and mercury in suspended sediment from point and nonpoint source discharges.
5. Calleguas Creek Watershed Salts TMDL was adopted by the Los Angeles RWQCB on October 4, 2007, and approved by the U.S. EPA on December 2, 2008. The effective date is December 2, 2008. This TMDL includes numeric targets for concentrations of boron, chloride, sulfate, and TDS in surface waters upstream of Potrero Road and applicable groundwater basins, including the Simi Valley basin. It also includes dry weather WLAs and LAs for concentrations of boron, chloride, sulfate, and TDS in discharges from point and nonpoint sources.

### *Groundwater*

According to the Project-specific WQAR, beneficial uses of Simi Valley basin include municipal supply, industrial service and process supply, and agricultural supply. Generally, water quality in Simi Valley Basin varies across the basin and with aquifer depth. The basin exhibits a gradual positive salinity gradient in the west direction, and quality of groundwater tends to be poorer in shallow regions. Measurements from wells in the region surrounding Project study area produced TDS concentrations between 793 and 2,090 milligrams per liter; the state secondary drinking water standard for TDS is 1,000 milligram per liter. Golden State Water Company currently pumps groundwater from Simi Valley Basin for water supply but combines pumped water with imported water prior to delivery to customers due to its high salinity (Appendix J).

According to the Phase I ESA prepared for the Project, 524 hazardous materials regulatory listings were identified within a 0.50-mile buffer of the Project alignment; however, no regulatory listings were noted in the EDR report as of potential concern to the Project footprint (Appendix I). The Project study area is not located within any oil fields. No gas, oil, or geothermal wells were identified within the Project study area (Appendix I). Refer to Section 3.8, Hazards and Hazardous Materials, for additional discussion.

### *Flooding*

The portions of the Project study area west and east of Tapo Canyon Road reside within the FEMA-designated 100-year floodplain. The western-most portion of the Project study area (near Sequoia Boulevard) and the majority of the Project study area east of Tapo Canyon Road is within the limits of the 100-year floodplain (Zones AO and AE), as shown on Figure 3.9-1. The area west of the East Los Angeles Avenue crossing, where the track crosses an open channel and briefly parallels

Arroyo Simi, is within a designated floodway (Zone AE). West of Tapo Canyon Road, areas are primarily classified as Zone X or areas of minimal flood hazard (FEMA 2008).

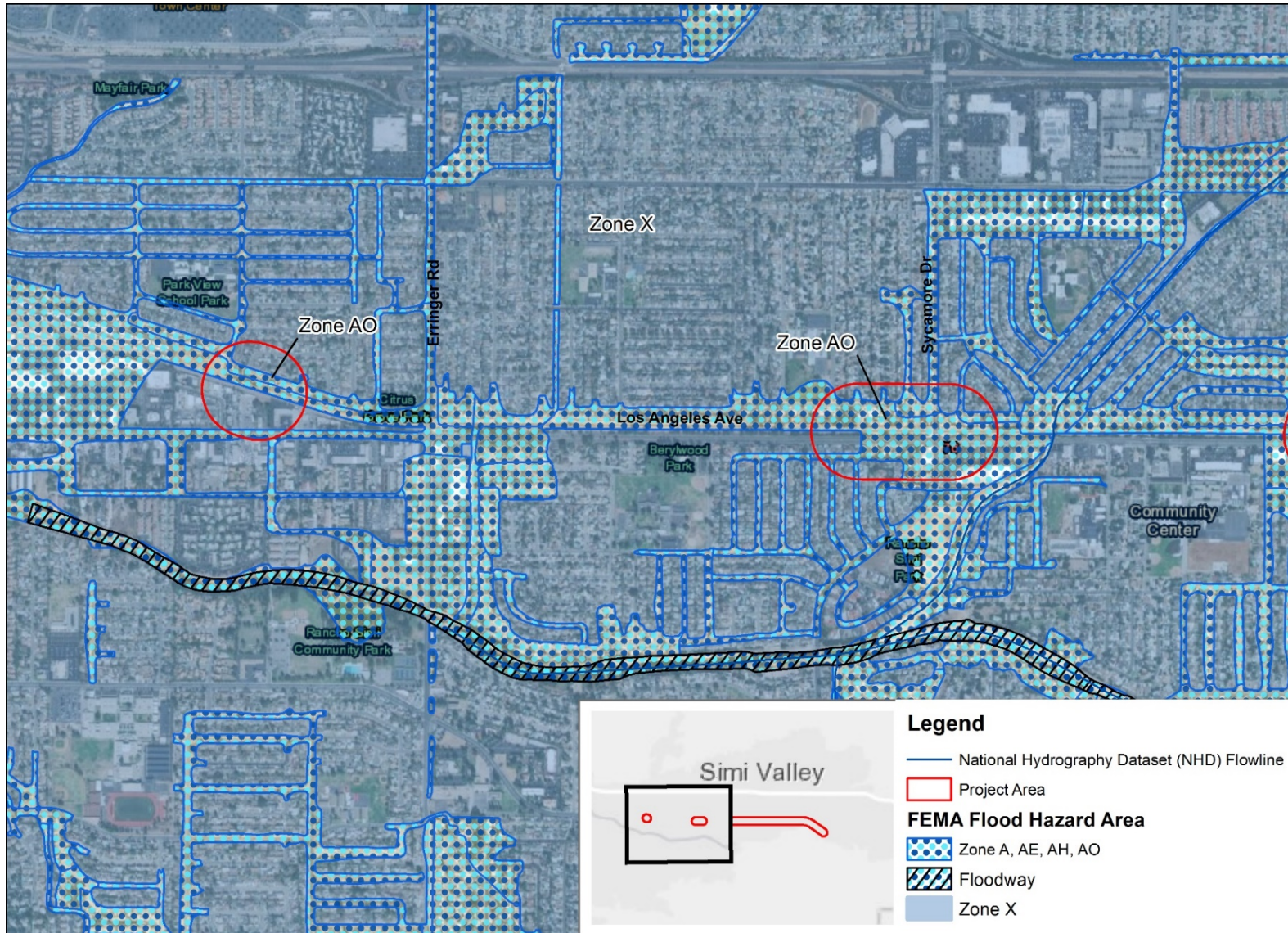
Table 3.9-4 includes descriptions of the various flood hazards zones established by FEMA and their associated flood hazards. Floodplains delineated by FEMA on Flood Insurance Rate Maps (FIRM) located in the Project study area and surrounding vicinity are shown on Figure 3.9-1.

**Table 3.9-4. Federal Emergency Management Agency Flood Hazard Zones**

Zone	Flood Zone
<b>High Risk Areas</b>	
A	Areas with a 1 percent annual chance of flooding and a 26 percent chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas, no depths or base flood elevations are shown within these zones.
AE	The base floodplain where base flood elevations are provided. AE Zones are now used on new format FIRMs instead of A1-A30 Zones.
AH	Areas with a 1 percent annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26 percent chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AO	River or stream flood hazard areas and areas with a 1 percent or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26 percent chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.
VE	Areas along the coast with a 1 percent annual chance of flooding event with additional hazards due to storm-induced velocity wave action. Base Flood Elevations derived from detailed hydraulic analyses are shown.
<b>Moderate- to Low-Risk Areas</b>	
B and X (shaded)	Area of moderate flood hazard, usually the area between the limits of the 100- year and 500-year floods. B Zones are also used to designate base floodplains of lesser hazards, such as areas protected by levees from the 100-year flood, or shallow flooding areas with average depths of less than 1 foot or drainage areas less than 1 square mile.
C and X (unshaded)	Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level. Zone C may have ponding and local drainage problems that do not warrant a detailed study or designation as base floodplain. Zone X is the area determined to be outside the 500-year flood and protected by levee from 100-year flood.
<b>Undetermined Risk Areas</b>	
D	Areas with possible but undetermined flood risks. No analysis of flood hazards was performed in these zones.

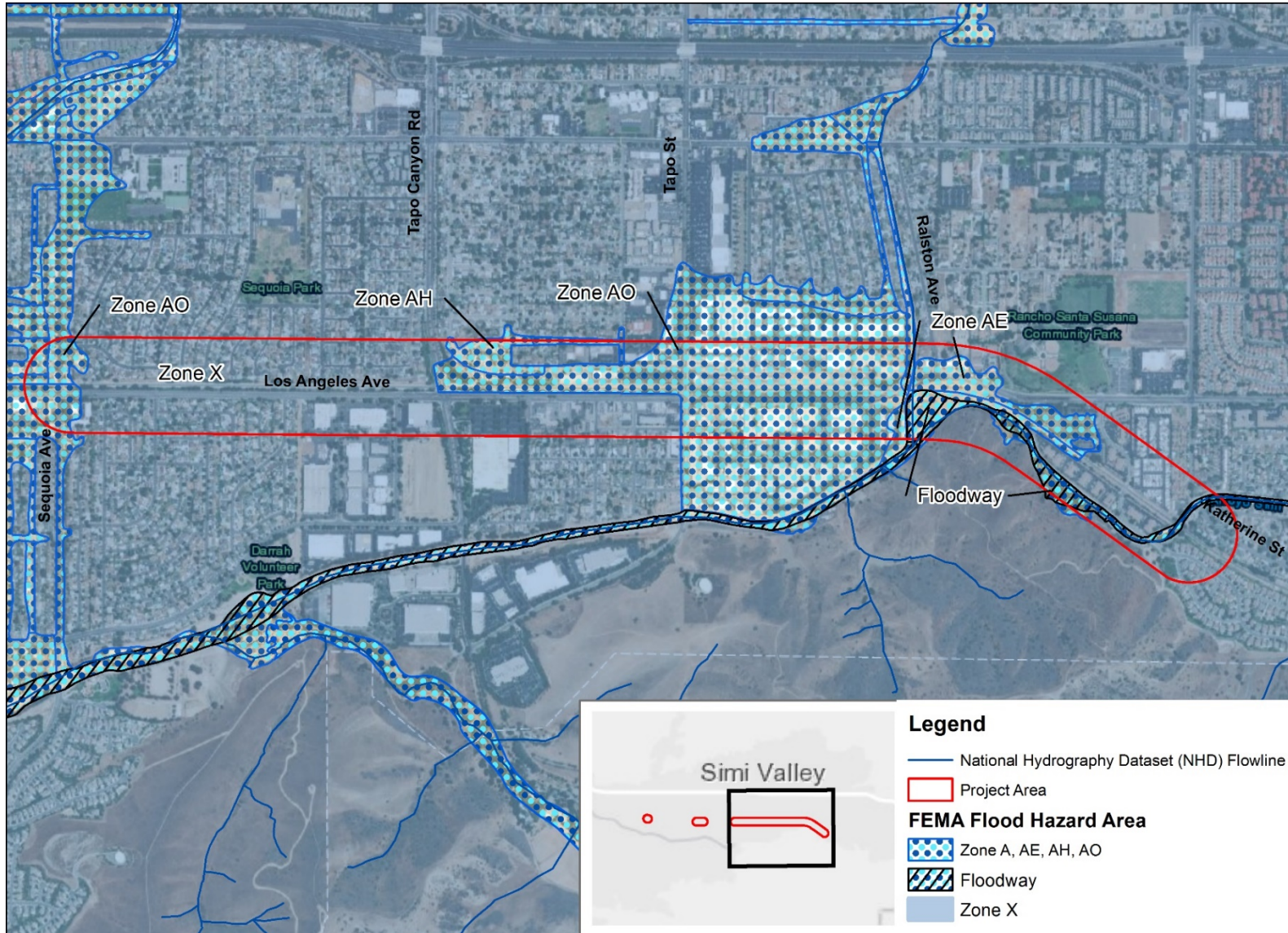
Notes:  
 FIRM=Flood Insurance Rate Map

Figure 3.9-1. Federal Emergency Management Agency Flood Zones within the Project Study Area  
(Sheet 1 of 2)



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Figure 3.9-1. Federal Emergency Management Agency Flood Zones within the Project Study Area  
(Sheet 2 of 2)



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### 3.9.3 Regulatory Setting

This section summarizes federal, state, and local regulations related to hydrology, flooding, and water quality that are applicable to the Project.

#### Federal

##### *Clean Water Act*

The CWA is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The CWA was enacted with the purpose of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters. The CWA directs states to establish water quality standards for all waters of the U.S. and to review and update such standards on a triennial basis. It is based on the principle that all discharges into the nation's waters are unlawful unless specifically authorized by a permit.

In California, the U.S. EPA has delegated responsibility for implementation of portions of the CWA, including water quality control planning and control programs, such as the NPDES program, to SWRCB and RWQCB. SWRCB establishes statewide policies and regulations for the implementation of water quality control programs mandated by federal and State water quality statutes and regulations. RWQCBs develop and implement water quality control plans (basin plans) that identify the beneficial uses of surface and ground waters, water quality characteristics, and water quality problems.

**SECTION 303(D) AND TOTAL MAXIMUM DAILY LOADS.** The CWA contains two strategies for managing water quality. One is a technology-based approach that includes requirements to maintain a minimum level of pollutant management using the best available technology. The other is a water quality-based approach that relies on evaluating the condition of surface waters and setting limitations on the amount of pollution that the water can be exposed to without adversely affecting the beneficial uses of those waters. Section 303(d) of the CWA bridges these two strategies. Section 303(d) requires that the states make a list of waters that are not attaining standards after the technology-based limits are put into place. For waters on this impairment list (and where the U.S. EPA administrator deems they are appropriate), the states are to develop TMDLs. TMDLs are established at the level necessary to implement the applicable water quality standards. The CWA does not expressly require the implementation of TMDLs. However, federal regulations require that an implementation plan be developed along with the TMDL and Sections 303(d), and 303(e), and their implementing regulations require that approved TMDLs be incorporated into basin plans.

**SECTION 404 DREDGE/FILL PERMITTING.** As explained in Section 3.3, Biological Resources, the USACE regulates and issues permits for placement of fill materials into the waters of the U.S. under Section 404 of the CWA.

**SECTION 401 WATER QUALITY CERTIFICATION.** As explained in Section 3.3, Biological Resources, the RWQCB regulates and issues Water Quality Certifications (or waivers) for activities that may result in a discharge of a pollutant under Section 401 of the CWA.

**SECTION 402 – NPDES.** The 1972 amendments to the federal Water Pollution Control Act established the NPDES permit program to control discharges of pollutants from point sources (Section 402). The 1987 amendments to the CWA created a new section of the CWA devoted to stormwater permitting (Section 402[p]). The U.S. EPA has granted the State of California (SWRCB and RWQCBs) primacy in administering and enforcing the provisions of CWA and NPDES. NPDES is the primary federal program that regulates point-source and nonpoint-source discharges to waters of the U.S.

### *Safe Drinking Water Act*

The 1986 federal Safe Drinking Water Act requires each state to develop a wellhead protection plan to describe how areas around wells would be protected from potential contamination. A major element of a wellhead protection program is the determination of protection zones around public supply wellheads. Within these zones, potential protection measures could include limitations on land uses to preclude industrial or agricultural uses with the potential to result in spills of chemicals or overuse of fertilizers and other chemicals.

### *National Flood Insurance Program*

FEMA is responsible for determining flood elevations, and floodplain boundaries based on USACE studies. FEMA is also responsible for distributing FIRMs, which are used in the National Flood Insurance Program. These maps identify the locations of special flood hazard areas, including the 100-year floodplain. FEMA allows nonresidential development in the floodplain; however, construction activities are restricted within the flood hazard areas, depending on the potential for flooding within each area.

### State

#### *Porter-Cologne Water Quality Control Act*

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) is established and implemented by the SWRCB and nine RWQCBs. Waters of the state are defined more broadly than waters of the U.S.; they are defined as any surface water or groundwater, including saline waters, within the boundaries of the state. This includes waters in both natural and artificial channels. The act requires projects that are discharging, or proposing to discharge, wastes that could affect the quality of the state's water to file a waste discharge report with the appropriate RWQCB. The Porter-Cologne Act also requires that the SWRCB or an RWQCB adopt basin plans for the protection of water quality. The Basin Plan specifies region-wide and water body-specific beneficial uses and sets numeric and narrative water quality objectives for several substances and parameters in numerous surface waters in its region. The Basin Plan also establishes beneficial water uses for groundwater basins within the region. The Project study area lies within the jurisdiction of the Los Angeles RWQCB, which last updated its' Basin Plan in 2019 (Los Angeles RWQCB 2020).

#### *National Pollutant Discharge Elimination System Construction General Permit*

Most construction activities that disturb 1 acre of land or more are required to obtain coverage under the NPDES General Permit for Construction Activities (Construction General Permit). The SWRCB has issued a statewide Construction General Permit (Order No. 2009-0009-DWQ, NPDES No. CAR000002, as amended by 2010-0014-DWQ and 2012-0006-DWQ), adopted September 2, 2009. Construction activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as stockpiling or excavation, that result in soil disturbances of at least 1 acre of total land area. The Construction General Permit requires the applicant to file a notice of intent to discharge stormwater and to prepare and implement a stormwater pollution prevention plan (SWPPP). The SWPPP includes a site map and a description of proposed construction activities, along with a demonstration of compliance with relevant local ordinances and regulations, and an overview of the BMPs that would be implemented to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources. Permittees are further

required to conduct annual monitoring and reporting to ensure that BMPs are correctly implemented and effective in controlling the discharge of stormwater-related pollutants.

#### *Lake and Streambed Alteration Program*

As described in Section 3.3, Biological Resources, the CDFW regulates water resources under Section 1600 et seq. of the California Fish and Game Code and has the authority to grant Streambed Alteration Agreements under Section 1602.

#### *Sustainable Groundwater Management Act*

The Sustainable Groundwater Management Act of 2014 (SGMA) is a comprehensive three-bill package that Governor Jerry Brown signed into California state law in September 2014. The SGMA provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for state intervention only if necessary to protect the resource. The plan is intended to ensure a reliable groundwater water supply for California for years to come. SGMA requires the formation of local groundwater sustainability agencies, which are required to adopt groundwater sustainability plans to manage the sustainability of groundwater basins. The adoption of a groundwater sustainability plan is required for all high- and medium-priority basins as identified by Department of Water Resources or submit an alternative to a groundwater sustainability plan. SGMA also requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge.

Per the SGMA 2019 Basin Prioritization conducted by the Department of Water Resources, groundwater basin 4-009, Simi Valley Basin is considered to be very low priority. Thus, no groundwater sustainability agency was formed, and no groundwater sustainability plan was adopted for this groundwater basin.

#### Local

##### *Ventura County Municipal Separate Storm Sewer System Permit*

The Ventura County MS4 Permit (Order No. R4-2010-0108, NPDES No. CAS004002) regulates discharge from MS4s into inland surface waters, enclosed bays and estuaries, and coastal ocean within the Ventura County Watershed Protection District (Principal Permittee), County of Ventura and its incorporated cities (Permittees). The permit covers discharge requirements, and requirements for Storm Water Quality Management Program implementation and sub-programs to be developed and implemented by the Principal Permittee (Public Information and Participation Program, Industrial/Commercial Facilities Program, Planning and Land Development Program, Development Construction Program, Public Agency Activities Program, Illicit Connection and Illicit Discharges Elimination Program), and Reporting Program requirements. The permit also requires that applicable development projects follow the guidance of a hydromodification control plan (HCP) and Technical Guidance Manual (TGM) for Stormwater Quality Measures developed by the permittees. The Planning and Land Development Program requires new—and redevelopment—projects to minimize pollutant loadings and hydromodification resulting from impervious surfaces through the use of properly designed, technically appropriate BMPs.

Selection of BMPs to remove stormwater pollutants, reduce stormwater runoff volume, and beneficially reuse stormwater should be prioritized in the following order:

1. Infiltration BMPs
2. BMPs that store and reuse stormwater runoff
3. BMPs that incorporate vegetation to promote pollutant removal and runoff volume reduction and integrate multiple uses
4. BMPs which percolate runoff through engineered soil and allow it to
5. Discharge downstream slowly
6. Approved modular/ proprietary treatment control BMPs that are based on low impact development concepts and that meet pollution removal goals

*Technical Guidance Manual for Stormwater Quality Measures – New Development and Redevelopment Projects*

The Ventura County TGM (Ventura County 2018), part of the Ventura Countywide Stormwater Quality Management Program, provides guidance for the implementation of stormwater management control measures in new development and redevelopment projects in the County of Ventura and the incorporated cities including Simi Valley. The guidelines in the TGM are intended to improve water quality and mitigate potential water quality impacts. The TGM was developed to meet the Planning and Land Development requirements contained in Part 4, Section E of the Ventura County MS4 permit for new development and redevelopment projects, which requires minimization of runoff pollution by limiting effective impervious area to less than 5 percent of a project site and retaining stormwater on site. The document was first adopted in 2011 and then updated in 2015 and most recently 2018. The TGM includes requirements for planning and development projects including low-impact development and BMPs. The selection, design, and application of temporary and permanent BMPs for the Project would adhere to requirements of the TGM.

*Ventura County Hydromodification Control Plan*

The Ventura County HCP (2013) contains requirements for implementation of hydromodification BMPs where they are applicable, and outlines performance and effectiveness monitoring requirements for implemented BMPs. New—and redevelopment—projects that qualify as Hydromodification Control Projects must implement appropriate hydromodification BMPs as specified in the HCP. Criteria for applicability include both Project specifics and receiving water susceptibility. New and redevelopment projects where assessments of downstream channel conditions and proposed discharge hydrology indicate that adverse hydromodification effects to present and future beneficial uses of natural drainage systems are unlikely may exempt from hydromodification controls requirements. This includes projects that:

- Disturb less than 1 acre;
- Are replacement, maintenance or repair of a permittee's existing flood control facility, storm drain, or transportation network;
- Are development projects in the Urban Core that do not increase the effective impervious area or decrease the infiltration capacity of pervious areas compared to the pre-project conditions;

- Have any increased discharge go directly or via a storm drain to a sump, lake, area under tidal influence, into a waterway that has a 100-year peak flow of 25,000 cubic feet per second or more, or other receiving water that is-not susceptible to hydromodification impacts; or,
- Discharge directly or via a storm drain into concrete or improved channels (e.g., rip rap, sackcrete, etc.), which, in turn, discharge into receiving water that is not susceptible to hydromodification impacts.

#### *City of Simi Valley General Plan*

The City's General Plan (City of Simi Valley 2012b) includes goals and objectives related to water quality. Table 3.10-1 includes applicable General Plan goals and policies pertaining to water quality.

#### *City of Simi Valley Municipal Code*

The Simi Valley Municipal Code, Title 6 - Sanitation and Health, Chapter 12 Storm Water Quality Management, prescribes regulations, pursuant to the Ventura County MS4 permit, to effectively prohibit non-stormwater discharges into MS4s and flood and sediment control facilities, and to reduce the pollutant discharge to the maximum extent practicable. Activities or operations that may result in pollutants entering MS4s or a watercourse must implement BMPs that prevent nonstormwater discharges and reduce pollutants in stormwater discharges to the maximum extent practicable. Development and redevelopment projects must comply with requirements specified in the Ventura County MS4 Permit and Ventura County TGM. Construction projects that require a grading permit or that are subject to the State Construction General permit must develop a Stormwater Pollution Control Plan. The Stormwater Pollution Control Plan must identify the responsible party, provide site location and contact information, identify pollutant sources, and describe placement and implementation of BMPs. The SWPPP required by the State Construction General Permit (state SWPPP) may be accepted as a Stormwater Pollution Control Plan if it is determined to meet the City's requirements. Projects that disturb 1 or more acre of land require a local SWPPP in addition to the state SWPPP.

### 3.9.4 Impact Analysis

This section describes the potential for environmental impacts related to hydrology, flooding, and water quality as a result of Project implementation. It describes the thresholds used to determine whether an impact would be significant, as well as measures to mitigate potentially significant impacts, where appropriate.

#### Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to hydrology, flooding, and water quality would be considered significant if the Project would:

- A. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;
- B. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- C. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would:
  - (i). Result in substantial erosion or siltation on- or off-site;

- (ii). Increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site;
  - (iii). Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
  - (iv). Impede or redirect flood flows;
- D. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or,
- E. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

### Thresholds Requiring No Further Analysis

No thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project.

### Methodology

The analysis of environmental effects focuses on foreseeable changes to existing hydrologic conditions as described in Section 3.9.1 in the context of the effects criteria listed above. The potential for significant impacts on hydrology and water quality was assessed through the following methods:

- **Regional and local hydrology:** The analysis considers each of the major Project components, as appropriate, in the context of the proposed construction activities and post-construction operations. Using a geographic information system (GIS), this assessment considers pre- and post-Project drainage conditions, probable water quality pollutants from the Project, and Project contributions to changes in the timing and quantity of runoff from the Project alignment. Potential hydromodification effects resulting from new impervious surfaces at the proposed station and at-grade crossings were considered based on the approximate site acreage subject to new impervious surfaces.
- **Existing floodplain conditions:** The existing conditions with respect to floodplains and floodways are based on available data, reports, studies, and topographic and floodplain mapping. The FEMA-mapped 100-year floodplain areas (known as special flood-hazard areas under FEMA regulations) were identified and mapped using GIS-based information based on FEMA's FIRMs for Ventura County, panels 06111C0863E and 06111C0864E. Both panels have an effective date of January 20, 2010. The special flood-hazard area designations and base flood elevation information were obtained from the FIRMs. Based on the geographic extent of the Project components, this analysis qualitatively evaluates the Project's potential to affect the current limits of the FEMA 100-year flood zone(s) or the depth of inundation.
- **Water Quality:** The analysis of water quality effects considers the potential for the Project to affect local and regional water quality based on the components described in Chapter 2. The analysis of water quality provides a discussion for the Project in the context of construction, post-construction operations, and the potential for direct and indirect water quality effects. In considering the potential for adverse water quality effects, this analysis considers existing data, reports or studies on surface water quality (e.g., U.S. EPA 303[d] list), which characterizes baseline surface water quality in the Project study area. This information was compared to the type(s) stormwater discharges that would be associated with one or more components of the Project to allow a qualitative evaluation of the Project's effects to beneficial uses.

The assessment of construction-related water quality effects considers the Project's sediment discharge risk and receiving water risk as defined in the NPDES Construction General Permit. These factors combine to determine the project Risk Level (1, 2, or 3) according to tables in the Construction General Permit (i.e., Risk Level 1 is the lowest risk and Risk Level 3 is the highest risk).

## Impact Significance Analysis

*Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

### CONSTRUCTION

**Less than Significant with Mitigation.** During the construction period, the Project may temporarily alter stormwater drainage patterns and result in erosion with the potential to degrade surface water quality. Construction related pollutants, such as grease and oil from vehicles and equipment, paint, lubricants, and construction debris and dust have potential to enter the storm drain system and downstream waterways via stormwater runoff. Chemical spills into storm drains or groundwater aquifers also have potential to impact water quality if proper minimization measures are not implemented.

Based on the Project's preliminary design, the construction disturbance area is estimated at approximately 36.69 acres. Construction projects exceeding 1 acre, such as the Project, are required to comply with the SWRCB's Construction General Activity NPDES Permit (Order No. 2009 0009 DWQ, as amended by Order No. 2010 0014 DWQ, NPDES No. CAS000002). In addition, the Project is required to comply with the SCRRA DCM (as amended). The NPDES Construction General Permit and SCRRA's DCM requires applicants to prepare and implement a SWPPP.

As outlined in the environmental setting, runoff from the Project study area would locally discharge into the Arroyo Simi, which confluences with Calleguas Creek further west. Reaches 7 and 8 of Calleguas Creek are listed as impaired for sediment/sedimentation on SWRCB's 303(d) list. Therefore, the receiving water risk is considered Risk Level 2. Based on the anticipated construction schedule and 19-month construction period, the Project sediment risk would be moderate. Therefore, according to the Construction General Permit, the Project would be classified as Risk Level 2. Risk Level 2 projects are required to implement good housekeeping, perform quarterly non-stormwater discharge observations, and conduct weekly, pre-storm, interim storm, and post-storm inspections. Based on these considerations, in the absence of a SWPPP that satisfies the minimum requirements for Risk Level 2 project, a potentially significant impact would result in the absence of Mitigation Measure HWQ-1.

If significant groundwater is encountered during construction, a dewatering system would need to be implemented. Discharge of pumped groundwater has potential to adversely impact receiving waters if contaminants are present. The Project would need to obtain coverage under the General Permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4 2018 0125, NPDES No. CAG994004) prior to implementing any construction dewatering activities. Prior to dewatering activities, the contractor must submit a Notice of Intent to the Los Angeles RWQCB in accordance with Order No. R4 2018 0125, NPDES No. CAG994004 at the time of construction. Following submittal of the Notice of Intent, the applicant is responsible for demonstrating that the project discharges do not have reasonable potential to contribute to exceed applicable water quality objectives and criteria.

In response to these considerations, the Project specific SWPPP would include BMPs to control on- and off-site erosion and sedimentation and dewatering discharges, if required. BMPs may include general housekeeping practices including, but not be limited to, covering stockpiles, retaining eroded sediment onsite, containing non stormwater discharges, and protecting storm drain inlets (e. g. sandbag barriers). With implementation of Mitigation Measure HWQ-1, which would require a Project-specific SWPPP and associated erosion and sediment control BMPs. With the implementation of Mitigation Measures HWQ-2 and HWQ-3, which requires preparation of a Project-specific drainage study and Project-specific H&H study respectively, Project construction would not violate any surface water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Impacts would be less than significant with mitigation incorporated.

#### OPERATION

**Less than Significant Impact.** Upon operation, the Project would be maintained in accordance with the water quality requirements of the City and Los Angeles RWQCB (e.g., Basin Plan, and Ventura County MS4 Permit). Therefore, the Project would not violate any water quality standards or degrade water quality. Through compliance with these policies and requirements, impacts on surface water quality from Project implementation would be minimized. Where runoff is not able to be contained on site, post-construction BMPs would treat the runoff prior to discharge to the local storm drain system through site design principles and techniques, biofiltration BMPs, and other control measures. Project operation would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Impacts would be less than significant. No mitigation is required.

*Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

#### CONSTRUCTION

**Less than Significant Impact.** During construction, water would be required for various activities, such as controlling dust, compacting soil, and mixing concrete. Project construction would require the use of locally available water supplies, which are distributed by Ventura County Waterworks' (VCW) District No. 8. Less than 5 percent of VCW District 8's existing water supply comes from groundwater and, as such, water supplied to the Project during construction is unlikely to result in depletion of the groundwater basin. Additionally, water demand for Project construction would be short-term and temporary in nature and would not strain available water supplies such that groundwater supplies would be depleted.

While the proposed Project would create an additional 1.23 acres of impervious surface, current recharge of the groundwater basin occurs primarily via irrigation return flow, water and septic system losses, stream recharge, and subsurface groundwater inflow. As such, Project construction would not significantly impact groundwater recharge.

As stated above, if significant groundwater is encountered during construction, a dewatering system would need to be implemented. Dewatering has potential to impact groundwater levels in the area. The Project would need to obtain coverage under the General Permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties prior to implementing any construction dewatering activities. Compliance with Order No. R4 2018 0125, NPDES No. CAG994004, or any subsequent permit/order at the time of construction would reduce potentially significant impacts to a less than significant level.



Given the above, Project construction would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Impacts would be less than significant. No mitigation is required.

#### OPERATION

**Less than Significant Impact.** Typical operations and maintenance activities include landscaping, maintenance of drainage features and signal infrastructure, car and locomotive maintenance and repair, and train car washing. These activities would not require significant water usage, including water from groundwater supplies. Proposed improvements to Simi Valley Station would not result in operations that would increase water demand when compared to existing conditions. Given the above, Project operation would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Impacts would be less than significant. No mitigation is required.

*Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion or siltation on- or off-site?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** Construction of the proposed Project would occur primarily within SCRRA's existing railroad ROW north or south of East Los Angeles Avenue. These areas are already graded to generally conform to existing drainage infrastructure constructed by the City and consist mostly of pervious surfaces, except at roadway crossings and parking areas. However, during construction, temporary alternations to existing drainage patterns may result. The increased volume, velocity, and discharge duration of stormwater runoff from developed areas could accelerate downstream erosion or alter existing drainage flows that could increase downstream scour (Appendix J).

However, as stated above, the Project specific SWPPP would include BMPs to control on- and off-site erosion. BMPs may include general housekeeping practices including, but not be limited to, covering stockpiles, retaining eroded sediment onsite, containing non stormwater at the Project site, utilizing sandbag barriers, etc. With the implementation of Mitigation Measure HWQ-1, which requires a Project specific SWPPP and associated erosion and sediment control BMPs, Project construction would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion or siltation on- or off-site. Impacts would be less than significant with mitigation incorporated.

#### OPERATION

**Less than Significant Impact.** Upon operation, the Project would not result in significant changes to the physical environment when compared to existing conditions; the Project is a railroad improvement that would improve the safety and efficiency of the existing VCL. Typical operations and maintenance activities would be carried out in accordance with the *Track Maintenance Manual* (Metrolink 2020), as amended, and would include landscaping, spraying of herbicides to reduce weeds, maintenance of drainage features and signal infrastructure, car and locomotive maintenance and repair, and train car washing. These activities would not alter the existing drainage pattern of the site or area, including

through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion or siltation on- or off-site. Impacts would be less than significant. No mitigation is required.

*Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site?*

**CONSTRUCTION**

**Less than Significant with Mitigation.** Construction of the Project would occur primarily within SCRRA’s existing railroad ROW. These areas are already graded to generally conform to existing drainage infrastructure constructed by the City and consist mostly of pervious surfaces, except at roadway crossings and parking areas. However, during construction, temporary alternations to existing drainage patterns may occur and, although unlikely, could inadvertently result in localized increases in surface runoff.

To address regulatory requirements and match existing drainage conditions to the maximum extent practical, the Project would include multiple drainage improvements within the Project study area. Based on the preliminary engineering design and drainage analysis (Appendix K), the Project would require the construction of new trackside earthen and concrete drainage ditches along the Project alignment to capture and control flows originating from areas north and east of the Project study area. Underdrains would also be required where graded ditches are not feasible, such as at-grade crossings, and a new pump station at the proposed pedestrian underpass. In addition and as shown Table 3.9-5, the Project would construct new drainage facilities that would connect to existing City-owned drainage infrastructure as detailed more in the Drainage Report (Appendix K).

**Table 3.9-5. Proposed Drainage Facilities**

Proposed Drainage Facilities	MP Location
9-inch by 2-foot earthen drainage ditch	MP 436.25 to MP 436.52
9-inch by 2-foot earthen drainage ditch	MP 436.53 to MP 436.81
9-inch by 2-foot earthen drainage ditch	MP 436.92 to MP 437.29
18-inch reinforced concrete pipe storm drain	MP 437.36 to MP 437.38
18-inch reinforced concrete pipe storm drain	MP 437.76 to MP 437.78
9-inch by 2-foot earthen drainage ditches	MP 437.78 to MP 437.98 and MP 437.88
24-inch reinforced concrete pipe storm drain	MP 437.98 to MP 438.23
8-inch underdrain	MP 437.98 to MP 438.20
8-inch underdrain	MP 438.20 to MP 438.25
9-inch by 2-foot earthen drainage ditch	MP 438.25 to MP 438.36

Source: Appendix K

Notes:

MP=mile post

Implementation of these Project drainage improvements would limit site runoff during construction and would maintain existing stormwater drainage patterns. Mitigation Measures HWQ-1 and HWQ-2 are proposed to provide specific performance standards for construction and require the preparation of a final drainage plan to maximize opportunities to properly control, capture, infiltrate, and treat construction and post-construction site runoff as a result of the additional 1.23 acres of impervious surface created by the Project. With implementation of Mitigation Measures HWQ-1 and HWQ-2, runoff discharging from the site would not increase and drainage patterns would not significantly alter existing drainage patterns. Impacts would be less than significant with mitigation incorporated.

#### OPERATION

**Less than Significant with Mitigation.** Once constructed, the addition of a second platform at the Simi Valley station, in conjunction with the construction of new track and drainage infrastructure, has the potential to add 1.23 acre (53,579 square feet) of impervious area (Appendix J), which could result in localized increases in peak runoff. Depending on the timing and quantity of flow, these increases could impact the City's storm drain system, and downstream receiving waters, and, although unlikely, could result in localized flooding in the absence of mitigation.

While drainage from the Project study area does not discharge directly to susceptible reaches of the Arroyo Simi and Calleguas Creek, as defined by the Ventura County HCP, the storm drain system and modified channel reaches traversed by the Project ultimately drain to susceptible reaches. Thus, the Project is subject to hydromodification control requirements of the Ventura County MS4 Permit and Ventura County HCP. Pending additional engineering design, post-construction hydromodification controls would be required as part of Mitigation Measure HWQ-2 to maintain the Project's post-construction stormwater runoff flow rates and durations to pre-Project conditions. Impacts would be less than significant with mitigation incorporated.

*Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** As explained above, implementation of proposed drainage improvements in coordination with interim SWPPP BMPs required by the NPDES Construction General Permit would reduce potential hydromodification impacts to below a level of significance. Subject to confirmation through the preparation of a final drainage plan as required by Mitigation Measures HWQ-2, stormwater runoff volumes would be similar to existing conditions, and hydromodification would be negligible. In this context, the Project would not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts would be less than significant with mitigation incorporated.

#### OPERATION

**Less than Significant Impact.** As explained above, appropriate BMPs would be incorporated into the final Project design to minimize and mitigate water quality impacts of increased runoff generation, if applicable. Ultimately, Project operation is not anticipated to significantly impact local hydrology and Project operation would not require the alteration of the course of a stream or river. Maintenance of Metrolink trains would occur at existing maintenance facility sites and therefore, the Project would not

exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts would be less than significant. No mitigation is required.

*Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would impede or redirect flood flows?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** Due to hydromodification from urbanization within Simi Valley, runoff generated during the 100-year storm has the potential to exceed existing capacity of local drainage infrastructure in the Project study area, thereby resulting in widespread shallow flooding. This existing condition combined with limited channel capacity in downstream segments of the Arroyo Simi, results in overflow and flooding along the eastern portions of the Project alignment during the 100-year storm event. As shown in Figure 3.9-1, the Project study area intersects multiple FEMA-designated flood zones and, therefore, Project construction and related grading has the potential to temporarily and permanently alter base flood elevations. Portions of the Project alignment also intersect the AE Flood Zone for the Arroyo Simi in the vicinity of the East Los Angeles Avenue at-grade crossing. In the absence of mitigation, the Project has the potential to alter existing drainage patterns in a manner that could impede or redirect flood flows during the 100-year event.

Based on the City's Municipal Code, the Project would be required to comply with terms of City of Simi Valley Floodplain Development Permit (Municipal Code 7-5.501) and demonstrate through H&H analysis that the post-Project condition does not significantly increase base flood elevations (44 Code of Federal Regulations section 60.3; Municipal Code 7-5.609). If the H&H analysis indicates an increase in base flood elevations of greater than one foot, the Project would be required to undergo a conditional FIRM map revision process and require approval from the local floodplain administrator. FEMA does not allow for any rise in water surface elevations within the AE flood zone.

Implementation of the proposed drainage improvements in coordination with Mitigation Measure HWQ-3 would minimize the Project's hydrologic impacts to adjacent properties. This would include the preparation of a formal H&H study, coordination with the local floodplain administrator, and incorporation of design refinements as necessary to minimize increases in existing water surface elevations during the 100-year event. With implementation of Mitigation Measure HWQ-3, the Project's final design would minimize changes to the frequency and depth of inundation on adjacent properties to the maximum extent practical. Impacts would be less than significant with mitigation incorporated.

#### OPERATION

**Less than Significant with Mitigation.** Once constructed, flash floods could lead to washout of tracks and subsequent derailment. In the event of an adverse, short-duration rainfall event, there is a possibility that the track could be subject to inundation during normal passenger rail operations. In the event of flooding conditions, Project operations would be discontinued until water levels recede. In such an event, passenger rail service would not occur until flood levels recede and an assessment for any flood-related damage along the rail corridor is completed. This type of scenario could result in a couple of days to several weeks of inactivity along the rail corridor depending on the extent of damage to one or more sections of the track. This impact is significant in the absence of mitigation. However, with implementation of Mitigation Measure HWQ-3, as described above, impacts would be reduced to a less than significant level.

*In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** The Project study area is not within a tsunami or seiche zone. However, the Project study area intersects multiple flood zones, and, in the unlikely event that the site is inundated, construction-related pollutants have potential to get washed from the Project study area into waterways. Construction related pollutants, such as grease and oil from vehicles and equipment, paint, lubricants, and construction debris and dust have potential to enter the storm drain system and waterways via stormwater runoff. Chemical spills into storm drains or groundwater aquifers also have potential to impact water quality if proper minimization measures are not implemented. During construction, stormwater BMPs would be implemented, pursuant to the NPDES Construction General Permit to minimize contamination of potential flood waters and degradation of downstream receiving waters. Additionally, materials and equipment within the floodplain would be stored in compliance with the City of Simi Valley Municipal Code 7-5.608.

Implementation of Mitigation Measure HWQ-1, which would require that construction BMPs are implemented to properly control, capture, infiltrate, and treat construction site runoff as needed, such that runoff discharging from the site would not release pollutants into receiving waters during construction, would reduce significant impacts to a less than significant level.

#### OPERATION

**Less than Significant Impact.** As a result of the Project's location within multiple designated flood zones, in the unlikely event of Project inundation due to flooding, the risk of pollutant release into downstream waterways does exist. Additionally, the routine transport of bulk hazardous materials by UPRR through the Project study area has the potential to exacerbate the risk of pollutant release into the environment in the event of Project inundation. However, the transport, handling, use, and disposal of hazardous materials by freight train is heavily regulated, and the Project would adhere to all applicable regulations (see Section 3.8, Hazards and Hazardous Materials, for details).

Upon operation, the Project would be maintained in accordance with the water quality requirements of the City, the Los Angeles RWQCB (e.g., Basin Plan, Ventura County MS4 Permit, etc.), and SCRRRA's DCM, as amended. Through compliance with these policies and requirements, indirect impacts on water quality as a result of Project inundation would be minimized. Where runoff is not able to be contained on site, post-construction BMPs would treat the runoff prior to discharge to the local storm drain system through site design principles and techniques, biofiltration BMPs, and other control measures. Project operation is not anticipated to violate any surface water or groundwater quality standards as a result of pollutant release during Project inundation and the corresponding impact would be less than significant. No mitigation is required.

*Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

#### CONSTRUCTION

**Less than Significant Impact.** As demonstrated throughout this document, construction of the Project would adhere to federal, state, and local water quality regulations and management plans and would not result in any significant impacts to surface water or groundwater quality. Project construction would not require significant water supplies, including water supplies from groundwater. As such, the Project

would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant. No mitigation is required.

#### OPERATION

**Less than Significant Impact.** The Project would not result in any land uses that would obstruct implementation of a water quality control plan or sustainable groundwater management plan. Project operation would not require significant water supplies, including water supplies from groundwater, when compared to existing conditions. Impacts would be less than significant. No mitigation is required.

### 3.9.5 Mitigation Measures

The following mitigation is proposed to reduce the Project's potential to exacerbate existing potential significant impacts on hydrology and water quality.

**HWQ-1 Prepare and Implement a Project-Specific SWPPP.** SCRRA shall prepare a SWPPP that satisfies Risk Level 2 requirements in accordance with the requirements of the Construction General Permit (Order No. 2012-0006-DWQ). A Qualified SWPPP Developer shall prepare the SWPPP and include construction-phase BMPs for erosion and sediment control; site management, housekeeping, and waste management for control of contaminants; management of non-stormwater discharges; run-on and runoff controls; and BMP inspection, maintenance, and repair activities. The SWPPP must also detail spill prevention and control measures to identify the proper storage and handling techniques of fuels and lubricants, and the procedures to follow in the event of a spill.

BMP requirements shall conform to SCRRA's DCM (as amended), and the most recent version of the California Stormwater Quality Association Stormwater Best Management Handbook. A Qualified SWPPP Practitioner shall be responsible for implementing the BMPs at the site and performing all required monitoring and inspection/maintenance/ repair activities.

**HWQ-2 Prepare a Final Drainage Plan.** The Project proponent shall prepare a final drainage plan in support of final design to maintain post-Project drainage flows to existing levels. The final drainage plan shall determine the capacity of existing drainage mains and their ability to accommodate any increase in runoff. The final drainage plan shall verify the existing pipe network including pipe size, elevation, material, capacity and condition, including the existing stormwater drainage facility north and south of the ROW. The drainage study would also determine the need and recommended type of low impact development required to manage stormwater and the applicability of the hydromodification requirements of the Ventura County MS4 Permit.

**HWQ-3 Prepare a Hydrologic and Hydraulic Analysis.** In conjunction with the Project's final engineering design, SCRRA shall prepare a H&H analysis to assess the Project's proposed improvements that intersect with FEMA-designated areas of 100-year flooding along the Project corridor. The H&H analysis shall adhere to FEMA and local Ventura County and City requirements to confirm the Project improvements do not redirect flood flows and/or increased base flooding depths. If modeling results indicate a rise in base flood levels or a redirection of flood flows, SCRRA will be responsible for modifying the Project design through the final design process to minimize or eliminate these impacts and/or filing a letter of map revision through the local floodplain administrator in coordination with FEMA.

### 3.9.6 CEQA Significance Conclusions After Mitigation

With implementation of Mitigation Measures HWQ-1, HWQ-2, and HWQ-3 the Project would have a less than significant impact on localized drainage and hydrology, floodplain encroachment, and water quality.

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## 3.10 Land Use and Planning

### 3.10.1 Introduction

The Land Use and Planning section describes the environmental and regulatory setting for land use and planning in the vicinity of the Project study area and evaluates potential land use impacts that would result from construction and operation of the Project. This includes evaluating the Project's consistency with federal, state, and local land use plans and policies. If required, mitigation measures are proposed to reduce potentially significant impacts. Cumulative land use impacts and plan consistency, in combination with planned, approved, and reasonably foreseeable projects, are discussed in Chapter 4, Cumulative Impacts.

### 3.10.2 Environmental Setting

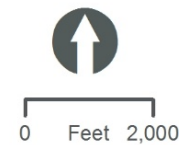
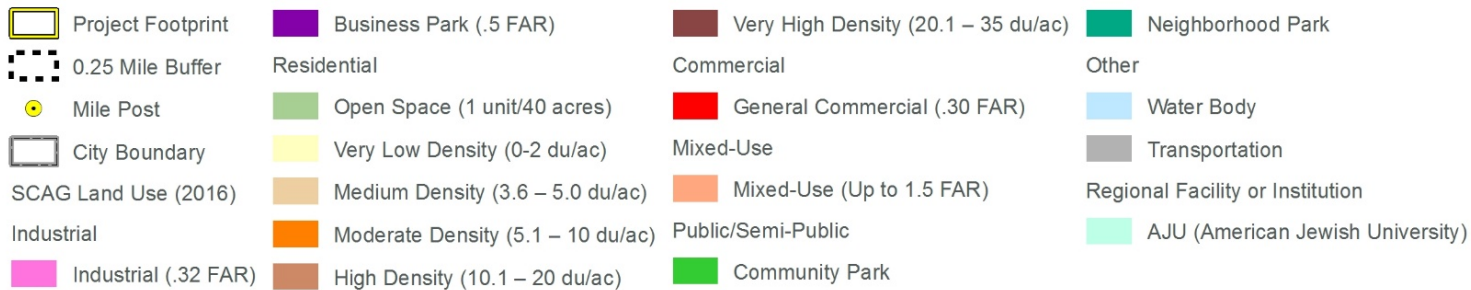
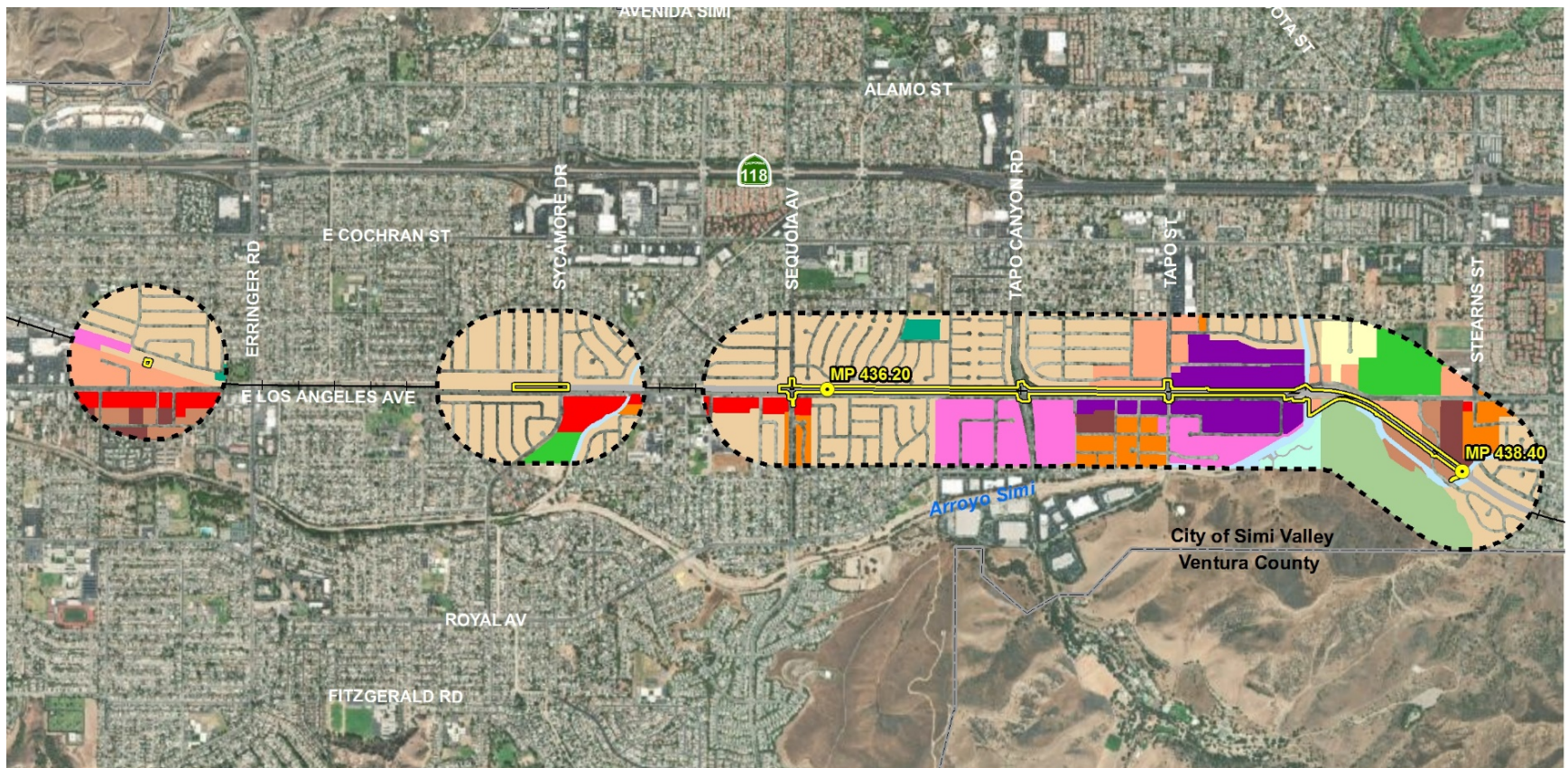
This section summarizes the existing environmental setting related to existing and planned land use within the Project study area.

The Project study area is located within a developed, urbanized area in the southeastern portion of the City in southeast Ventura County. Existing land uses in the Project study area consist mainly of industrial, commercial, and single and multifamily residential areas, including the Hidden Valley Apartment Homes and the Tradewinds Mobilehome Park adjacent to the Simi Valley Station at the eastern terminus of the Project study area. Improvements proposed as part of the Project would be constructed primarily within existing railroad ROW. The northern 40 feet of the ROW are owned by the VCTC, which is an SCRRA member agency, and the southern 60 feet are owned by UPRR. The existing railroad ROW contains an active passenger and freight rail corridor that currently carries Metrolink regional rail, Amtrak intercity rail, and UPRR freight rail traffic.

Figure 3.10-1 presents the currently planned land use designations identified in the General Plan Land Use Map (City of Simi Valley 2020a). Land uses identified in the General Plan adjacent to the Project study area primarily consist of medium (3.6 – 5.0 dwelling units per acre [du/ac]), moderate (5.1-10 du/ac), and high (10.1 – 20 du/ac) density residential, mixed-use (up to 1.5 floor area ratio [FAR]), general commercial (0.30 FAR), open space (1 unit per 40 acres), industrial (0.32 FAR), business park (0.5 FAR), and commercial (0.30 FAR) land uses. Figure 3.10-2 presents the current zoning districts within the City's Municipal Code. The Project study area includes residential, commercial, and industrial zoning districts. The Project study area also overlaps with both the City's Tapo Street Overlay Area and the East Los Angeles Avenue Industrial/Metrolink Area overlay zones. Further details are provided in Section 3.10.3.

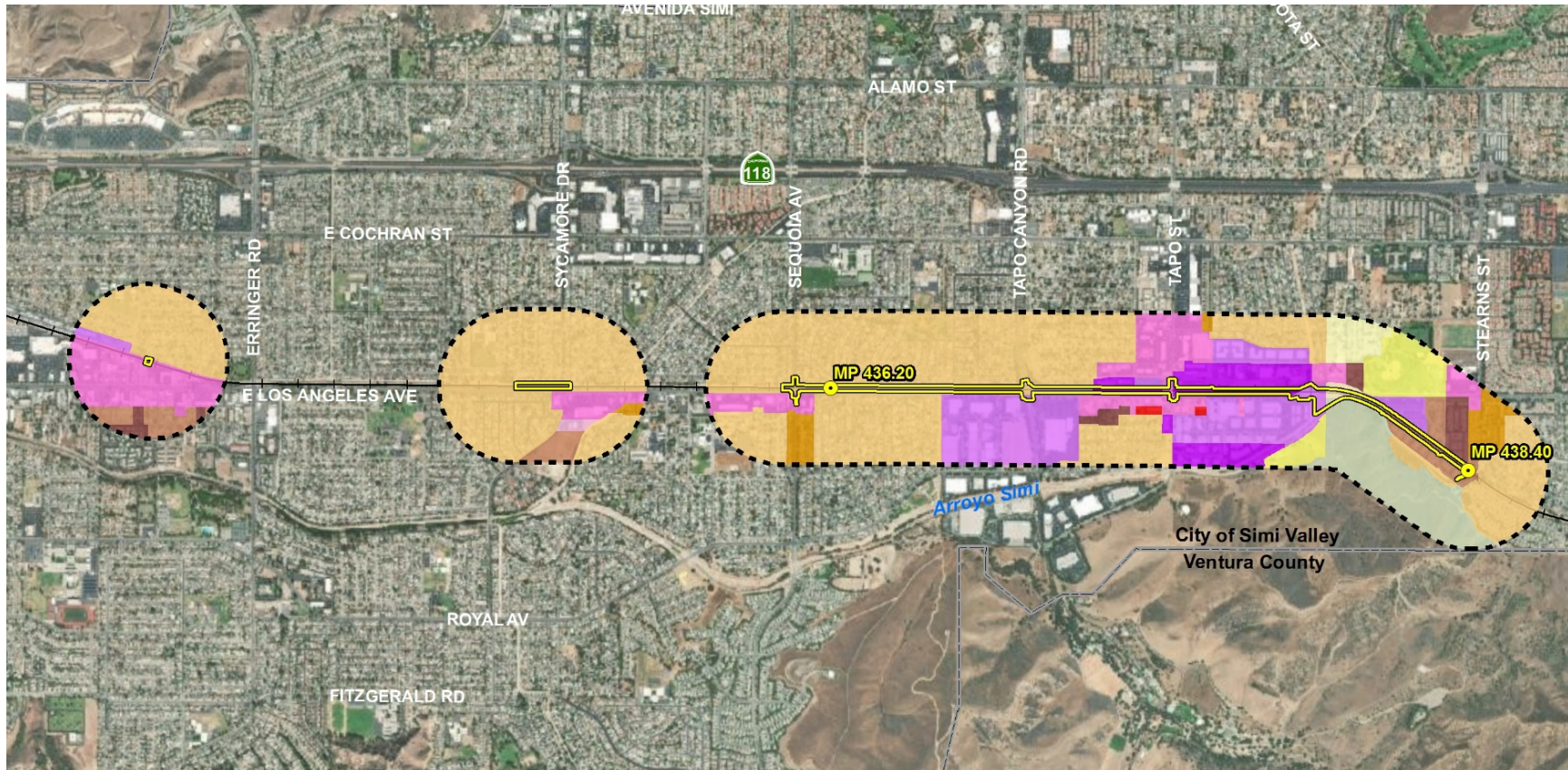
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Figure 3.10-1. City of Simi Valley General Plan Land Use Map

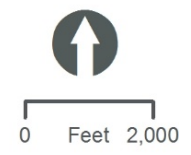


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Figure 3.10-2. City of Simi Valley Zoning Map



- |                       |                                |                               |
|-----------------------|--------------------------------|-------------------------------|
| Project Footprint     | Commercial Planned Development | Residential Medium Density    |
| Mile Post             | General Industrial             | Residential Moderate Density  |
| City Boundary         | Light Industrial               | Residential High Density      |
| Simi Valley Zoning    | Open Space                     | Residential Very High Density |
| Business Park         | Residential Estate             | Water Storage Facilities      |
| Commercial Industrial | Residential Very Low Density   |                               |
| Commercial Office     | Residential Low Density        |                               |



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### 3.10.3 Regulatory Setting

This section summarizes federal, state, and local regulations (including land use and transportation plans) related to land use and planning that are applicable to the Project.

#### Federal

##### *Federal Railroad Administration*

FRA is responsible for the development and enforcement of regulations governing the safety of freight and passenger rail systems, including the design, operations, and maintenance of railroads. Examples include issuing guidance on compliance with the Americans with Disabilities Act in the design of passenger station platforms and regulating sounding of train horns at grade crossings.

##### *Uniform Relocation Assistance and Real Property Acquisition Policies Act*

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) is a federal law that establishes minimum standards for federally funded programs and projects that require the acquisition of real property (real estate) or displace persons from their homes, businesses, or farms. The Uniform Act's protections and assistance apply to the acquisition, rehabilitation, or demolition of real property for federal or federally funded projects (Housing and Urban Development Exchange 2021).

##### *Section 4(f) of the Department of Transportation Act of 1966*

Section 4(f) of the Department of Transportation Act of 1966 specifies that transportation projects requiring the use of land from historical sites, parks and recreational areas, and wildlife and waterfowl refuges can only be approved if there is no feasible and prudent avoidance alternative to the use of the land and if the project includes all possible planning to minimize harm to the property, or if the National Environmental Policy Act lead agency determines that the use of the property will have a de minimis impact.

#### State

##### *State Planning and Zoning Laws (California Government Code Section 65300)*

California Government Code Section 65300 et seq. establishes the obligation of counties and cities to adopt and implement general plans for a 20-year planning horizon. The State Zoning Law (California Government Code Section 65800 et seq.) establishes that zoning ordinances, which are laws that define allowable land uses within a specific zone district, are required to be consistent with the jurisdiction's general plan and any applicable specific plans. A specific plan is another planning device that governs a smaller land area than the general plan but must be consistent with the overarching general plan. Specifically, it implements the general plan in a geographic area (California Government Code, Section 65450).

##### *California Sustainable Communities and Climate Protection Act of 2008*

The California Sustainable Communities and Climate Protection Act (SB 375) requires regional planning agencies to develop regional land use plans (SCSs) to meet GHG emission reduction goals set forth in the California Global Warming Solutions Act (AB 32). These plans address reducing VMT by co-locating uses to shorten necessary trips and by coordinating land use and transportation/transit

planning. Coordination is enforced by requiring transportation planning projects to comply with the SCSs to receive state funding. SB 375 also allows projects that meet regional SCSs to qualify for CEQA exemptions or streamlining.

SCAG is the designated metropolitan planning organization (MPO) for the Project study area.

#### *2018 California State Rail Plan*

The California State Rail Plan sets out the state's vision for an integrated statewide rail network. The goal of the plan is for the state's rail systems to provide a competitive alternative to driving by increasing frequency of service and providing pulsed schedules with seamless transfers between lines and operators.

#### Local

#### *Southern California Association of Governments 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy*

The 2020-2045 RTP/SCS is a long-range RTP that provides a blueprint to coordinate the regional transportation system by creating a vision for transportation investments throughout the SCAG region (which includes the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and identifying regional transportation and land use strategies to address mobility needs and help the region achieve GHG emission reduction goals. The SCORE Program is identified in the RTP/SCS under project number 7210001, and the Project corridor is identified in the RTP/SCS as a high-quality transit area. The Project is included in Phase 1 of the SCORE Program and is critical to improving safety and increasing operational capacity on the Metrolink VCL.

#### *Southern California Association of Governments 2008 Regional Comprehensive Plan*

The SCAG 2008 Regional Comprehensive Plan (RCP) is an advisory document to local agencies for their voluntary use in preparing local plans and handling issues of regional significance. The RCP addresses important regional issues, such as housing, traffic and transportation, water, and air quality, and presents a vision of how the SCAG region can balance resource conservation, economic vitality, and quality of life.

#### *Ventura County Comprehensive Transportation Plan*

The 2013 Ventura County Comprehensive Transportation Plan (CTP) is a long-range policy document that aims to enhance mobility throughout Ventura County. The transportation vision presented in the CTP was developed based on stakeholder and community input. One of the priority issues identified in the CTP, which received favorable support from the public, is the expansion of Metrolink rail services to enhance transit options and connectivity throughout the County.

#### *City of Simi Valley General Plan*

The General Plan (City of Simi Valley 2012b) includes goals and objectives related to that direct the pattern of development in Simi Valley by designating the general location, distribution, and density of land uses. Table 3.10-1 includes applicable City of Simi Valley General Plan goals and policies pertaining to the Project.



### *City of Simi Valley Municipal Code*

The Simi Valley Municipal Code contains the regulatory, penal, and administrative laws that apply to the City of Simi Valley. The Simi Valley Development Code (Title 9 of the Simi Valley Municipal Code) is the primary tool for implementing the goals and policies contained in the Simi Valley General Plan. The Simi Valley Development Code regulates the growth and development of the City, consistent with the General Plan, using methods such as establishing zoning districts and standards for specific land uses.

Per the City's Municipal Code, and as shown in Figure 3.10-2 (City Zoning Map), the Project is included in Residential Medium Density, Commercial Planned Development, General Industrial, and Light Industrial zoning districts. The purpose of the Residential Medium Density zoning district is to provide for a suburban, single-family residential environment. The purpose of the Commercial Planned Development zoning district is to encourage the development of commercial sites with a broad range of retail, office, and service commercial uses. The purpose of the General Industrial zoning district is to provide areas for a broad range of manufacturing activities. The purpose of the Light Industrial district is to provide areas for a broad range of light manufacturing, service, technical research, and related business office uses.

The Project study area overlaps with both the City's Tapo Street Overlay Area and the East Los Angeles Avenue Industrial/MetroLink Area, which are identified in the City's General Plan EIR (City of Simi Valley 2012b) as areas of potential land use change. The Tapo Street Overlay Area includes older residential and commercial uses and contains opportunities for redevelopment and infill development, with the overall goal of achieving high quality, pedestrian-oriented development. The East Los Angeles Avenue Industrial/MetroLink Area contains the Simi Valley Transit Station and has opportunities for higher density mixed-use development near the transit station.

### *Cultural Heritage Ordinance of the Simi Valley Municipal Code (Ordinance No. 1150)*

This ordinance adopts many of the provisions of the Ventura County Cultural Heritage Ordinance and establishes the Simi Valley Cultural Heritage Board and grants the board the ability to inventory, evaluate, educate, and make recommendation to City Council regarding the eligibility of Cultural Heritage Sites, placement of aesthetic markers, and state registration of resources. The ordinance also provides definitions for Cultural Heritage Sites, Historic Districts, Historical Resources, Landmarks, Points of Historical Interest, and Sites of Merit.

## 3.10.4 Impact Analysis

This section describes the potential for environmental impacts related to land use and planning as a result of Project implementation. It describes the thresholds used to determine whether an impact would be significant, as well as measures to mitigate potentially significant impacts, where appropriate.

### Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to land use and planning would be considered significant if the Project would:

- A. Physically divide an established community; or,
- B. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

## Thresholds Requiring No Further Analysis

No thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project.

## Methodology

This analysis evaluates the Project's potential to result in land use conflicts and/or plan inconsistencies that would result in significant environmental effects. This evaluation is performed at the local and regional level to facilitate an evaluation of the Project's consistency with the applicable local plans and policies presented in the City's General Plan (City of Simi Valley 2012b) and SCAG's 2020-2045 RTP/SCS (SCAG 2020a). The project also evaluates the Project's potential to introduce facilities or components that could result in localized land use conflicts or plan inconsistencies.

## Impact Analysis

*Would the Project physically divide an established community?*

### CONSTRUCTION

**Less than Significant with Mitigation.** Generally, the physical division of an established community occurs as a result of the introduction of a new, physical feature, such as a highway, railroad tracks, or security fence (or wall). Similarly, a division could result through the removal of a means of access, such as closing a local road, trail, or bridge. Once implemented, these physical alternatives to the circulation network could impair mobility within an existing community or between adjacent communities or outlying areas.

The Project is situated in an urbanized community containing an existing, active, rail corridor currently utilized by Metrolink, Amtrak and freight carriers. As proposed, the Project includes a new station platform at the existing Simi Valley Station, the construction of approximately 2.20 miles of second track, and at-grade crossing enhancements to facilitate the implementation of quiet zones. These Project improvements would be constructed primarily within existing railroad ROW owned by SCRRRA and UPRR with limited extensions into the City's roadway ROW at the five at-grade crossings.

Temporary construction easements (TCE) would be required for improvements that extend beyond the railroad ROW, which may include, sidewalk, signal, and/or SSM improvements. In limited circumstances, these improvements may also extend into unimproved portions of a limited number of adjacent private properties near Hidden Ranch Drive. If required, these improvements would be placed adjacent to existing railroad ROW and existing rail infrastructure, which would be compatible with the existing onsite and surrounding land uses.

During construction of the Project, temporary detours would be required for vehicular traffic, fixed route transit, and bikes and pedestrians. This could cause disruptions to mobility and circulation thereby temporarily dividing neighborhoods within Simi Valley. With implementation of Mitigation Measures TRA-1 and TRA-2, which require preparation of a Traffic Management Plan for construction and maintaining pedestrian and bicycle access during construction, these potentially significant impacts would be minimized to a less than significant level.

## OPERATION

**No Impact.** Upon operation, the Project would not require any new property acquisitions that could otherwise impede existing access or create new structures that could otherwise physically separate the existing community. The Project would facilitate increased operational capacity on the Metrolink VCL and passenger capacity at the existing Simi Valley Transit Station. These operations would occur within in existing, active rail corridor within a broader urban center. Once complete, the access and connectivity would be maintained at existing levels and none of the Project features would physically divide the existing communities and neighborhoods that border the rail corridor. No impact would occur.

*Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

## CONSTRUCTION

**Less than Significant with Mitigation.** Construction would be conducted in accordance with applicable policies and regulations of agencies with jurisdiction or discretionary authority over one or more of the Project components. Table 3.10-1 provides an evaluation of the Project's consistency with the goals and policies of the California State Rail Plan, the 2020-2045 SCAG RTP/SCS, and City's adopted General Plan, as applicable to the Project. As provided in Table 3.10-1, the evaluation indicates whether or not the Project is consistent with each plan and therefore would not conflict with a goal or policy adopted for the purpose of avoiding or minimizing an adverse environmental impact. Where construction of the Project would result in temporary potentially significant environmental impacts within the Project study area, as identified in relevant sections throughout this EIR (e.g., Section 3.2, Air Quality; Section 3.8, Hazards and Hazardous Materials; 3.11, Noise and Vibration; and Section 3.12, Transportation and Traffic), mitigation measures are identified to avoid, minimize, or reduce those impacts. With the implementation of Mitigation Measures AES-1, AES-2, AQ-1, BIO-1, BIO-2, BIO-3, CUL-1, CUL-2, CUL-3, PAL-1, PAL-2, PAL-3, HAZ-1, WLD-1, NV-1, NV-2, TRA-1, and TRA-2, temporary land use impacts would be reduced to a less than significant level.

## OPERATION

**Less than Significant Impact.** The Project is generally consistent with applicable plans and policies that encourage sustainable design of public facilities, expansion of existing transportation options and increased rail service in the region (Table 3.10-1). As a component of SCORE, the Project is consistent with the State Rail Plan. In addition to the Project supporting the implementation of SCRRA's SCORE Program, the Project would be consistent with the 2020-2045 RTP/SCS in improving rail service and safety for Metrolink rail corridor.

During operation, the Project would support the overall citywide development pattern by advancing land use patterns consistent with regional transportation and urban planning goals for the City and the region. Based on these considerations, operation of the Project would not cause a significant environmental impact due to conflict with any land use plans, policies or regulations for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant. No mitigation is required.

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**Table 3.10-1. Project Consistency with Applicable Plans and Regulations**

Plan	Policy	Consistency Determination
California State Rail Plan	Goal 1. Improve multimodal mobility and accessibility for all people.	Consistent. The improvements proposed as part of the Project would provide faster, more frequent, and more reliable passenger rail service on the Metrolink VCL.
	Goal 2: Preserve the multimodal transportation system.	Consistent. The improvements proposed as part of the Project would be constructed within existing railroad ROW.
	Goal 3. Support a vibrant economy.	Consistent. The Project would support a vibrant economy through the provision of enhanced passenger rail service at the existing Simi Valley's Station and constructed on existing railroad ROW.
	Goal 4. Improve public safety and security.	Consistent. The improvements included as part of the Project, including the proposed SSMS, second mainline track, and new pedestrian undercrossing at the Simi Valley Station, would increase rail safety and reliability for transit users, and improve safety at existing at-grade crossings.
	Goal 6. Practice environmental stewardship	Consistent. The Project improvements would be located within existing railroad ROW.
SCAG 2020-2045 RTP/SCS	Goal 2. Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent. The improvements proposed as part of the Project would improve the safety and reliability of the existing rail system.
	Goal 4. Increase person and goods movement and travel choices within the transportation system.	Consistent. The Project is located within the Ventura County HQTAs. The improvements proposed as part of the Project would provide faster, more frequent passenger rail service on the Metrolink VCL, which could encourage a mode-shift from automobile use to transit use, and ease traffic congestion on freeways and local streets.
	Goal 5. Reduce GHG emissions and improve air quality.	Consistent. The Project would result in an increase in rail emissions in addition to emissions from construction, however, this increase would be offset by emissions displaced VMT.
	Goal 10. Promote conservation of natural and agricultural lands and restoration of habitats.	Consistent. The Project improvements would be located within existing railroad ROW and would not encroach into open space areas.
City of Simi Valley General Plan	<b>Community Development</b>	
	LU-1.2 Development Location. Limit development to lands within the Simi Valley CURB, thereby protecting existing agriculture, open space, viewsheds, wildlife, and watersheds surrounding the City from development impacts and limiting urban sprawl.	Consistent. The Project is within the Simi Valley CURB and would largely be constructed within the railroad ROW owned by SCRRA and UPRR.
	LU-3.2 Citywide Development Pattern. Provide for an overall pattern of land uses that promotes efficient development; minimizes the impact of traffic congestion; reduces transportation distances, energy consumption,	Consistent. The Project conforms to the City of Simi Valley's existing pattern of development. The Project improvements would be located within existing railroad ROW and would not require the acquisition of adjacent properties.

**Table 3.10-1. Project Consistency with Applicable Plans and Regulations**

Plan	Policy	Consistency Determination
	<p>air pollution, and greenhouses gas emissions; ensures compatibility between uses; protects the natural hillsides, major watercourses, and trees; enhances community livability and public health; and sustains economic vitality.</p>	
	<p>LU-4.1 Preservation of Natural Features. Maintain significant natural landmarks, such as prominent ridgelines visible from the valley floor, and other natural scenic features in their natural state, to the extent feasible.</p>	<p>Consistent. The Project would not impact scenic resources in the City (see Section 3.1.) Upon operation, the Project would be at existing topographic grades and no substantial changes to the visual character of the Project study area would result.</p>
	<p>LU-5.1 Development Compatibility. Locate and design development to assure compatibility among land uses, addressing such elements as building orientation and setbacks, buffering, visibility and privacy, automobile and truck access, impacts of noise and lighting, landscape quality, and aesthetics.</p>	<p>Consistent. The Project improvements would be located within existing railroad ROW and would not require new vertical visual encroachments that could impact the existing visual character of the Project area. Additionally, the Project is within an existing urban setting and would be similar to existing operations.</p>
	<p>LU-7.2 Development in View Corridors. Design structures and site improvements constructed in highly visible locations to minimize their impacts on natural vistas.</p>	<p>Consistent. The Project would not impact scenic vistas. Project features would be generally at existing grades and would not impact scenic resources or views in the City when compared to existing conditions.</p>
	<p>LU-8.1 Regulating Sustainable Development. Implement the most current version of the California Green Building Standards Code with amendments and update periodically to reflect future amendments and require development projects, major renovations, and municipal structures to be consistent with these.</p>	<p>Consistent. The Project would be constructed in accordance with the SCRRRA standards, which has incorporated the California Green Building Standards Code by reference.</p>
	<p>LU-24.2 Transit-Oriented Development. Promote the development of a new Metrolink transit station to serve the western portion of Simi Valley and intensify development within its proximity to foster transit use and reduce automobile trips, energy consumption, air pollution, and greenhouse gas emissions. Incorporate retail uses on the ground floor of street-facing elevations of parking structures developed to serve transit riders and or office uses that are designed for continuity with development on adjoining parcels.</p>	<p>Consistent. The Project includes the construction of new rail infrastructure (including new track and railroad signals) to improve safety, reliability, and operational capacity on Metrolink’s VCL, which would help to foster transit use and reduce automobile trips (and the associated air quality impacts). The rail infrastructure proposed under the Project would accommodate the development of a new Metrolink transit station in the future, should one be warranted.</p>

**Table 3.10-1. Project Consistency with Applicable Plans and Regulations**

Plan	Policy	Consistency Determination
	<p>HR-1.1 Historical Resources Inventory. Contribute to the maintenance of Ventura County’s recorded inventory of historical landmarks for properties, objects, structures, and monuments having importance to the history or architecture of Ventura County.</p>	<p>Consistent. There is only one known NRHP eligible cultural resource (P-56-152301) that partially overlaps with the Project study area, which was already previously recorded in the SCCIC. A qualified archaeologist would be present during any ground-disturbing activities within 50 feet of the resource P-56-152301 so that no inadvertent substantial adverse changes to the significance of a historical resource pursuant to Section 15064.5 would occur.</p>
	<p>HR-1.2 Preservation or Reuse of Historical Structures. Support the preservation of structures listed on the NRHP, California Historical Landmarks, and/or the Ventura County List of Historic Landmarks.</p>	<p>Consistent. The Project, where feasible, would support not altering the significance of a historical resource determined eligible or listed on the NHPA. Refer to Section 3.5 for additional discussion.</p>
	<p>HR-2.1 New Development Activities. Require that new development protect and preserve paleontological and archaeological resources from destruction, and avoid, and mitigate impacts to such resources. Through planning policies and permit conditions, ensure the preservation of significant archaeological and paleontological resources and require that the impact caused by any development be mitigated.</p>	<p>Consistent. During construction of the Project, a qualified archaeologist or paleontologist would be present during any ground-disturbing activities within 50 feet of a sensitive resource, including P-56-152301.</p>
	<p>HR-2.2 Grading and Excavation Activities. Maintain sources of information regarding paleontological and archeological sites and the names and addresses of responsible organizations and qualified individuals who can analyze, classify, record, and preserve paleontological or archeological findings. Require a qualified paleontologist/archeologist to monitor all grading and/or excavation where there is a potential to affect cultural, archeological, or paleontological resources. If these resources are found, the applicant shall implement the recommendations of the paleontologist/archeologist, subject to the approval of the City.</p>	<p>Consistent. A qualified archaeologist would be present during any ground-disturbing activities within 50 feet of the resource P-56-152301 so that no inadvertent substantial adverse changes to the historic resource would occur.</p>
	<p>HR-2.3 Cultural Organizations. Notify cultural organizations, including Native American organizations, of proposed developments that have the potential to adversely impact cultural resources. Allow representatives of such groups to monitor grading and/or excavation of development sites.</p>	<p>Consistent. The NAHC and local Native American tribes will be consulted if buried prehistoric or Native American cultural resources or human remains are discovered inadvertently during ground-disturbing activities.</p>

**Table 3.10-1. Project Consistency with Applicable Plans and Regulations**

Plan	Policy	Consistency Determination
	HR-2.4 Paleontological or Archaeological Materials. Require new development to donate scientifically valuable paleontological or archaeological materials to a responsible public or private institution with a suitable repository, located within Simi Valley or Ventura County, whenever possible.	Consistent. If buried artifacts are discovered, work will be temporarily halted in the area and within 50 feet of the find until a qualified archaeologist who meets the Secretary of Interior Standards for Archaeology can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with SCRRA. If the find is prehistoric or Native American in origin, local Native American tribes will be consulted.
<b>Mobility and Infrastructure</b>		
	M-1.1 Comprehensive Mobility System. Establish a diverse transportation system that provides mobility options for the community, including adequate roads, transit service, bike paths, pedestrian walkways, and commuter rail services.	Consistent. The improvements proposed as part of the Project (second main track, new platform, and pedestrian undercrossing) would enhance the safety and reliability of the commuter rail system.
	M-1.2 Integrated Multi-Modal System. Provide an integrated transportation system that supports the land use plan set forth in the Land Use Element.	Consistent. The Project would include pedestrian improvements and improvements to the commuter rail system.
	M-1.3 Complete Streets. Accommodate and balance the needs of all users of the transportation system including pedestrians, bicyclists, transit users, freight, and motor vehicle drivers through all phases of transportation and development projects so that all users can travel safely within the various public ROWs.	Consistent. The improvements included as part of the Project (e.g., SSMS, pedestrian undercrossing, second main track) would increase rail safety and reliability for transit users, improve safety at the existing at-grade crossings.
	M-1.4 Roadway Design Elements. Incorporate, where practical, complete streets design elements into projects including sidewalks and other measures to improve pedestrian safety, median and intersection curbing treatments, better bus stop placement, traffic-calming measures, bicycle accommodations, and treatments for disabled travelers to improve safety.	Consistent. The Project would include improvements at the existing at-grade crossings, including sidewalk and pavement reconstruction, installation of pedestrian gates and warning signals, all of which would enhance pedestrian and bicycle safety.
	M-2.4 Regional Traffic Mitigation. Participate in programs (Congestion Management Program, Growth Management Program, etc.) to reduce regional traffic congestion.	Consistent. The Project would improve congestion broadly throughout the region by shifting travelers from automobiles to commuter rail.



**Table 3.10-1. Project Consistency with Applicable Plans and Regulations**

Plan	Policy	Consistency Determination
	M-6.4 Railroad Grade Crossings. Encourage the railroad entities to continue to improve their railroad grade crossing surfaces and safety devices to minimize crossing delay and street maintenance.	Consistent. The Project would include SSM improvements at the existing at-grade crossings, including sidewalk and pavement reconstruction, installation of pedestrian gates and warning signals, which would enhance pedestrian and bicycle safety at the crossings.
	M-11.2 Alternative Transportation Modes. Promote and encourage the use of alternative transportation modes, such as ridesharing, carpools, van pools, public transit, bicycles, and walking; and provide facilities that support such alternative modes.	Consistent. The improvements proposed as part of the Project would improve the reliability of the rail system and encourage the use of rail transportation as an alternative to single-occupancy vehicles.
	M-12.9 Bicycle and Pedestrian Safety. Provide for the safety of bicyclists and pedestrians through provision of adequate facilities.	Consistent. The Project would include improvements at the existing at-grade crossings, including sidewalk and pavement reconstruction, installation of pedestrian gates and warning signals, all of which would enhance pedestrian and bicycle safety.
	M-13.2 Transit Design. Support a well-designed transit system to meet the mobility needs of residents and visitors including seniors, disabled, and transit-dependent persons.	Consistent. The objectives of the Project are to improve the safety, frequency, and reliability of the existing commuter rail service.
	M-13.3 Transit Frequency. Support increased frequency transit service and capital investments to serve high-density employment, commercial, residential, or mixed-use areas and activity centers.	Consistent. The improvements proposed as part of the Project would allow for an hourly bidirectional service, a half-hourly regional train to dispatch in the peak direction, and an hourly express train in the peak direction along the VCL.
	M-13.5 Transit Support Facilities. Participate in efforts to develop transit support facilities, including park-and-ride lots, bus stops, and shelters.	Consistent. The Project would include the construction of a new platform on the south side of the main line tracks at the Simi Valley Transit Station, including a new pedestrian underpass with ramp and stair access.
	M-14.1 Pedestrian Safety. Design and maintain sidewalks along all roadways, streets, and intersections to emphasize pedestrian safety and comfort through a variety of street design and traffic management solutions.	Consistent. The Project would include pedestrian safety features such as sidewalk repaving, stripping, and installation of pedestrian gates and warning signals at at-grade crossings.

**Table 3.10-1. Project Consistency with Applicable Plans and Regulations**

Plan	Policy	Consistency Determination
	IU-4.3 Drainage Plans. Require developers to prepare project-specific drainage plans for proposed developments that meet integrated water quality, flow reduction, and resources management criteria as technically feasible; define needed drainage treatment and runoff controls (BMPs) per City standards; and comply with the City’s most current National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit and Master Plan of Drainage.	Consistent. A mitigation measure proposed as part of the Project includes the preparation of a final drainage plan to maximize opportunities to properly control, capture, infiltrate, and treat construction and post-construction site runoff.
	IU-5.7 Recycling and Reuse of Construction Waste. Require recycling and reuse of construction wastes, including recycling materials generated by the demolition and remodeling of buildings, with the objective of diverting 85 percent of construction wastes through source reduction, reuse, and recycling.	Consistent. The Project would be required to comply with federal, state, and local statutes and regulations related to solid waste and recycling, such as AB 939, through participation in existing City of Simi Valley’s waste diversion programs.
<b>Natural Resources</b>		
	NR-1.1 Open Space Preservation and Buffer Zone. Protect, conserve, and maintain the open space, hillside, and canyon areas that provide a buffer zone around the city’s urban form, serve as designated habitat for sensitive species, and provide recreation opportunities for residents and visitors.	Consistent. The Project would be constructed in an existing railroad corridor and would protect, conserve, and maintain existing open space, hillside, and canyon areas in the City. The Project will accommodate existing and planned recreational trails and parallel or bisect the Project study area. The Project would protect, conserve, and maintain the open space, hillside, and canyon areas that provide a buffer zone around the city’s urban form, serve as designated habitat for sensitive species, and provide recreation opportunities for residents and visitors, where feasible.
	NR-1.2 Slope Preservation. In open space areas, uses requiring grading or other alteration of land shall maintain the natural topographic character and ensure that downstream properties and watercourses are not adversely affected by siltation or chemical runoff.	Consistent. The Project would avoid steep topographical areas and adjacent watercourses. Downstream watercourses would not be adversely affected by siltation or chemical runoff through compliance with the Project’s SWPPP (MM-HWQ-1) as described more in Section 3.9. The Project would ensure, where feasible, that in open space areas, uses requiring grading or other alteration of land would maintain the natural topographic character and ensure that downstream properties and watercourses are not adversely affected by siltation or chemical runoff.

**Table 3.10-1. Project Consistency with Applicable Plans and Regulations**

Plan	Policy	Consistency Determination
	<p>NR-1.6 Open Space for Wildlife Habitat. Preserve open space in its natural form. Prioritize preservation of open space that can support Sensitive, Endangered, and Protected species, as defined by the county, state, and federal governments, as part of a contiguous system that allows the movement of wildlife from one habitat area to another.</p>	<p>Consistent. The Project would avoid existing open space areas and does not include any protected corridors that support sensitive, endangered, and protected species, as defined by the county, state, and federal governments.                      The Project would, where feasible, preserve open space in its natural form, prioritize preservation of open space that can support sensitive, endangered, and protected species, as defined by the county, state, and federal governments, as part of a contiguous system that allows the movement of wildlife from one habitat area to another.</p>
	<p>NR-1.11 Arroyo Simi. Enhance and conserve the Arroyo Simi and its tributaries as a natural resource for scenic and passive recreational enjoyment by the community.</p>	<p>Consistent. The Project would avoid the Arroyo Simi and its tributaries, including indirect impacts.                      The Project would, where feasible, enhance and conserve the Arroyo Simi and its tributaries as a natural resource for scenic and passive recreational enjoyment by the community.</p>
	<p>NR-2.1 Tree Preservation. Encourage the preservation of trees and native vegetation in development projects. Require that new development utilize creative land planning techniques to preserve any existing healthy, protected trees to the greatest extent possible.</p>	<p>Consistent. The Project would preserve existing trees and native vegetation consistent with the City's tree ordinance.</p>
	<p>NR-2.2 Wildlife Crossings. Require the installation of wildlife crossing structures by developers or as part of public improvement projects. Minimize artificial night lighting in the vicinity of wildlife crossing structures and adjacent wild lands. Install appropriate wildlife fencing and encourage the growth of woody native vegetation leading up to crossing structures to provide cover and direction and to encourage the use of the crossing structures by wildlife.</p>	<p>Consistent. The Project would, where feasible, minimize artificial night lighting in the vicinity of wildlife crossing structures and adjacent wild lands.</p>
	<p>NR-2.3 Agency Collaboration. Work with federal, state, and local agencies, such as Santa Monica Mountains Conservancy, Mountains Recreation and Conservation Authority, Rancho Simi Recreation and Park District, National Park Service, and other organizations, for guidance on the restoration of riparian communities and vegetative cover at passageways.</p>	<p>Consistent. The Project would, where feasible, work with federal, state, and local agencies, such as Santa Monica Mountains Conservancy, Mountains Recreation and Conservation Authority, Rancho Simi Recreation and Park District, National Park Service, and other organizations, for guidance on the restoration of riparian communities and vegetative cover at passageways.</p>

**Table 3.10-1. Project Consistency with Applicable Plans and Regulations**

Plan	Policy	Consistency Determination
	<p>NR-2.4 Habitat Connectivity. Ensure that projects within areas identified as regional wildlife corridors are designed and constructed so as to preserve the ability of wildlife to travel through the region.</p>	<p>Consistent. The Project would, where feasible, be designed and constructed so as to preserve the ability of wildlife to travel through the region.</p>
	<p>NR-2.5 Wetland and Sensitive Habitat Mitigation. Conserve wildlife ecosystems, wetlands, and sensitive habitat areas in the following order of protection preference: (1) avoidance; (2) on-site mitigation; and (3) off-site mitigation. Where avoidance is not possible, require provision of replacement habitat through restoration and/or habitat creation to mitigate the loss of wetlands and/or sensitive habitat. Off-site replacement habitat should be at a minimum of 5:1 replacement ratio or as recommended by CDFW.</p>	<p>Consistent. The Project would, where feasible, conserve wildlife ecosystems, wetlands, and sensitive habitat areas in the following order of protection preference: (1) avoidance; (2) on-site mitigation; and (3) off-site mitigation. Where avoidance is not possible, the Project would provision of replacement habitat through restoration and/or habitat creation to mitigate the loss of wetland and/or sensitive habitat. The Project would, where feasible, ensure that off-site replacement habitat should be at a minimum of 5:1 replacement ratio or as recommended by CDFW.</p>
	<p>NR-2.6 Site Assessments. Require assessment by a qualified professional for development applications that may adversely affect sensitive biological or wetland resources, including occurrences of special-status species, occurrences of sensitive natural communities, and important wildlife areas and movement corridors. Ensure that individual projects incorporate measures to reduce impacts on special-status species, sensitive natural communities, and important wildlife areas and movement corridors according to Simi Valley's environmental review process.</p>	<p>Consistent. The Project would, where feasible, require assessment by a qualified professional for development applications that may adversely affect sensitive biological or wetland resources, including occurrences of special-status species, occurrences of sensitive natural communities, and important wildlife areas and movement corridors, and ensure that measures to reduce impacts to special-status species, sensitive natural communities, and important wildlife areas and movement corridors are incorporated according to Simi Valley's environmental review process.</p>
	<p>NR-3.1 Maintenance of Natural Topography. Preserve hills, ridgelines, canyons, bluffs, significant rock outcroppings, and open space areas surrounding the City as a visual resource, and locate buildings and utility infrastructure to minimize alteration of natural topography.</p>	<p>Consistent. The Project would avoid any alterations to the surrounding natural topography. Further, improvements at the station and at-grade crossing would be consistent with existing conditions</p>
	<p>NR-3.2 Trails, Recreation Areas, and Viewing Areas. Provide public trails, recreation areas, and viewing areas near significant visual resources where appropriate.</p>	<p>Consistent. The Project is not near significant visual resources. The Project, although visually characterized by new railroad infrastructure within the corridor, would not represent any notable change to the existing visual character of the Project study area.</p>
	<p>NR-3.3 Location and Design of Developments. Require development within visually sensitive areas to minimize impacts to scenic resources and to preserve unique or</p>	<p>Consistent. The Project is located in an urban, developed area within the southern portion of the City and is not within a visually sensitive area. Distant views of both the Whiteface Escarpment to the north and the Simi Hills to the south are available from most</p>

**Table 3.10-1. Project Consistency with Applicable Plans and Regulations**

Plan	Policy	Consistency Determination
	special visual features, particularly in hillside areas, through the following: <ul style="list-style-type: none"> <li>• Creative site planning</li> <li>• Integration of natural features into the project</li> <li>• Appropriate scale, materials, and design to complement the surrounding natural landscape</li> <li>• Clustering of development so as to preserve open space vistas and natural features</li> <li>• Minimal disturbance of topography</li> <li>• Creation of contiguous open space networks</li> </ul>	north-south thoroughfare viewer locations along the Project alignment. The Project would not degrade or obstruct the existing visual character of the Project study area.
	NR-3.5 Development Location on Hillsides. Require development to preserve and enhance physical features by being located down and away from ridgelines.	Consistent. The Project is located in an urban, developed area within the southern portion of the City, and away from ridgelines.
	NR-5.2 Protect Open Space Areas and Water Resources. Conserve undeveloped open space areas and drainage channels for the purpose of protecting water resources in the city’s watershed. For new development and post-development runoff, control sources of pollutants and improve and maintain urban runoff water quality through stormwater protection measures consistent with the city’s National Pollution Discharge Elimination System Permit.	Consistent. The Project avoids undeveloped open space areas and drainage channels. As provided in Section 3.9, post-development runoff, control sources of pollutants and improve and maintain urban runoff water quality through stormwater protection measures (MM-HWQ-1) would be performed consistent with the NPDES Construction General Permit, SCRRRA’s DCM, and local City requirements, as applicable.
	NR-5.5 Arroyo Simi. Restore and protect the Arroyo Simi as a natural resource that contributes to recharge and filtration capability for the watershed.	Consistent. The Project would avoid direct impacts to the Arroyo Simi and related impacts to recharge and filtration capability for the watershed.
	NR-9.6 Construction and Operation. Evaluate development project applications, including for particulate matter, by using the procedures and thresholds established in the most recent version of the Ventura County Air Quality Assessment Guidelines as published by the Ventura County Air Pollution Control District and ensure that projects incorporate all applicable construction and operation mitigation measures contained therein.	Consistent. A mitigation measure proposed as part of the Project includes the use of Tier 4 equipment to reduce emissions during construction. With the inclusion of Tier 4 equipment, Project emissions would be below VCPCD regional significance thresholds.

**Table 3.10-1. Project Consistency with Applicable Plans and Regulations**

Plan	Policy	Consistency Determination
	<b>Safety and Noise</b>	
	S-1 Emergency Response. Effective emergency preparedness and rapid response to natural or human induced disasters are provided that minimize the loss of life, damage to property, and disruptions in the delivery of vital public and private services during and following disaster	Consistent. The Project would comply with the City of Simi Valley’s SEMS Multi-Hazard Functional Plan.
	S-1.1 Multi-Hazard Mitigation Plan and NIMS Plan. Implement the strategies in the City’s Multi-Hazard Mitigation Plan and NIMS Plan to prevent the replication of pre-disaster conditions.	Consistent. The Project would not impair implementation of, or physically interfere with, the City’s SEMS Multi-Hazard Functional Plan.
	S-5.1 Review Safety Standards. Regularly review and enforce all seismic and geologic safety standards, including the Building Code, in site design and building construction methods.	Consistent. The Project would be constructed in accordance with the seismic and geologic safety standards contained in the SCRRA DCM (as amended), CBSC, and the City’s Municipal Code.
	S-5.2 Building Codes. Adopt building codes that include design and construction features that provide protection for new and renovated structures in hazard areas.	Consistent. The Project would be constructed in accordance with the Uniform Building Code, SCRRA DCM (as amended), CBSC, and the City’s Municipal Code.
	S-5.3 Geotechnical Investigations. Require geotechnical investigations for applicable improvements to determine the potential for ground rupture, groundshaking, landslides, and liquefaction impacts due to seismic events, as well as expansive soils and subsidence problems, on sites where these hazards are potentially present.	Consistent. The Project would not result in any significant changes related to the risk of seismic hazards in the Project area when compared to existing conditions.
	S-5.6 Damage Prevention and Control. Develop a comprehensive approach to reducing the possibility of damage and losses due to earthquakes.	Consistent. The Project would comply with the City’s Multi-Hazard Mitigation Plan, which recommends the development of a comprehensive approach to reducing the possibility of damage and losses due to earthquakes.
	S-7.2 Fire Department Review. Continue review by the Ventura County Fire Protection District of all proposed structures and developments within the community to mitigate potential wildland fire loss and damage.	Consistent. The Project would comply with the City’s requirements for fire suppression (WLD-1).

**Table 3.10-1. Project Consistency with Applicable Plans and Regulations**

Plan	Policy	Consistency Determination
	S-7.3 Fire Inspection. Work with the Ventura County Fire Protection District to ensure an ongoing fire inspection program to reduce fire hazards associated with critical facilities, public assembly facilities, industrial buildings, and nonresidential buildings.	Consistent. Although the Project does not include the construction of habitable structures and would not result in significant changes within the existing railroad corridor when compared with existing conditions.
	S-7.5 Fuel Modification. Ensure that new development complies with fuel modification requirements of the Ventura County Fire Protection District, as applicable.	Consistent. Future operations would include vegetation management along the ROW, similar to existing conditions, to reduce the build-up of ignitable fuels. The Project would not exacerbate wildfire risk from the installation of additional rail track, station platform and pedestrian undercrossing.
	S-8.1 Floodplain Requirements. Regulate new development and protect existing development within flood prone areas in accordance with City, state, and federal building codes. Follow federal requirements to reduce damage and loss due to flooding and to maintain the City's eligibility under the National Flood Insurance Program.	Consistent. The Project would comply with the terms of the City of Simi Valley's Floodplain Development Permit and demonstrate that the post-Project condition does not increase base flood elevations.
	S-8.3 Flood Prevention Design. Require that new development incorporates sufficient measures to mitigate flood hazards, including the design of on-site drainage systems linking with Citywide storm drainage, gradation of the site so that runoff does not impacts adjacent properties or structures on the site, and elevation of any structures above the localized flooding elevation.	Consistent. The implementation of proposed drainage improvements and mitigation measures as part of the Project would minimize flooding impacts to adjacent properties.
	S-8.7 Preservation of Flood Plains. Require preservation of flood plains as open space, when practical, as the preferred alternative to development or channelization in project environmental impact reports.	Inconsistent. Portions of the Project study area reside within the FEMA-designated 100-year floodplain.
	S-9.1 Interjurisdictional Coordination. Continue to carry out inspections, emergency response, and enforcement of hazardous materials and waste compliance procedures for Simi Valley.	Consistent. During construction, the Project would comply with existing regulations governing the safe transportation, handling, use, and disposal of hazardous materials and wastes.
	S-9.3 Emergency Response. Maintain and enhance the City's first responders' ability to safely and effectively respond to hazardous materials incidents and releases.	Consistent. The Project would not impair implementation of, or physically interfere with, the City's Emergency Plan, and would therefore maintain the City's first responders' ability to respond to hazardous materials incidents and releases.

**Table 3.10-1. Project Consistency with Applicable Plans and Regulations**

Plan	Policy	Consistency Determination
	<p>S-9.4 Hazardous Materials Regulation. Work with relevant agencies regarding enforcement of applicable laws requiring all users, producers, disposers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use, produce, dispose, or transport, and to notify the appropriate City, county, state, and federal agencies in the event of a violation</p>	<p>Consistent. During construction, the Project would adhere to SCRRRA’s DCM (as amended), the SWRCB’s NPDES Construction General Permit, OSHA, California OSHA, and other local, state, and federal regulations, including the RCRA and Business Plan Act.</p>
	<p>S-9.5 Known Areas of Contamination. Require proponents of projects in known areas of contamination from oil operations or other uses to perform comprehensive soil and groundwater contamination assessments, in accordance with applicable standards. If contamination exceeds regulatory action levels, require the proponent to undertake remediation procedures prior to grading and development through a cleanup program under the supervision of the Ventura County Environmental Health Division, Department of Toxic Substances Control, or Regional Water Quality Control Board.</p>	<p>Consistent. A general construction soils management plan that includes general provisions for how soils would be managed within the Project footprint for the duration of construction would be prepared.</p>
	<p>S-9.6 Siting of Sensitive Uses. Develop and implement strict land use controls, performance standards, and structure design standards for uses that generate, use, or store hazardous materials, including development setbacks from sensitive uses such as residential homes, schools, hospitals, daycare and eldercare facilities, high density population facilities (such as movie theaters, auditoriums, museums), and other sensitive uses.</p>	<p>Consistent. The Project is a rail improvement project located within existing railroad ROW. Upon operation, the Project would not include any activities that could result in significant risk to the public or the environment due to proximity to hazardous materials and hazardous waste cleanup sites.</p>
	<p>N-2.3 Noise Attenuation along Major Arterials and Railroad Tracks. Require the use of walls and berms in the design of residential and other noise-sensitive land uses that are adjacent to the 118 Freeway, major arterials, and railroad tracks.</p>	<p>Consistent. Implementation of a quiet zone along the Project alignment would reduce the operational noise impacts resulting from the Project. However, implementation of a quiet zone is ultimately the responsibility of the local jurisdiction and other entities including FRA and CPUC.</p>
	<p>N-3.3 Enforcement of Hours of Construction Activity. Continue to enforce restrictions on hours of construction activity so as to minimize the impacts of noise and vibration from the use of trucks, heavy drilling equipment,</p>	<p>Inconsistent. Noise- and vibration-reducing measures are proposed to be implemented during construction, and Project construction would be limited to daytime hours to the greatest extent practicable. However, temporary nighttime construction may be required and may result in significant unavoidable nighttime noise impacts at adjacent residences.</p>



**Table 3.10-1. Project Consistency with Applicable Plans and Regulations**

Plan	Policy	Consistency Determination
	and other heavy machinery to adjacent uses, particularly in residential areas.	
Ventura County General Plan	HAZ-5.5. Hazardous Materials and Waste Management Facilities. The County shall require discretionary development involving facilities and operations which may potentially utilize, store, and/or generate hazardous materials and/or wastes be located in areas that would not expose the public to a significant risk of injury, loss of life, or property damage and would not disproportionately impact Designated Disadvantaged Communities.	Consistent. The Project could result in the release of hazardous materials into the environment as a result of construction in proximity to past hazardous materials cleanup sites. However, implementation of MM-HAZ-1 would reduce the potential of hazardous materials releasing into the environment. Upon operation, the Project would not include any activities that could result in significant risk to the public or the environment, or disproportionately impact disadvantaged communities, due to proximity to hazardous materials and hazardous waste cleanup sites.
	HAZ-5.3. Preventing Contamination of Natural Resources. The County shall strive to locate and control sources of hazardous materials to prevent contamination of air, water, soil, and other natural resources.	Consistent. The Project's handling, use, transport, and disposal of hazardous materials would be subject to federal, state, and local health and safety requirements and, as such, the Project is not anticipated to create a significant hazard to the public or the environment.
	HAZ-5.6. Hazardous Materials – County Regulatory Oversight. The County shall continue to provide regulatory oversight for all facilities or activities that store, use, or handle hazardous materials.	Consistent. Construction workers who may handle hazardous materials and substances would be required to adhere to OSHA and California OSHA health and safety regulations, which provide oversight for the implementation of procedures for handling, using, and disposing of hazardous substances on a construction site. Additionally, hazardous materials used during Project construction would be transported, stored, and disposed of in accordance with local, state, and federal regulations including the RCRA and Business Plan Act. The Project would not result in any significant changes regarding the transportation of hazardous materials when compared to existing conditions.
	HAZ-6.7. Risk Reduction for Railroad and Trucking Hazards. The County shall condition discretionary development to minimize, to the maximum extent practical through site design or setbacks, the risk for exposure to railroad and trucking hazards.	Consistent. The Project would minimize the risk for exposure to railroad and trucking hazards by transporting, storing and disposing of hazardous materials in accordance with local, state, and federal regulations including the RCRA and Business Plan Act. The Project's level of transportation of hazardous materials would not result in any significant changes when compared to existing condition.

Source: City of Simi Valley 2012b; Ventura County 2020

Notes:

AB=Assembly Bill; CDFW=California Department of Fish and Wildlife; CURB=City Urban Restriction Boundary; DCM=Design Criteria Manual; GHG=greenhouse gas; HQT=High Quality Transit Area; NAHC=Native American Heritage Commission; NHPA=National Historic Preservation Act; NPDES=National Pollutant Discharge Elimination System; NRHP=National Register of Historic Places; OSHA=Occupational Safety and Health Administration; RCRA=Resource Conservation and Recovery Act of 1976; ROW=right of way; RTP=Regional Transportation Plan; SCAG=Southern California Association of Governments; SCCIC=South Central Coastal Information Center; SCRRA=Southern California Regional Rail Authority; SCS=Sustainable Communities Strategy; SEMS=Standardized Emergency Management System; SSM=supplemental safety measure; SWPPP=stormwater pollution prevention plan; SWRCB=State Water Resources Control Board; UPRR=Union Pacific Railroad; VCL=Ventura County Line

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### 3.10.5 Mitigation Measures

Mitigation Measures AES-1, AES-2, AQ-1, BIO-1, BIO-2, BIO-3, CUL-1, CUL-2, CUL-3, PAL-1, PAL-2, PAL-3, HAZ-1, WLD-1, NV-1, NV-2, TRA-1, and TRA-2 are proposed to avoid or minimize potential significant impacts on land use and planning.

### 3.10.6 CEQA Significance Conclusions After Mitigation

With the implementation of Mitigation Measures AES-1, AES-2, AQ-1, BIO-1, BIO-2, BIO-3, CUL-1, CUL-2, CUL-3, PAL-1, PAL-2, PAL-3, HAZ-1, WLD-1, NV-1, NV-2, TRA-1, and TRA-2, land use impacts would be reduced to a less than significant level.

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## 3.11 Noise and Vibration

### 3.11.1 Introduction

The Noise and Vibration section describes the environmental and regulatory setting for noise and vibration in the vicinity of the Project study area. This section also describes the impacts from noise and vibration that would result from construction and operation of the Project and mitigation measures that would reduce significant impacts, where feasible. Cumulative impacts from noise and vibration, in combination with planned, approved, and reasonably foreseeable projects, are discussed in Chapter 4, Cumulative Impacts.

### 3.11.2 Environmental Setting

This section summarizes the existing environmental setting related to noise and vibration within the Project study area. Information contained in this section is summarized from the *Simi Valley Double Track and Platform Project Noise and Vibration Technical Report* (Appendix L of this EIR) and the *Transit Noise and Vibration Impact Assessment Manual* (Federal Transit Administration [FTA] manual) (FTA 2018).

#### Definition of Sound

The most common descriptor of sound and noise associated with community noise measurements is the A-weighted sound pressure level, which is abbreviated as dBA.<sup>1</sup> The term dBA indicates that the decibel (dB) level is A-weighted to approximate the human ear's sensitivity to sounds of different frequencies. The A-weighted sound level of rail noise and other long-term noise-producing activities within and around a community vary with time. Certain noise descriptors are preferred for use in describing community noise environments. These descriptors are based on noise energy and called the equivalent sound level ( $L_{eq}$ ), and the day-night average sound level ( $L_{dn}$ ).  $L_{eq}$  is defined as the continuous steady-state noise level that would have the same total acoustical energy as the real fluctuating noise measured during the same period.

Although  $L_{eq}$  can be measured or computed for any period, it is typically specified for 1 hour ( $L_{eq}[h]$ ) or 24 hours ( $L_{eq}[24h]$ ).  $L_{dn}$  is the same as a 24-hour  $L_{eq}$  except that noise occurring during the nighttime hours (10:00 p.m. to 6:59 a.m.) is weighted or penalized by 10 dBA (Appendix L of this EIR).

#### Vibration

Ground-borne vibration is a small, rapidly fluctuating motion transmitted through the ground. The strength of ground-borne vibration diminishes (or attenuates) fairly rapidly over distance. Some soil types transmit vibration quite efficiently; other types (primarily sandy soils) do not.

There are several basic measurement units commonly used to describe the intensity of ground vibration. The descriptors used by FTA are peak particle velocity (PPV), in units of inches per second, and the velocity decibel (VdB). The velocity parameter (instead of acceleration or displacement) best correlates with human perception of vibration. Thus, the response of humans, buildings, and sensitive

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<sup>1</sup> The unit of sound pressure level measurement is the decibel (dB). It is a unit describing the amplitude of sound pressure compared to a reference pressure. Commonly encountered sound levels range from slightly above the threshold of hearing and very quiet (around 20 dB) to very loud sounds at 130 dB.

equipment to vibration is described in this section in terms of the root mean square (RMS) velocity level in VdB units relative to one micro-inch per second.

As a point of reference, the average person can just barely perceive vibration velocity levels below 70 VdB (typically in the vertical direction). Typical background vibration levels are between 50 and 60 VdB under normal circumstances, whereas the levels for minor cosmetic damage to fragile buildings or blasting are generally 100 VdB.

### Noise Sensitive Land Uses

For the purposes of this analysis and consistent with the FTA manual, the study area for noise and vibration is defined as follows respectively:

- The study area for noise is the area within 750 feet of the commuter railroad alignment.
- The study area for vibration is the area within 200 feet of the commuter railroad alignment.

Noise and vibration sensitive land uses in the Project study area include low to medium-density residential areas. As described further in Section 3.11.3, these uses are classified as Noise Category 2 uses for the purposes of the noise and vibration analysis. No schools are located adjacent to the Project footprint. Existing noise sources in the Project study area include passenger and freight rail operations (such as train wheels, train horns, and announcements on station speakers), roadway traffic, and general community activity (pedestrians, cyclists, and parking lot traffic).

### Ambient Noise and Vibration Conditions

Field measurements were conducted to document ambient noise and vibration conditions. Noise measurements were taken at two locations: (SVDT-A) and (SVDT-B). SVDT-A is located northeast of the at-grade crossing at Tapo Canyon Road. SVDT-B is located at the Simi Valley Station at 5050 East Los Angeles Avenue) and adjacent to an apartment complex. The noise measurements were completed from publicly accessible ROWs that were representative of the residential areas in the Project study area.

The measurement at location SVDT-A was completed for a 24-hour period following FTA's manual. The measurement at location SVDT-B was completed by acquiring three 1-hour measurements following FTA's manual during peak hours, midday (outside of peak hour), and late night (12:00 to 4:00 a.m.). Table 3.11-1 summarizes the measured noise levels at SVDT-A and SVDT-B. Additional details are provided in Appendix L of this EIR.

**Table 3.11-1. Existing Noise Levels**

Site Identification	Location	Noise Levels (dBA)	
		L <sub>dn</sub>	L <sub>eq</sub> (peak hour)
SVDT-A	ROW	65.6	72.3
SVDT-B	Simi Valley Transit Station	51.9	56.7

**Notes:**

Sound-level measurements occurred during the COVID-19 pandemic conditions. In recognition of the reduced operating conditions, the noise model was calibrated to incorporate typical (pre-pandemic) passenger rail operations.

dBA=A-weighted decibel; L<sub>dn</sub>=day-night average sound level; L<sub>eq</sub>=equivalent sound level; ROW=right-of-way

Vibration measurements were completed to document vibration levels from existing train pass-by events. An array of vibration sensors was set up near the noise monitoring location SVDT-A at distances of 65-feet, 115-feet, 215-feet and 315-feet from the existing mainline track. The vibration array was also redeployed 15-feet closer to the tracks to represent conditions for passenger rail operating on the Project track, which would be 15-feet closer to the vibration sensitive uses north of the tracks at SVDT-A. Table 3.11-2 summarizes the vibration measurement results by providing the measurements from closest to and farthest from the existing mainline track. The complete vibration measurement results are provided in Appendix L of this EIR.

**Table 3.11-2. Existing Vibration Levels**

Time	Train Pass-by Event	Speed (miles per hour)	Distance from Existing Track	Measured VdB
<b>Date: 10/08/2020</b>				
6:07:00 a.m.	VCL Inbound	72	65	86
			315	71
6:45:00 a.m.	VCL Inbound	76	65	84
			315	69
7:23:00 a.m.	VCL Inbound	75	65	87
			315	74
7:54:00 a.m.	VCL Outbound	65	65	84
			315	73
8:20:00 a.m.	Surfliner Inbound	75	65	83
			315	68

**Table 3.11-2. Existing Vibration Levels**

Time	Train Pass-by Event	Speed (miles per hour)	Distance from Existing Track	Measured VdB
10:09:00 a.m.	Surfliner Outbound	68	65	83
			315	— <sup>a</sup>
10:54:00 a.m.	Surfliner Inbound	75	65	84
			315	— <sup>a</sup>
11:12:00 a.m.	Coast Starlight	67	65	83
			315	— <sup>a</sup>
1:44:00 p.m.	VCL Outbound	58	65	84
			315	— <sup>a</sup>
2:01:00 p.m.	Freight Train	46	65	88
			315	— <sup>a</sup>
<b>Date: 10/09/2020</b>				
6:06:00 a.m.	VCL Inbound	72	50	87
			300	— <sup>a</sup>
8:44:00 a.m.	VCL Inbound (broken train)	45	50	83
			300	69
9:14:00 a.m.	VCL Outbound	65	50	85
			300	71
9:24:00 a.m.	Surfliner Inbound	73	50	87
			300	70
9:46:00 a.m.	VCL Inbound	75	50	85
			300	70
10:10:00 a.m.	Surfliner Outbound	63	50	84
			300	68
11:00:00 a.m.	Surfliner Inbound	71	50	87
			300	70



**Table 3.11-2. Existing Vibration Levels**

Time	Train Pass-by Event	Speed (miles per hour)	Distance from Existing Track	Measured VdB
11:13:00 a.m.	Coast Starlight Inbound	72	50	86
			300	77

Notes:

VCL=Ventura County Line; VdB=velocity decibel

<sup>a</sup> Data collection suspended due to equipment error.

### 3.11.3 Regulatory Setting

This section summarizes federal, state, and local regulations related to noise and vibration that are applicable to the Project.

#### Federal

##### *Noise Control Act of 1972*

The Noise Control Act of 1972 (42 United States Code [USC] Section 4910) was the first comprehensive statement of national noise policy. The Noise Control Act declared that “it is the policy of the United States to promote an environment for all Americans free from noise that jeopardizes their health or welfare.”

##### *Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual*

The FTA manual (FTA 2018) provides the methodology and impact criteria applicable to conventional passenger rail and transit components associated with the Project.

In the FTA manual (FTA 2018), noise impact criteria for the operation of rail facilities are based on the change in outdoor noise exposure using a sliding scale with three land use categories and three degrees of impact. For operational rail noise, FTA’s three land use categories are as follows:

- **Noise Category 1** – Tracts of land where quiet is an essential element in their intended purpose, such as outdoor amphitheatres, concert pavilions, and National Historic Landmarks with significant outdoor use.
- **Noise Category 2** – Residences and buildings where people normally sleep, including homes, hospitals, and hotels.
- **Noise Category 3** – Institutional land uses (i.e., schools, places of worship, libraries) with use typically during the daytime and evening. Other uses in this category can include medical offices, conference rooms, recording studios, concert halls, cemeteries, monuments, museums, historical sites, parks, and recreational facilities.

Based on FTA criteria, potential noise impacts fall into three types: no impact, moderate impact, and severe impact (FTA 2018). The impact categories are described further below:

- **No impact** – A project on average would result in an insignificant increase in the number of instances where people are highly annoyed by new noise. This impact level would not require mitigation.
- **Moderate impact** – The change in cumulative noise is noticeable to most people, but may not be sufficient to cause strong, adverse community reactions. The FTA manual indicates mitigation for this impact level should be considered but is not required.
- **Severe impact** – A significant percentage of people would be highly annoyed by the noise, perhaps resulting in strong, negative community reaction. The FTA manual indicates mitigation for this impact level is required.

## State

### *California Noise Control Act of 1973*

The California Noise Control Act was enacted in 1973 (Health and Safety Code Section 46010, et seq.); it allows the Department of Health Services' Office of Noise Control to offer assistance to local communities that are developing local noise control programs and work with OPR to provide guidance for the preparation of the required noise elements in city and county general plans, pursuant to Government Code Section 65302(f).

### *California Environmental Quality Act*

The State of California has established land use compatibility criteria that provide guidance on the compatibility of different types of land uses based upon the existing community noise level. These guidelines are often adopted by city and county agencies for land use planning purposes. The State of California has not adopted specific noise criteria that are applicable to rail projects; therefore, the noise impact assessment is based on the guidelines provided by FTA.

## Local

The City has regulations that pertain to construction noise; however, the City does not have authority to regulate noise from railroads. Specifically, the City controls construction noise via Title 5, Chapter 16, Section 16.02 of its Code of Ordinances. This ordinance allows for the erection, excavation, demolition, alteration, construction, or repair of any structure or building between the hours of 7:00 a.m. and 7:00 p.m. Pile drivers, hammers, and the like are not permitted between the hours of 7:00 p.m. and 7:00 a.m. The City does not identify vibration standards or thresholds in their municipal code or other ordinances.

The General Plan (City of Simi Valley 2012b) includes goals and objectives related to noise in the City. Table 3.10-1 includes applicable General Plan goals and policies pertaining to noise.

### 3.11.4 Impact Analysis

This section describes the potential noise and vibration impacts that would result from Project implementation and the thresholds used to determine whether an impact would be significant. Mitigation measures to mitigate potentially significant impacts are identified, where appropriate.

#### Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to noise and vibration would be considered significant if the Project would:

- A. Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- B. Result in the generation of excessive groundborne vibration or groundborne noise levels; or,
- C. For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, the project would expose people residing or working in the Project study area to excessive noise levels.

#### Thresholds Requiring No Further Analysis

The following thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project:

- C. The Project would not involve the placement of new noise sensitive land uses and is not located within two miles of an airport land use plan or in the vicinity of a private airstrip. Therefore, the Project would not expose people residing or working in the Project study area to excessive noise levels associated with an airport. No impact would occur. No further discussion is required.

#### Methodology

The potential for significant noise and vibration impacts was assessed by following the methodology described in the FTA manual (FTA 2018). FTA guidance requires that mitigation measures be implemented for severe impacts and considered for moderate impacts. The approach and methodology for evaluating noise and vibration impacts for the construction and operational phases of the Project is described below.

##### *Construction Noise*

Noise from construction activity is generated by the broad array of powered, noise-producing mechanical equipment used in the construction process. This equipment ranges from hand-held pneumatic tools to excavators, loaders, a variety of trucks, and tie and rail handling equipment. To assess potential noise impacts from construction, this noise analysis used the methodology in Section 7 of the FTA manual (FTA 2018).

The noise exposure at a receiver location was calculated from the dB addition of all operating construction equipment using the equations and methodology described in the FTA manual (FTA 2018). Construction equipment used in the analysis included compressors, welding machines, mobile cranes, front-end loaders, rollers, dozers, graders, and excavators. The range in noise levels typically

generated by the equipment assumed for the analysis ranges from 67 dBA  $L_{eq}$  (e.g., compressor) to 87 dBA  $L_{eq}$  (e.g., excavator) at a distance of 50-feet based on source levels from the Federal Highway Administration Roadway Construction Noise Model, Version 2.0 (Table 3.11-3).

**Table 3.11-3. Typical Construction Equipment Noise Levels**

Equipment/Source	dBA $L_{max}$ at 50 Feet
Compressor	67
Welding machine	72
Crane	76
Excavator	87
Front-end loader	81
Dozer	86
Grader	78

Source: Appendix L of this EIR

Notes:

dBA=A-weighted decibel;  $L_{max}$ =maximum sound level

### Construction Vibration

To assess potential vibration impacts from construction, the vibration analysis used the methodology contained in Section 7.2 of the FTA manual (FTA 2018). The potential for damage to structures from Project-related construction vibration was analyzed for the sensitive receivers discussed above. Vibration source levels for a variety of typical construction equipment types are outlined in Table 7-4 of the FTA manual (reproduced in this document as Table 3.11-4), in terms of PPV in inches per second at a reference distance of 25 feet from the source and VdB at 25 feet (FTA 2018). For this analysis, the source of typical vibration levels for a vibratory roller (0.210 inch per second PPV) and a large bulldozer (0.089 inch per second PPV) was utilized.

**Table 3.11-4. Typical Construction Equipment Vibration Levels**

Equipment/Source		PPV at 25 Feet (inch/second)	Approximate Vibration Velocity Level at 25 Feet <sup>a</sup>
Pile driver (impact)	Upper range	1.518	112
	Typical	0.644	104
Pile driver (vibratory)	Upper range	0.734	105
	Typical	0.170	93
Clam shovel drop (slurry wall)	—	0.202	94

**Table 3.11-4. Typical Construction Equipment Vibration Levels**

Equipment/Source		PPV at 25 Feet (inch/second)	Approximate Vibration Velocity Level at 25 Feet <sup>a</sup>
Hydromill (slurry wall)	In soil	0.008	66
	In rock	0.017	75
Vibratory roller	—	0.210	94
Hoe ram	—	0.089	87
Large bulldozer	—	0.089	87
Caisson drilling	—	0.089	87
Loaded trucks	—	0.076	86
Jackhammer	—	0.035	79
Small bulldozer	—	0.003	58

Source: FTA 2018

Notes:

<sup>a</sup> RMS VdB reference 1 microinch per second

PPV=peak particle velocity; RMS=root mean square; VdB=velocity decibel

### *Operational Noise*

#### **RAIL NOISE**

The methodologies outlined in Section 4.5 of the FTA manual (FTA 2018) were used to calculate the noise levels attributable to train operation on the rail alignment under the existing, future-no-project, and future-with-project scenarios (Project-related contribution). Receivers of interest (i.e., noise-sensitive receptors) were selected using the guidance provided in Section 4.5 of the FTA manual (FTA 2018).

The noise modeling effort associated with the detailed noise assessment accounted for the construction fleet and duration to construct the Project, as well as the number of train movements anticipated to pass along the railroad during daytime and nighttime hours throughout operation. The following assumptions were made as part of the detailed noise assessment:

- The typical train speed along the alignments through the Project study area is 50 miles per hour;
- Future train movements and consists (e.g., the number of locomotives and cars per train movement) is one locomotive and four passenger cars for the VCL;
  - Other train consists used for existing train movements to assess quiet zone effectiveness included 2 locomotives and 10 passenger cars for the Amtrak Coast Starlight, 1 locomotive and 7 passenger cars for the Amtrak Pacific Surfliner, 2 locomotives and 100 railcars for freight trains, and the same consist listed previously for the VCL;

- Locomotive horn use is included in this assessment at grade-crossings;
- The future noise exposure would be the combination of the existing noise exposure and the additional Project-related noise exposure:
  - Due to Project environmental permit scheduling requirements, it was necessary to monitor existing sound levels during COVID-19 pandemic conditions. Under these conditions, passenger rail operates under a reduced schedule. To account for the reduced passenger rail activity the difference between the reduced passenger rail schedule and the typical weekday schedule were calculated in the noise model for the Project. The difference between the two conditions was logarithmically added to the monitored sound levels to identify a more accurate representation of typical non-pandemic noise conditions.
  - Train movement volumes are projected to increase in the future (with Project implementation and completion of other VCL projects, Metrolink service would increase from 33 revenue trains to 48 revenue trains per weekday throughout the VCL). These train movements are incorporated into the noise modeling and the Project levels logarithmically added to the existing levels, then the difference between the cumulative with Project conditions is compared with the existing levels to identify impact conditions.
- Peak daytime hour noise level ( $L_{eq}$ ) for daytime use only noise-sensitive land uses, such as parks and schools, are calculated based on the peak hour of anticipated railroad activity; and,
- For construction-related impacts, the anticipated construction equipment mix and phases were used to identify potential impacts.

### THREE DIMENSION PREDICTIVE MODEL

Operational sound levels can be assessed using the FTA spreadsheet models; however, efficiencies can be gained by implementing off-the-shelf acoustic modeling software that implements the calculation methods of the FTA spreadsheets. For this assessment, the three-dimensional off-the-shelf predictive model (i.e., SoundPLAN) was used to calculate rail noise levels implementing the FTA methods for regional/intercity rail. This modeling program conforms to the FTA standard for rail noise sources. The SoundPLAN model includes an array of data inputs, such as sound sources, topography, buildings, and ground characteristics, such as paved areas and vegetated areas. The following steps were taken to implement the FTA standard for rail noise sources in SoundPLAN:

- Each train configuration and the number of train movements on a given track location were entered into SoundPLAN.
- Each source term was applied to specific rail lines based on estimates of train volumes.
- Modeling included terrain contours to capture terrain changes.
- Buildings were modeled as three-dimensional shapes to capture attenuation impacts.
- Ground type is assumed to be hard ground (i.e., acoustically reflective).

Operational noise levels were compared with the relevant noise impact criteria identified in Section 3.11.3. Noise levels associated with special track work, such as crossovers, were also included in this assessment for sensitive receptors.

## WHEEL/RAIL NOISE

There are no tight radius curves in the Project study area; therefore, wheel squeal is not a factor requiring consideration in the analysis.

## TRAFFIC NOISE

Based on anticipated low trip generation during construction, no modeling of vehicular traffic noise during construction was undertaken as part of this analysis.

### *Operational Vibration*

The FTA procedures for a general operational vibration assessment (as outlined in Section 6 of the FTA manual) were used for this analysis (FTA 2018). The FTA assessment procedure requires the following data:

- **Number of daily vibration events** – The number of daily events was classified as occasional because there would be over 30 but less than 70 vibration events of the same kind per day.
- **Receiver land use designation (categories specified above)** – Category 2 (for the residences) and no Category 1 or 3 land uses are present.
- **Vibration source levels** – The source levels were derived from Figure 6-4 of the FTA manual (FTA 2018) using the curve for locomotive-powered passenger or freight.
- **Measured vibration source levels** – Near the Tapo Canyon Road at-grade crossing vibration source levels were measured, and the results were used for neighborhoods in this portion of the Project analysis area.
- **Distance from source to receiver (building) footprints** – The distance between the source (i.e., rail centerline) and the receiver was measured using a geographic information system.
- **Train speed, suspension, wheel condition (worn or flat-spots), and track condition** – Train speed estimates would be the same for vibration as stated for noise and the train's wheels were assumed to be in good condition (i.e., no flat spots).
- **Soil characteristics of ground between the vibration source and receiver** – Soil propagation characteristics were assumed to be normal (rather than efficient).
- **Receiver construction/foundation type and description, including whether it is fragile or extremely fragile** – Using the generalized ground surface vibration curve, the RMS velocity level data at the receiver distance of interest were adjusted based on the factors affecting the source, factors affecting the vibration path, and factors affecting the receiver. Structure types and associated adjustments were also obtained from the FTA manual (FTA 2018).

The potential for damage to adjacent sensitive resources because of Project-related operational vibration was analyzed in addition to the modeled noise- and vibration-sensitive receivers. Following FTA methodology, the potential for vibration damage and annoyance was assessed at sensitive land uses.

## Impact Analysis

*Would the Project result in generation of a substantial increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

### CONSTRUCTION

**Significant Unavoidable Impact.** The conventional construction activities for the Project would require the use of a fleet of construction vehicles and heavy equipment. Table 3.11-3 and Table 3.11-4 include noise levels typical for specific types of conventional construction equipment. The equipment noise levels range from a level of 58 dBA at the low end to pile driving equipment (peaks) up to 112 dBA at a distance of 25 feet. As provided in Table 3.11-5, the range in noise levels typically generated by the equipment assumed for the analysis ranges from 78 dBA  $L_{eq}$  to 91 dBA  $L_{eq}$  at 50 feet. Given that nighttime construction is also proposed, these same noise levels would be associated with construction activities occurring during nighttime hours.

As provided in Appendix L of this EIR, up to approximately 150 receptors would be impacted by temporary construction noise; detailed noise calculation results are provided in the Appendix L. The range of predicted construction noise levels for each phase of construction and the associated impact type are provided in Table 3.11-5. As previously noted, construction would be limited to daytime hours to the greatest extent practicable. These predicted noise levels carry the potential to exceed FTA’s nighttime construction noise criteria of 70 dBA  $L_{eq}$  at residential uses. An exceedance of the nighttime construction standards would be considered a significant impact in the absence of mitigation. Implementation of Mitigation Measure NV-1, which would employ noise- and vibration-reducing measures during construction, and Mitigation Measure NV-2, which would require the preparation and maintenance of a community notification plan, would reduce potentially significant impacts resulting from nighttime construction noise to a large extent. However, temporary nighttime construction impacts would remain potentially significant and unavoidable at adjacent residential land uses.

**Table 3.11-5. Construction Noise Results**

Construction		Equipment	dBA $L_{max}$ at 50 feet	Composite dBA $L_{eq}$ at 50 feet	Range of Sound Levels (dBA $L_{eq}$ )	Potential Impact Type
Main-Phase	Sub-Phase					
1	a (construct structures)	Compressor	67	78	37-87	FTA nighttime
		Welding machine	72	—		
		Crane	76	—		
	b (construct trackwork and new turnouts)	Excavator	87	90		
		Front-end loader (cyclical)	81			
		Dozer	86			
		Crane	76			
	c (signal installation)	Excavator	87	91		
		Front-end loader (cyclical)	81			
		Dozer	86			
		Grader (pass by)	78			



**Table 3.11-5. Construction Noise Results**

Construction		Equipment	dBA L <sub>max</sub> at 50 feet	Composite dBA L <sub>eq</sub> at 50 feet	Range of Sound Levels (dBA L <sub>eq</sub> )	Potential Impact Type
Main-Phase	Sub-Phase					
		Compactor (roller)	82			
2	a (construct track and roadway improvements at at-grade crossings)	Compressor	67	78	37-73	FTA nighttime
		Welding machine	72			
		Crane	76			
	b (transfer rail service onto the newly constructed Main Track 1)	None	—	—	—	—
	c (finish installing signals)	None	—	—	—	—
3	a (construct Main Track 2 and upgrade existing from timber to concrete ties)	Compressor	67	78	37-88	FTA nighttime
		Welding machine	72			
		Crane	76			
	c (remove and reconstruct existing platform and finish upgrading any remaining timber ties for concrete ties)	Excavator	87	91		
		Front-end loader (cyclical)	81			
		Dozer	86			
		Grader (pass by)	78			
		Compressor	67			
		Compactor (roller)	82			
		Crane	76			
Welding machine	72					

Notes:

dBA=A-weighted decibel; FTA=Federal Transit Administration; L<sub>eq</sub>=equivalent sound level; L<sub>max</sub>=maximum sound level

## OPERATION

**Less than Significant with Mitigation.** Operation of the Project would result in increased noise levels from sources including train horn noise, traffic noise, and wheel/rail noise from daily passenger rail operations. Project operations would involve increased passenger rail service along the railroad corridor. In addition to noise produced as part of the additional trains’ movements back and forth along the railroad corridor, operations would involve the use of locomotive horns at at-grade crossings near noise-sensitive land uses and wayside signal bells at crossings. Each of these sources was accounted for as part of the detailed noise analysis (Appendix L of this EIR). The actual rail noise levels experienced at any one receptor would be dependent on several factors:

- Track condition and gradient;
- Intervening ground surface characteristics, whether acoustically reflective or absorptive (i.e., pavement or vegetation);
- Meteorological factors such as wind and temperature gradient; and,
- Shielding due to structures, earthen berms, hills, and the proximity of a roadway.

The results of the rail noise impact assessment are summarized in Table 3.11-6. For the future Project conditions, Metrolink trains would operate on any tracks available to move most efficiently through the railroad corridor. In some cases, this would mean that trains would operate in closer proximity to sensitive receptors than they currently do, which is in addition to increases in rail traffic on Metrolink’s VCL. As shown in Table 3.11-6, the Project is predicted to result in no severe impacts and moderate impacts at 33 Category 2 land uses (residences). These noise impacts would be significant in the absence of mitigation.

**Table 3.11-6. Project Operational Noise Conditions**

Impact Type	Land Use Category 2
Severe	0
Moderate	33
No impact	632

Source: Appendix L of this EIR

The highest increase in sound levels are predicted at residences southeast of the Simi Valley Station with the largest increase of 3.6 dB, resulting in a moderate impact. Other moderate impacts would occur at sensitive receptors near the Simi Valley Station due to increases in noise ranging from 1.4 dB to 3.5 dB from the Project, at those ROW receptors located closest to the railroad. Impacts are more pronounced at the existing at-grade crossing at Hidden Ranch Road where trains use their horns. All of the moderate impacts are within approximately 0.25 mile of the existing grade crossing associated with the activation of locomotive warning devices (e.g., horns). The moderate impacts are considered significant in the absence of mitigation.

Implementation of Mitigation Measure NV-3, which would establish quiet zones at the at-grade crossings, would reduce potentially significant impacts to a less than significant level. In the absence of quiet zones proposed in Mitigation Measure NV-3, implementation of Mitigation Measure NV-4, which would enable the use of wayside horns instead of locomotive horns at the at-grade crossings, would reduce potentially significant impacts to a less than significant level.

*Would the Project result in exposure of persons to, or generation of, excessive ground-borne vibration or ground-borne noise levels?*

**CONSTRUCTION**

**Less than Significant with Mitigation.** Vibration levels were analyzed at sensitive-receptor locations where the new main line track would be installed in closer proximity and track would be relocated. To be conservative, the vibration-damage analysis assumes the most vibration-sensitive structures are FTA Category 3 structures, which are nonengineered timber and masonry buildings. For vibration annoyance, the land use category most sensitive to construction vibration includes places where people typically sleep, such as residences.

Construction of the new main line track includes activities that have the potential to cause construction vibration impacts. These activities include the use of vibratory rollers and bulldozers to place track ballast and lay down railroad ties and tracks. Out of the two pieces of equipment, vibratory rollers produce the highest levels of vibration, and therefore, Category 3 structures located within 25 feet of vibratory roller activities have the potential to experience vibration impacts. The highest vibration level when evaluating for structural damage is predicted at 0.068 PPV at the nearest receptor to construction. This level is below the damage impact criteria. Impacts would be less than significant.

Vibration annoyance predictions were also calculated at each receptor and assessed against the threshold for Category 2 uses of 80 VdB because construction vibration would not be present in any location for extended periods of time. Table 3.11-7 provides the vibration levels for the three closest receptors to construction.

**Table 3.11-7. Construction Vibration Annoyance Results**

Vibration Sensitive Receptor <sup>a</sup>	FTA Category	Distance from Vibratory Roller (feet) <sup>b</sup>	PPV (inch/second)	VdB
R95	2	53	0.068	84
R96	2	57	0.061	83
R97	2	57	0.062	83

Notes:

<sup>a</sup> See Appendix L of this EIR for detailed results at all receptors.

<sup>b</sup> Vibratory roller source level at 25 feet is 0.21 PPV and 94 VdB

FTA=Federal Transit Administration; PPV=peak particle velocity; VdB=velocity decibel

Construction vibration annoyances can be anticipated at sensitive receptors located within approximately 73 feet of the proposed construction. Nineteen of the receptors analyzed are predicted to experience annoyances from vibration during construction activities, and a maximum vibration level of 84 VdB is predicted at the nearest receptor. However, implementation of Mitigation Measures NV-1 and NV-2 would reduce potentially significant impacts to a less than significant level.

**OPERATION**

**Less than Significant Impact.** The Project corridor would be characterized as one that is occasionally used per FTA’s manual. Vibration levels under existing conditions are estimated to be above the FTA vibration impact criteria at many of the sensitive uses; therefore, for these cases, the FTA impact

criteria of 3 dB increase or greater over existing conditions is appropriate. For other locations where the existing vibration level does not exceed the FTA criteria, the Project's vibration levels are evaluated against the FTA criteria for occasionally used railroad lines (75 VdB).

No vibration impacts are predicted from the Project. Table 3.11-8 provides the predicted vibration levels for the sensitive areas with the highest predicted levels.

**Table 3.11-8. Operational Ground-borne Vibration and Noise Results**

Vibration Sensitive Receptor <sup>s</sup>	FTA Category	Distance from Track (feet)	Existing VdB	Project VdB	Change in VdB	Project Ground-Borne Noise (dBA)
R98	2	59	76	78	2	28
R99	2	59	76	78	2	28
R100	2	63	75	77	2	27
R101	2	63	75	77	2	27
R116	2	70	75	76	2	26
R117	2	67	75	77	2	27
R118	2	69	75	76	2	26
R133	2	69	75	76	2	26
R200	2	61	76	77	2	27
R222	2	67	75	77	2	27

Notes:

<sup>a</sup> See Appendix L for detailed results at all receptors. Special track work (crossover) located within 100 to 200 feet from the vibration sensitive use, 5-dB adjustment included in the calculation.

dB=decibel; FTA=Federal Transit Administration; VdB=velocity decibel

Ground-borne noise levels were also analyzed for the Project. Based on the predicted ground-borne noise levels for the Project, there would be no ground-borne noise impacts. Impacts would be less than significant. No mitigation is required.

### 3.11.5 Mitigation Measures

The following mitigation is proposed to reduce the Project's potential to increase noise within the Project study area.

**NV-1**      **Employ noise- and vibration-reducing measures during construction.** The construction contractor will employ measures to minimize and reduce construction noise and vibration. Noise and vibration reduction measures that would be implemented include, but are not limited to, the following:

- Design considerations and Project layout:
  - Construct temporary noise walls between noisy activities and noise-sensitive receivers
  - Place site equipment on the construction site as far away from noise-sensitive sites as possible
  - Construct walled enclosures around especially noisy activities or clusters of noisy equipment
- Sequence of operations:
  - Combine noisy operations to have them occur in the same time period
    - The total noise level produced would not be significantly greater than the level produced if the operations were performed separately
  - Avoid nighttime construction adjacent to noise-sensitive receptors to the maximum extent feasible
    - Sensitivity to noise increases during the nighttime hours in residential neighborhoods
- Alternative construction methods:
  - Use specially quieted equipment, such as quieted and enclosed air compressors and properly working mufflers on all engines
  - Select quieter demolition methods, where feasible

These noise and vibration reduction methods shall be incorporated into Metrolink's contractor specifications.

**NV-2**      **Prepare a community notification plan for Project construction.** To proactively address community concerns related to construction noise and vibration, prior to construction, SCRRA and/or the construction contractor will prepare and maintain a community notification plan. Components of the plan will include initial information packets prepared and mailed to all residences within a 500-foot radius of Project construction. Updates to the plan will be prepared as necessary to indicate changes to the construction schedule or other processes. SCRRA will identify a Project liaison to be available to respond to questions from the community or other interested groups.

**NV-3 Quiet zone implementation.** At-grade crossings will be designed and constructed to be compatible with the formation of quiet zones. Prior to the operation, SCRRA will coordinate with the City of Simi Valley, CPUC, and FRA to construct and establish quiet zones at the following grade crossings:

- Sequoia Avenue
- Tapo Canyon Road
- Tapo Street
- East Los Angeles Avenue
- Hidden Ranch Drive

With implementation of quiet zones, Project operational noise levels would be reduced, and all impacts would be eliminated. Appendix L of this EIR provides detailed calculations at each of the sensitive receptors.

**NV-4 Wayside horns.** If the City's application for quiet zone status at the Project's at-grade crossings (i.e., Sequoia Avenue, Tapo Canyon Road, Tapo Street, East Los Angeles Avenue, and Hidden Ranch Drive) is not approved by FRA, the use of wayside horns at the at-grade crossings would be implemented instead of a quiet zone. Wayside horns would be used instead of locomotive horns to warn roadway vehicles, pedestrians, and bicyclists of an oncoming train. A plan to use wayside horns in place of the locomotive horn at public grade crossings would be coordinated with the City of Simi Valley and the local agency having responsibility for traffic control and law enforcement on the road crossings, as well as the state agency responsible for railroad safety (e.g., CPUC), any railroads that share the ROW, and FRA prior to Project approval.

### 3.11.6 CEQA Significance Conclusions After Mitigation

With implementation of Mitigation Measures NV-1 through NV-4, the Project's impact on noise and vibration would be minimized; however, residual moderate impacts would remain.

SCRRA does not have a formal noise mitigation policy; however, SCRRA's goal is to substantially reduce noise levels at severe impacts and implement noise mitigation at moderate impacts where feasible and reasonable. There are 33 moderate impacts predicted from operation of the Project. SCRRA has considered a range of feasible and reasonable mitigation measures to minimize the moderate noise impacts resulting from the implementation of the Project.

During operation, implementation of a quiet zone along the Project alignment is the most effective means for reducing the moderate operational noise impacts resulting from the Project. Noise walls were considered but rejected (refer to Chapter 5, Alternatives) due to their limited effectiveness, especially at roadway at-grade crossings and access points. However, implementation of a quiet zone is ultimately the responsibility of the local jurisdiction and other entities including FRA and CPUC. Although SCRRA does not retain full control for implementation, the City has indicated support for a quiet zone. If quiet zones are not possible, wayside horns could alternatively be implemented at the crossings to eliminate the need for trains to sound their horns at crossings but would be less effective. Either approach would the moderate impacts. Given these considerations, long term operational noise impacts would be mitigated to a level of less than significant.

Implementation of the construction noise and vibration mitigation measures are proposed to address noise levels generated during day and nighttime construction activities. By restricting the loudest activities to daytime periods, noise levels would remain below the FTA's guidelines. As previously stated, nighttime construction (and the associated temporary noise impact) would likely occur for the Project and could impact up to 150 receptors. Even with these noise and vibration reduction measures, noise levels could remain in excess of FTA criteria and remain significant.

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## 3.12 Transportation and Traffic

### 3.12.1 Introduction

The Transportation and Traffic section describes the environmental setting and regulatory setting for the transportation system in the Project study area. It also describes the impacts on the transportation system that would result from construction and operation of the Project and mitigation measures that would reduce significant impacts, where feasible. Cumulative impacts on the transportation system, in combination with planned, approved, and reasonably foreseeable projects, are discussed in Chapter 4, Cumulative Impacts.

### 3.12.2 Environmental Setting

Information contained in this section is summarized from Appendix M, *Simi Valley Double Track and Platform Project Traffic Impact Study (TIS)*. This section summarizes the existing environmental setting related to the transportation system within the Project study area, which consists of the existing railroad corridor, two arterial highways parallel to the railroad, four additional roadways that intersect the railroad, and two bicycle paths paralleling the railroad, as described below.

#### Existing Regional Transportation Facilities

The Project study area overlaps portions of SCRRA's Ventura Subdivision that traverse through central portions of the City. The northern 40 feet of the ROW is owned by the VCTC, a SCRRA member agency, and the southern 60 feet are owned by UPRR. The existing railroad corridor is utilized by commuter and intercity passenger rail, as well as freight rail service by UPRR. The Metrolink VCL provides passenger rail service to station stops including in the City of Los Angeles east of the Project study area and Ventura to the west. Amtrak operates two intercity services along the railroad: the Pacific Surfliner from San Diego to San Luis Obispo, and the Coast Starlight from Los Angeles to Seattle.

State Route (SR) 118 is the major highway that provides regional access to the City and travels parallel to the railroad between Ventura and San Fernando.

#### Existing Local Transportation Facilities

##### *Local Public Transit*

The VCTC operates bus service within Ventura County. Route 77 operates between Simi Valley Station in the east and Ventura Transit Center to the west, largely travelling along SR 118. Within the City, Route 77 travels from SR 118 to Los Angeles Avenue via Tapo Canyon Road and stops at the Simi Valley Station before returning to SR 118 via Stearns Street.

The City operates local bus service within the City limits. Route 20 provides service to the Simi Valley Metrolink Station, as well as downtown and western Simi Valley. In the Project vicinity, Route 20 largely travels east-west on Los Angeles Avenue, but detours to downtown Simi Valley via Tapo Canyon Road and Tapo Street.

### Existing Roadway Network

Table 3.12-1 lists the existing roadways that traverse or parallel the Project study area. Except for Cochran Street, which parallels the railroad approximately 0.5 mile to the north, all roadways cross the railroad at-grade. Further detail on these roadways is available in Appendix M of this EIR.

**Table 3.12-1. Project Study Area Roadways**

Roadway	Direction	Classification	Lanes	Speed Limit	Bicycle Facilities
Tapo Canyon Road	North-south	Primary arterial	4	45 miles per hour	Class II
East Los Angeles Avenue	East-west	Primary arterial	4	45 miles per hour	Class II
Tapo Street	North-south	Secondary arterial	4/2 <sup>a</sup>	40 miles per hour	None
Sequoia Avenue	North-south	Secondary arterial	4	45 miles per hour	Class II <sup>b</sup>
Cochran Street	East-west	Secondary arterial	4	40 miles per hour	None
Hidden Ranch Drive	North-south	Local	2	30 miles per hour	None

Sources: Appendix M, City of Simi Valley 2008, 2012b

<sup>a</sup> Tapo Street provides two lanes each direction north of East Los Angeles Avenue and one lane each direction south of East Los Angeles Avenue intersection

<sup>b</sup> Bicycle lanes are only provided south of East Los Angeles Avenue intersection

Eight intersections of the above roadways were selected as study intersections. As shown in Table 3.12-2, all study intersections currently operate at level of service (LOS) C or higher.

**Table 3.12-2. Existing Peak Hour Level of Service Results**

ID	Primary Street	Secondary Street/Crossing	Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
1	Tapo Canyon Road	East Los Angeles Avenue	Signalized	26.7	C	33.5	C
2	Tapo Street	East Los Angeles Avenue	Signalized	28.3	C	22.7	C
3	East Los Angeles Avenue	Railway Crossing	Signalized	8.4	11.7	B	11.5
4	Hidden Ranch Drive	Railway Crossing	Signalized	10.3	10.9	B	9.5
5	Sequoia Avenue	East Los Angeles Avenue	Signalized	22.5	C	22.0	C
6	Tapo Canyon Road	Cochran Street	Signalized	32.7	C	30.3	C
7	Tapo Street	Cochran Street	Signalized	21.9	C	21.6	C

**Table 3.12-2. Existing Peak Hour Level of Service Results**

ID	Primary Street	Secondary Street/Crossing	Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
8	Sequoia Ave	Cochran Street	Signalized	26.7	C	22.8	C

Source: Appendix M of this EIR

Notes:

ID=identification; LOS=level of service

### *Pedestrian and Bicycle Facilities*

The Arroyo Simi Greenway is a multi-use path located south of the existing railroad and serves as the east-west backbone of the City’s pedestrian and bicycle network. West of the Simi Valley Station, a segment of the path passes within UPRR’s ROW before transitioning south, on the other side of the multifamily development south of the railroad and ending at Hidden Ranch Drive.

At the East Los Angeles Avenue crossing, another multiuse path, the Kadota Fig Trail, connects to the Arroyo Simi Greenway from the north.

North of the tracks at the Simi Valley Station, a Class I bikeway travels east along the railroad from the station to the Arroyo Simi rail bridge, after which it travels approximately 1 mile east on along the Arroyo Simi to Yosemite Avenue, connecting the station to the neighborhood to the east.

### 3.12.3 Regulatory Setting

This section summarizes federal, state, and local regulations related to transportation resources that are applicable to the Project.

#### Federal

FRA is responsible for the development and enforcement of regulations governing the safety of freight and passenger rail systems, including the design, operations, and maintenance of railroads. Examples include issuing guidance on compliance with the Americans with Disabilities Act in the design of passenger station platforms and regulating sounding of train horns at grade crossings.

#### State

##### *2018 California State Rail Plan*

The California State Rail Plan (Caltrans 2018) sets out the state’s vision for an integrated statewide rail network. The goal of the plan is for the state’s rail systems to provide a competitive alternative to driving by increasing frequency of service and providing pulsed schedules with seamless transfers between lines and operators.

##### *Senate Bill 743*

SB 743 was passed in 2013 and changed the evaluation of traffic impacts under CEQA. The bill required OPR to modify the CEQA Guidelines to replace existing approaches for studying transportation impacts. These previously existing approaches focused on auto delay and congestion,

which are typically measured using LOS. These metrics would no longer be considered an environmental impact under CEQA upon certification of revised CEQA Guidelines. Rather, SB 743 required OPR to establish criteria for determining the significance of transportation impacts that promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses.

OPR published a revised Technical Advisory in April 2018. The revised Technical Advisory identifies VMT as the new metric for evaluating transportation impacts. VMT can be measured per capita, per employee, or via other appropriate efficiency measures.

SB 743 preserves local government authority to make planning decisions. Although not required by CEQA, LOS metrics are still used by local jurisdictions, including the City, to inform planning decisions and maintain roadway capacities consistent with adopted General Plans.

#### *California Public Utilities Commission*

The CPUC is responsible for overseeing the safe operation of freight and passenger railroads by enforcing state and federal rail safety rules, regulations, and inspection efforts. This includes regulating the creation of new at-grade crossings or alteration of existing crossings and investigating crossing conditions after train-related incidents.

#### Local

##### *City of Simi Valley General Plan*

The General Plan (City of Simi Valley 2012b) includes goals and objectives related to transportation and traffic. Table 3.10-1 includes applicable General Plan goals and policies pertaining to transportation and traffic. The policy for minimum vehicular operating condition standards for intersections adopted in the General Plan Mobility and Infrastructure Element sets a standard of LOS C or better during peak hour periods (City of Simi Valley 2012b).

##### *Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)*

On September 3, 2020, SCAG adopted the 2020–2045 RTP/SCS (SCAG 2020a). The 2020–2045 RTP/SCS includes a strong commitment to reduce GHG emissions from transportation sources by shifting trips from automobiles to less energy-intensive modes, including transit, walking, and cycling. The SCORE Program is identified in the 2020-2045 RTP/SCS under project number 7210001, and the Project is integral to the proposed service improvements on the Metrolink VCL (SCAG 2020b).

### 3.12.4 Impact Analysis

This section describes the potential for impacts related to transportation and traffic as a result of construction and operation of the Project. This includes a description of the thresholds used to determine whether an impact would be significant, as well as measures to mitigate potentially significant impacts, where appropriate.

## Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to transportation would be considered significant if the Project would:

- A. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- B. Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);
- C. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or,
- D. Result in inadequate emergency access.

## Thresholds Requiring No Further Analysis

The following thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project:

- B. The proposed Project is a passenger railroad improvement project and would include a new second main track and a second boarding platform at the existing Simi Valley Station. These Project features would improve service reliability and enable increased operational frequencies on the Metrolink VCL. This enhanced operational capacity in turn would support increased ridership at opening day and over the long term and a corresponding decrease in regional VMT. As a result, no impact would occur.

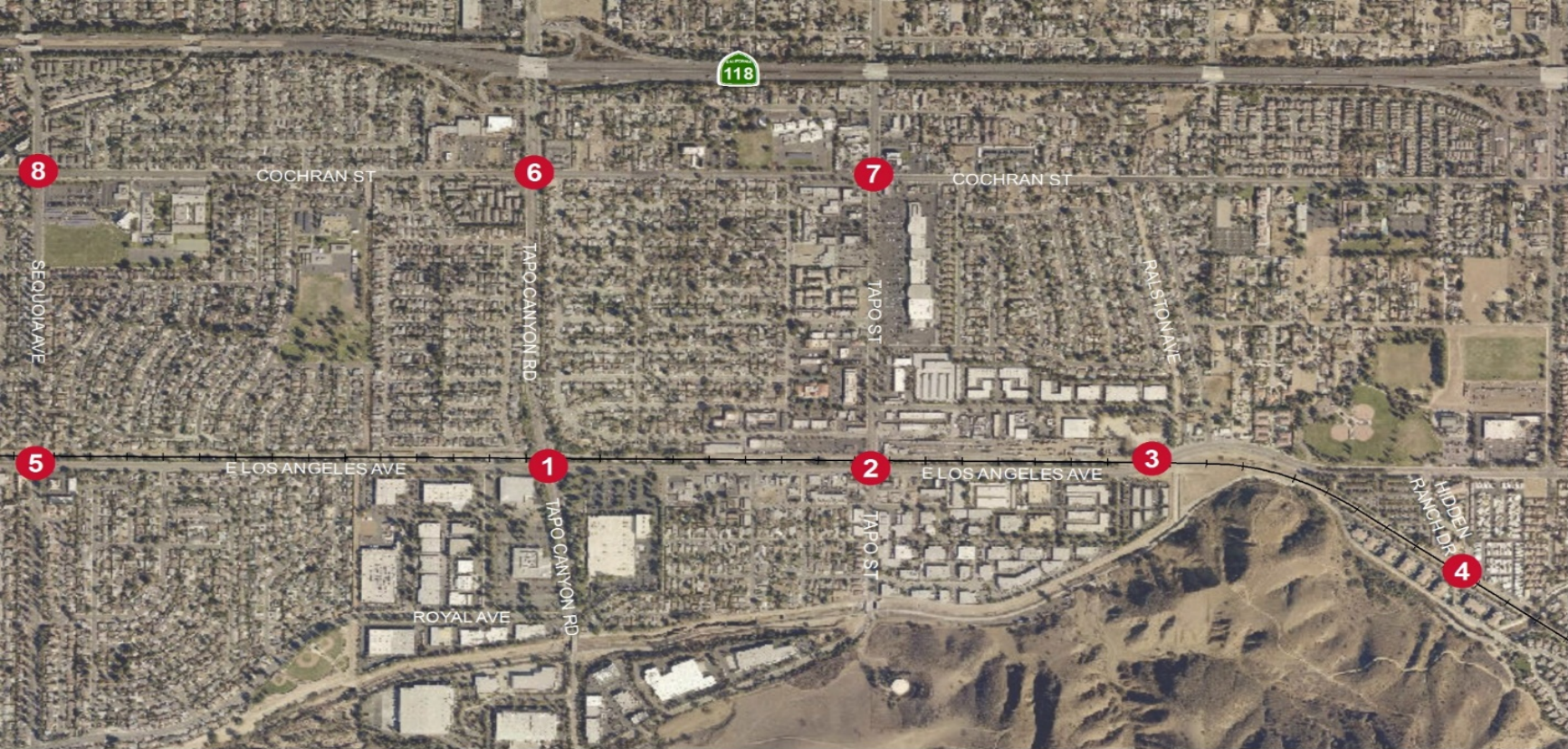
## Methodology

The potential for significant impacts to the transportation system was assessed by conducting a traffic impact analysis in accordance with the City's Traffic Impact Analysis guidelines published in the Simi Valley General Plan EIR, Chapter 4.16, June 2012 (City of Simi Valley 2012a). The TIS (Appendix M of this EIR) analyzes eight study intersections, which represent key locations throughout the Project study area that were identified for the analysis and are presented on Figure 3.12-1:

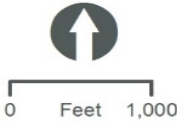
1. Tapo Canyon Road and East Los Angeles Avenue
2. Tapo Street and East Los Angeles Avenue
3. East Los Angeles Avenue and Railway Crossing
4. Hidden Ranch Drive and Railway Crossing
5. Sequoia Avenue and East Los Angeles Avenue
6. Tapo Canyon Road and Cochran Street
7. Tapo Street and Cochran Street
8. Sequoia Avenue and Cochran Street

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Figure 3.12-1. Traffic Impact Study Intersections



LEGEND  
● Study Intersections



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*Intersection Level of Service Standards*

According to the City’s General Plan guidelines for intersections, an LOS C or better is considered satisfactory. Intersections operating at LOS D, E, and F are considered unsatisfactory. The definitions for the range of LOS for signalized and stop sign-controlled intersections under the Highway Capacity Manual (HCM) 6th Edition (Transportation Resource Board 2020) are listed in Table 3.12-3 and Table 3.12-4, respectively.

For this study, HCM delay-based methodology utilizing Synchro 10 software was used for calculating the intersection LOS. Since the Project would be considered an infrastructure-related project such as transit, rail, bicycle, and roadway improvements, HCM delay-based methodology was utilized. Per City guidelines, HCM delay-based methodology is acceptable for infrastructure improvement projects.

**Table 3.12-3. Signalized Intersection Level of Service Standards**

Average Stopped Delay Per Vehicle (seconds)	LOS Characteristics
<10.0	<i>LOS A</i> describes operations with very low delay. This occurs when progression is extremely favorable, and most vehicles do not stop at all. Short cycle lengths may also contribute to the low delay.
>10 – 20.0	<i>LOS B</i> describes operations with generally good progression and/or short cycle lengths. More vehicles stop than for <i>LOS A</i> , causing higher levels of average delay.
>20 – 35.0	<i>LOS C</i> describes operations with higher delays, which may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
>35 – 55.0	<i>LOS D</i> describes operations with high delay, resulting from some combination of unfavorable progression; long cycle lengths, or high volumes. The influence of congestion becomes more noticeable, and individual cycle failures are noticeable.
>55 – 80.0	<i>LOS E</i> is considered the limit of an acceptable delay. Individual cycle failures are frequent occurrences.
>80.0	<i>LOS F</i> describes a condition of excessively high delay, considered unacceptable to most drivers. This condition often occurs when arrival flow rates exceed the <i>LOS D</i> capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes to such delay.

Source: Transportation Research Board 2020

Notes:

LOS=level of service

**Table 3.12-4. Unsignalized Intersection Level of Service Standards**

Average Control Delay (seconds/vehicle)	LOS
≤10	A
>10 and ≤15	B
>15 and ≤25	C
>25 and ≤35	D
>35 and ≤50	E
>50	F

Source: Transportation Research Board 2020

Notes:

LOS=level of service

*Project Analysis Conditions*

The TIS considers the following six scenarios:

- Existing conditions (2020)
- Construction year (2022) conditions
- Opening year (2024) – No Project conditions
- Opening year (2024) – Project conditions
- Future year (2045) – No Project conditions
- Future year (2045) – Project conditions

**EXISTING CONDITIONS (2020)**

Under the existing conditions, the Project study area intersections are analyzed based on existing roadway geometries. The railroad crossings are analyzed based on the existing train crossing timings and frequency. For the purposes of analysis, traffic data from 2019 was selected to characterize existing conditions (as summarized in Table 3.12-2).

**CONSTRUCTION YEAR (2022) CONDITIONS**

The construction of the Project would be conducted in three phases over the course of 19 months.

Under the Construction Year (2022) Phase 1 condition, the Project improvements would be constructed at the Tapo Canyon Road crossing. To facilitate construction, the railroad crossing would be temporarily closed to vehicular traffic along Tapo Canyon Road, and traffic would be detoured to Sycamore Drive, Sequoia Avenue, and Tapo Street via East Los Angeles Avenue.

In Phase 2 of construction, the Project improvements would be constructed at the Tapo Street and Hidden Ranch Drive crossings. At the Tapo Street crossing, temporary closures to vehicular traffic would be required to facilitate construction. Traffic would be temporarily detoured to Tapo Canyon Road, Sequoia Avenue, and Stearns Street via East Los Angeles Avenue. The railroad crossing at

Hidden Ranch Drive would be constructed in phases to maintain one lane of traffic at the crossing, including emergency vehicle access. Emergency access could also be provided by a gated alley way/fire lane between Oak Knolls Road and California Oak Street east of Hidden Ranch Drive.

In Phase 3 of construction, the Project would be constructed at the East Los Angeles Avenue crossing. Construction would require the temporary closure of the railroad crossing at East Los Angeles Avenue to vehicular traffic. Traffic along East Los Angeles Avenue would be temporarily detoured to Interstate 118 via Sequoia Avenue, Tapo Canyon Road, Tapo Street, and Stearns Street.

#### **OPENING YEAR (2024) – NO PROJECT CONDITIONS**

Under the Opening Year (2024) No Project conditions, the Project improvements would not be implemented; however, roadway improvements planned for completion by 2024 are assumed to have been implemented. Additionally, an ambient growth rate of 2.33 percent is applied to the existing volumes to develop volumes for the opening year 2024.

#### **OPENING YEAR (2024) – PROJECT CONDITIONS**

Under the Opening Year (2024) Project conditions, the Project improvements would be implemented. There would be no changes in the traffic volumes at the study intersections when compared to the Opening Year (2024) No Project conditions. In the Project condition, the frequency of passenger trains would also increase, thereby resulting in additional gate closures at the at-grade crossings, including during peak periods. Frequency would increase by one train per direction during peak hours.

#### **FUTURE YEAR (2045) – NO PROJECT CONDITIONS**

Under the Future Year (2045) No Project conditions, the Project improvements would not be implemented; however, an ambient growth is applied to the existing volumes for the purposes of forecasting future traffic volumes. This condition includes improvements at the adjacent intersections, which are planned for completion prior to year 2030, according to City's General Plan Infrastructure and Mobility Element (City of Simi Valley 2012b).

#### **FUTURE YEAR (2045) – PROJECT CONDITIONS**

Under the Future Year (2045) Project conditions, the Project improvements would be implemented. The operating traffic volumes at the study intersections would remain unchanged when compared to the Future Year (2045) No Project conditions. In the Project condition, the frequency of passenger trains would increase, thereby resulting in more frequent gate closures at the at-grade crossings, including during peak periods. Frequency would increase by one train per direction during peak hours.

### **Impact Analysis**

*Would the Project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?*

#### **CONSTRUCTION**

**Less than Significant with Mitigation.** Construction of the Project would result in temporary disruptions to the circulation system, including transit, roadways, and active transportation in the form of temporary closures, detours, and/or reductions in roadway capacities and active transportation corridors.

**Transit.** Construction activities would be completed Monday through Saturday during normal business hours throughout the 19-month construction period. Temporary detours and closures would be scheduled during time frames that allow for exclusive track occupancy by construction crews to minimize effects on Metrolink operations. Any track outages would be coordinated and scheduled with SCRRA, Amtrak, and UPRR along with other ongoing capital or rehabilitation projects to minimize service delays and/or disruptions. Two absolute work windows (full railroad closures) would be required during construction, resulting in temporary bus service between Los Angeles and Ventura, with stops at intermediate stations, to accommodate ridership demands during these disruptions to passenger rail service.

During construction of the Project, temporary full closures of the Tapo Canyon Road, Tapo Street, and Los Angeles Avenue at-grade crossings would also be required. As noted in the methodology, the Project improvements would be phased and completed sequentially such that only one crossing is closed at any given period to facilitate temporary detours. The Simi Valley Transit Route 20 passes through each of these intersections, and, therefore, service disruptions could result in potentially significant impact for existing transit riders. Implementation of Mitigation Measure TRA-1, which would require a traffic management plan (TMP) for construction and would facilitate the temporary rerouting of Route 20, would reduce potentially significant impacts to a less than significant level.

**Roadways.** The City’s General Plan sets an acceptable standard of LOS C for intersections within the City. As described in the methodology, a traffic analysis was prepared to assess the Construction Year (2022) conditions as a result of Project construction (City of Simi Valley 2012b). As shown in Table 3.12-5, the following intersections are forecasted to operate below LOS C during Construction Year Project (2022) conditions:

- Tapo Canyon Road at East Los Angeles Avenue during Phase 2 and Phase 3
- Tapo Canyon Road at Cochran Street during Phase 1, Phase 2, and Phase 3

These impacts are attributed to temporary detoured traffic from the construction area and would be potentially significant in the absence of mitigation (Appendix M). Implementation of Mitigation Measure TRA-1, which would require a TMP for construction and would facilitate the temporary rerouting of Route 20, would reduce potentially significant impacts to a less than significant level.

**Table 3.12-5. Intersections Impacted During Construction**

ID	Primary Street	Secondary Street/ Crossing	Control	Without Mitigation				With Mitigation			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
<b>Construction Year Phase 1</b>											
6	Tapo Street	Cochran Street	Signalized	45.8	D	51.4	D	25.6	C	32.4	C
<b>Construction Year Phase 2</b>											
1	Tapo Canyon Road	East Los Angeles Avenue	Signalized	50.4	D	49.5	D	33.7	C	34.4	C

**Table 3.12-5. Intersections Impacted During Construction**

ID	Primary Street	Secondary Street/ Crossing	Control	Without Mitigation				With Mitigation			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
6	Tapo Canyon Road	Cochran Street	Signalized	51.0	D	52.7	D	34.1	C	34.9	C
<b>Construction Year Phase 3</b>											
1	Tapo Canyon Road	East Los Angeles Avenue	Signalized	74.1	E	68.9	E	32.9	C	33.6	C
6	Tapo Canyon Road	Cochran Street	Signalized	50.5	D	53.7	D	32.9	C	29.5	C

Source: Appendix M of this EIR

Notes:

ID=identification; LOS=level of service

**Active Transportation.** Construction would require temporary closures at the Tapo Canyon Road, Tapo Street, Los Angeles Avenue crossings, and Hidden Ranch Drive. Except for Hidden Ranch Drive, these intersections would be fully closed to automobiles. Additionally, construction adjacent to portions of the Arroyo Simi Greenway and within UPRR’s ROW may require temporary closure or detours of part of the Greenway west of the Simi Valley Station. If not properly programmed, these closures and detours could obstruct pedestrian and bicycle access thereby resulting in a potentially significant impact. Implementation of Mitigation Measure TRA-2, which would maintain bicycle and pedestrian access at each grade crossing during most of the construction period, including access along East Los Angeles Avenue, would reduce potentially significant impacts to a less than significant level.

**OPERATION**

**Less than Significant Impact.** Operation of the Project would comply with applicable transportation programs, plans or policies relating to transit, including those related to bicycle and pedestrian facilities. Four study intersections are expected to operate at less than acceptable LOS in the Future Year (2045) Project and No Project conditions as a result of ambient growth in travel demand. These future forecasted LOS conditions and the corresponding delay would not be attributable to the Project passenger rail operations or proposed SSMs. These impacts would be less than significant as described further below.

**Transit.** The Project is included in the 2020-2045 SCAG RTP/SCS (under project number 720001) and supports the goal for more frequent passenger rail service set out in the 2018 California State Rail Plan (SCAG 2020b, Caltrans 2018). Therefore, Project operation would not conflict with applicable plans relating to transit and no impact would result.

**Roadways.** As shown in Table 3.12-6, one intersection is forecast to operate at LOS D during the opening year in both the No Project and Project conditions:

- Tapo Canyon Road at Cochran Street

In the 2045 horizon year, four intersections would operate below the LOS C threshold in both No Project and Project conditions, as shown in Table 3.12-7:

- Tapo Canyon Road at East Los Angeles Avenue
- Sequoia Avenue at East Los Angeles Avenue
- Tapo Canyon Road at Cochran Street
- Sequoia Avenue at Cochran Street

Increased delay at the study intersections during Opening Year (2024) and Future Year (2045) conditions is a result of a forecasted increase in vehicular traffic based on an ambient growth of 2.33 percent annually. The increase in train volumes projected in 2024 would contribute minimally to this delay at the study intersections. As shown in Table 3.12-6 and Table 3.12-7, the delay at the impacted intersections is identical in both the Project and No Project scenarios. Therefore, the identified increase in delay are not attributable to the Project and no significant traffic impacts to the adjacent intersections would result.

**Table 3.12-6. 2024 Intersection Levels of Service**

ID	North-South Street	East-West Street	2024 Opening Year No Project				2024 Opening Year with Project			
			AM Peak		PM Peak		AM Peak		PM Peak	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Tapo Canyon Road	East Los Angeles Avenue	33.6	C	34.7	C	33.6	C	34.7	C
2	Tapo Street	East Los Angeles Avenue	33.7	C	27.1	C	33.7	C	27.1	C
3	East Los Angeles Avenue	Railway Crossing	12.4	B	11.4	B	12.8	B	12.0	B
4	Hidden Ranch Drive	Railway Crossing	12.6	B	7.7	A	12.9	B	8.0	A
5	Sequoia Avenue	East Los Angeles Avenue	26.1	C	23.4	C	26.1	C	23.4	C
6	Tapo Canyon Road	Cochran Street	<b><u>50.6</u></b>	<b><u>D</u></b>	<b><u>45.0</u></b>	<b><u>D</u></b>	<b><u>50.6</u></b>	<b><u>D</u></b>	<b><u>45.0</u></b>	<b><u>D</u></b>
7	Tapo Street	Cochran Street	26.3	C	23.3	C	26.3	C	23.3	C

**Table 3.12-6. 2024 Intersection Levels of Service**

ID	North-South Street	East-West Street	2024 Opening Year No Project				2024 Opening Year with Project			
			AM Peak		PM Peak		AM Peak		PM Peak	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
8	Sequoia Ave	Cochran Street	28.7	C	28.1	C	28.7	C	28.1	C

Source: Appendix M of this EIR

Notes:

**Bold** indicates LOS D, E, or F

ID=identification; LOS=level of service

**Table 3.12-7. 2045 Intersection Levels of Service**

ID	North-South Street	East-West Street	2045 No Project				2045 Project			
			AM Peak		PM Peak		AM Peak		PM Peak	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Tapo Canyon Road	East Los Angeles Avenue	<b>103.2</b>	<b>F</b>	<b>108.9</b>	<b>F</b>	<b>103.2</b>	<b>F</b>	<b>108.9</b>	<b>F</b>
2	Tapo Street	East Los Angeles Avenue	28.9	C	29.7	C	28.9	C	29.7	C
3	E Los Angeles Avenue	Railway Crossing	16.8	B	17.9	B	17.1	B	18.4	B
4	Hidden Ranch Drive	Railway Crossing	16.0	B	12.4	B	16.7	B	13.0	B
5	Sequoia Avenue	East Los Angeles Avenue	<b>96.8</b>	<b>F</b>	<b>43.6</b>	<b>D</b>	<b>96.8</b>	<b>F</b>	<b>43.6</b>	<b>D</b>
6	Tapo Canyon Road	Cochran Street	<b>93.7</b>	<b>F</b>	<b>114.2</b>	<b>F</b>	<b>93.7</b>	<b>F</b>	<b>114.2</b>	<b>F</b>
7	Tapo Street	Cochran Street	28.7	C	30.7	C	28.7	C	30.7	C
8	Sequoia Ave	Cochran Street	<b>76.1</b>	<b>E</b>	<b>65.2</b>	<b>E</b>	<b>76.1</b>	<b>E</b>	<b>65.2</b>	<b>E</b>

Source: Appendix M of this EIR

Notes:

**Bold** indicates LOS D, E, or F

ID=identification; LOS=level of service

**Active Transportation.** The Project would maximize opportunities to connect to existing and planned bicycle and pedestrian facilities as part of the final design process and improve safety at the existing at-grade crossings. The Simi Valley Bicycle Master Plan includes the objective of linking residential areas, workplaces, and transit centers with bicycle paths (City of Simi Valley 2008). The eastern segment of the Arroyo Simi Greenway, the City’s primary bicycle path, connects to the Simi Valley Station, the City’s rail transit hub. Increasing service to the Simi Valley Station would provide more opportunities for use of walking and cycling as first or last mile modes and cyclists, are currently provided a designated ‘bike car’ on each passenger train.

SSM improvements at existing at-grade crossings within the Project footprint would include sidewalk repaving and installation of pedestrian gates and warning signals. These SSMs would improve safety for pedestrians at these crossings and no significant impacts would result. No mitigation is required.

*Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** During the construction phases, at-grade crossings would be closed to facilitate the Project improvements, which will require detours to crossings not under construction. The temporary closure of at-grade crossings during construction has the potential to create hazardous conditions due to the disruption of traffic flow and localized pedestrian and bicycle access. Once complete and construction progresses, these hazards would no longer remain with the installation of the improved safety features as part of the Project.

Construction-related activities of the Project would also require the delivery of off-road heavy construction-related equipment and facility materials, some of which may require transport by oversized vehicles. The use of oversize vehicles during construction-related activities could create a hazard to the public by limiting motorist views on roadways and by the obstruction of space, as these vehicles will be slow to accelerate and will require larger distances to decelerate or stop than the passenger cars.

Construction-related vehicles will follow the TMP (Mitigation Measure TRA-1), and oversize vehicle loads must comply with permit related and other requirements of the California Vehicle Code and California Streets and Highway Code. California Highway Patrol escorts may be required at the discretion of Caltrans and the City and will be detailed in respective oversize load permits. Implementation of Mitigation Measure TRA-1, which would require a TMP for construction, would reduce potentially significant impacts to a less than significant level.

#### OPERATION

**Less than Significant with Mitigation.** The Project would include multiple SSMs and related improvements at the five at-grade crossings intersected by the Project study area. Each at-grade crossing would be improved to accommodate the Project. No permanent roadway closures are proposed.

SCRRA would consult with the local roadway jurisdiction(s) to coordinate the traffic signal operations for adjacent intersection signals to avoid traffic queuing across the railroad tracks. To assess safety concerns associated with passing trains under the Project conditions, a queuing analysis was conducted to determine if sufficient queuing distance is available between existing signalized intersections and adjacent grade crossings to minimize the potential for blockage of the at-grade



crossing(s). Appendix M of this EIR includes a summary of the at-grade crossing influence zone queue analysis.

Based on the analysis of Project operations, the projected northbound traffic queuing during Opening Year (2024) conditions and Future Year (2045) conditions at the Tapo Canyon Road and Tapo Street at-grade crossings could result in potential spillover impacts that could be potentially significant. Installation of pre-signals at these crossings as part of the Project would prevent vehicles from queuing in the railroad crossing, reducing safety risks from occupying the crossing beyond the duration of the traffic signal cycle. Implementation of Mitigation Measure TRA-3, which would require the implementation of pre-signals, would reduce potentially significant impacts to a less than significant level.

*Would the Project result in inadequate emergency access?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** During Project construction, increased construction activity within the Project study area may result in roadway delays, and grade crossing closures would require detours, which could temporarily impact emergency access. However, these impacts would be intermittent and temporary in nature, and are not anticipated to result in any long-term delays that would result in inadequate emergency access. As shown in Table 3.12-5, vehicular flow would be maintained throughout Project construction with implementation of Mitigation Measure TRA-1, which would require a TMP for construction allowing study intersections to operate at acceptable LOS and minimize delay to emergency vehicles, would reduce potentially significant impacts to a less than significant level.

Temporary full closures of the Tapo Canyon Road, Tapo Street, and Los Angeles Avenue crossings would be required, but the improvements would be completed sequentially such that only one crossing is closed at once, and emergency vehicles can detour to the next crossing. Additionally, these detours would be coordinated with the City and applicable emergency service providers prior to the start of work.

Since Hidden Ranch Drive is the primary access road to the residential subdivision south of the railroad, improvements at Hidden Ranch Drive would be constructed in phases to maintain one lane of traffic at the at-grade crossing, including emergency vehicle access. Emergency access could also be provided from the east by a gated alley way/fire lane connecting Oak Knolls Road to California Oak Street, if required. With implementation of Mitigation Measure TRA-2, which would maintain pedestrian and bicycle access during construction, impacts would be reduced to a less than significant level.

#### OPERATION

**Less than Significant Impact.** The Project would not result in changes to roadway configuration or vehicular access points to properties within the Project study area. As discussed above, Project operation would not contribute to deterioration of study intersections to an unacceptable LOS.

The existing roadways within the vicinity of the Project allow emergency vehicles to respond to areas on either side of the railroad. At existing at-grade crossings, there may be an occasional increase in response times for some emergency vehicles due to the greater frequency of gate-down events with the Project. Unlike at intersections with traffic signals, where emergency vehicles have the right to pass through the intersection at reduced speed despite a red light, such vehicles would not be able to cross through the at-grade crossings when railroad gates are down. This may cause some minor delay

to emergency vehicles, but delays would not substantially differ from typical congestion that occurs around these crossings under existing conditions.

These localized traffic delays are not the only factor in emergency response times, which are a function of travel along the entire path from their station to the site on an incident. Operation of the Project would substantially reduce overall VMT in the region by shifting travelers from automobiles to rail, which would improve congestion broadly throughout the region. This broad improvement is likely to more than offset localized effects at individual crossings and result in a net improvement in emergency vehicle response times.

In addition to the new underpass connecting the platforms, emergency egress from the new platform would be provided by new egress paths connecting to the Arroyo Simi Greenway to the west and Hidden Ranch Drive to the east. In this context, operational impacts related to the Project would be less than significant. No mitigation is required.

### 3.12.5 Mitigation Measures

The following mitigation is proposed to reduce the Project's potential to avoid or minimize potential significant impacts on the transportation circulation system and traffic.

**TRA-1 Prepare a TMP for Construction.** Prior to the start of construction, a TMP will be prepared by the contractor in compliance with local requirements and approval of SCRRA, the City, and Caltrans, where applicable.

Street closure schedules in the construction TMP will be coordinated between the construction contractor, the City, private businesses, public transit and bus operators, emergency service providers and residents to minimize construction-related vehicular traffic impacts. During planned closures, traffic will be re-routed to adjacent streets via clearly marked detours and notice will be provided in advance to applicable parties.

The following provisions will be included in the TMP:

- Phase 1:
  - Traffic will be detoured to Sequoia Avenue, Tapo Street, and Stearns Street via East Los Angeles Avenue.
- Phase 2:
  - Traffic will be detoured to Sequoia Avenue, Tapo Canyon Road, and Stearns Street via East Los Angeles Avenue during full closure at Tapo Street railroad crossing.
  - For Hidden Ranch Drive it is recommended once a contractor is chosen, the design and staging of construction sequence will be coordinated and reviewed between the contractor, the City, and SCRRA.
- Phase 3:
  - Traffic will be detoured to SR 118 and Cochran Street via Sequoia Avenue, Tapo Canyon Road, Tapo Street, and Stearns Street.

**TRA-2**      **Maintain Pedestrian and Bicycle Access During Construction.** Pedestrian and bicycle access at the Tapo Canyon Road, Tapo Street, and East Los Angeles Avenue railroad crossings will be maintained during construction for most of the construction period. During planned closures, pedestrian and bicycle traffic will be re-routed to adjacent streets and/or sidewalks via clearly marked detours and notice will be given in advance to parties who are expected to need pedestrian and bicycle access during construction, including: nearby residences, emergency service providers, public transit and bus operators, the bicycle community, businesses and organizers of special events.

**TRA-3**      **Implement Pre-signals or Comparable Measure(s).** Implement pre-signals or comparable measure(s) as part of the Project at the Tapo Canyon Road at East Los Angeles Avenue and Tapo Street at East Los Angeles Avenue intersections. The pre-signal or comparable measure(s), along with signal preemption, will result in reduction of queue and increase safety for the at-grade crossings. To implement this measure, SCRRA's contractor would be required to provide the traffic signal timing plans and preemptions calculations for City, CPUC, and FRA approval to upgrade the signal.

### 3.12.6 CEQA Significance Conclusions After Mitigation

With implementation of Mitigation Measures TRA-1 through TRA-3, the Project would have a less than significant impact on the transportation system.

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## 3.13 Tribal Cultural Resources

### 3.13.1 Introduction

The Tribal Cultural Resources (TCR) section describes the environmental setting and regulatory setting for TCRs in the vicinity of the Project. It also describes the impacts on TCRs that would result from construction and operation of the Project and mitigation measures that would reduce significant impacts, where feasible. Cumulative impacts on TCRs, in combination with planned, approved, and reasonably foreseeable projects, are discussed in Chapter 4, Cumulative Impacts.

### 3.13.2 Environmental Setting

This section summarizes the existing environmental setting related to TCRs within the Project study area. For further discussion on the prehistoric, ethnohistoric, and historic settings of the Project study area, refer to Section 3.4, Cultural Resources. The TCR information contained in this section is summarized, in part, from the *Simi Valley Double Track and Platform Project Cultural Resources Technical Report* (Appendix F of this EIR).

A SCCIC record search was conducted for the area within 0.25 mile of the Project study area. As detailed further in Section 3.4, Cultural Resources, three previously recorded cultural resources were identified; however, none of these resources were determined to be Native American in origin. A pedestrian field survey within the Project study area was conducted to visually inspect for the presence of any prehistoric or historic artifacts, ecofacts, features, buildings, and structures; and no new cultural resources or TCRs were identified within or adjacent to the Project study area. Additionally, on December 11, 2020, the NAHC confirmed that the requested Sacred Lands File search was negative for the Project study area and provided a list of tribes that are traditionally and culturally affiliated with the geographic area.

### 3.13.3 Regulatory Setting

This section summarizes state and local regulations related to aesthetic resources that are applicable to the Project.

#### State

##### *Assembly Bill 52*

AB 52 was approved on September 25, 2014 and became effective on July 1, 2015. As it relates to Native Americans, this bill amended Section 5097.94 of the PRC and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

In order to recognize tribal cultural values in addition to scientific and archaeological values when determining impacts and mitigation, AB 52 establishes a new category of resource under CEQA called TCRs (PRC Section 21074). TCRs are “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” (PRC Section 21074). In order to qualify as a TCR, a resource be either of the following:

1. A resource listed or determined eligible for listing on the national, state, or local register of historic resources; or,
2. A resource that a lead agency chooses to treat as a TCR based on the CRHR criteria and the cultural value of the resource to a California Native American tribe.

AB 52 requires that the CEQA lead agency notify any interested Native American tribes of a proposed project, only if those tribes have requested to be notified regarding the CEQA lead agency’s projects. The CEQA lead agency must consult in good faith with participating California Native American Tribes prior to the release of the EIR. If a project has the potential to affect a TCR, the CEQA document must discuss whether there is a significant impact on a TCR and whether there are feasible alternatives or mitigation to avoid or substantially lessen impacts on the TCR. Consultation is finished when one of the following applies:

1. The parties agree to avoid or mitigate significant impacts on TCRs; or,
2. The CEQA lead agency, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

The NAHC is the primary state government agency for identifying and cataloging Native American cultural resources. AB 52 required the NAHC to provide each California Native American tribe, as defined, on or before July 1, 2016, with a list of all public agencies that may be a lead agency within the geographic area in which the tribe is traditionally and culturally affiliated, the contact information of those agencies, and information on how the tribe may request those public agencies to notify the tribe of projects within the jurisdiction of those public agencies for the purposes of requesting consultation.

The NAHC also provides protection to Native American burials from vandalism and inadvertent destruction, provides a procedure for the notification of most likely descendants (MLD) regarding the discovery of Native American human remains and associated grave goods, brings legal action to prevent severe and irreparable damage to sacred shrines, ceremonial sites, sanctified cemeteries and place of worship on public property, and maintain an inventory of sacred places. Upon written request, the NAHC is required to conduct a Sacred Lands File search for sites located on or near a project site.

*Public Resources Code 5097.98 (b) and (e) and Section 15064.5 of the CEQA*

PRC 5097.98(b) and (e) and Section 15064.5 of the CEQA guidelines requires that if Native American human remains are found, the project proponent must halt construction or excavation activity within the area of discovery and confer with MLDs identified by the NAHC to consider treatment options. In the absence of MLDs or of a treatment acceptable to all parties, the project proponent is required to reenter the remains elsewhere on the property in a location not subject to further disturbance.

### *California Public Resources Code*

Cultural resources are recognized as nonrenewable resources, and receive additional protection under the PRC and CEQA; therefore, the following PRCs provide additional protections under the following regulations for TCRs:

- **PRC 5097.97:** This code states that no agency or party shall cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require.
- **PRC 65092:** This code provides for notices of projects to be sent to California Native American tribes that are on the contact list maintained by the NAHC in the definition of "person" to whom notice of public hearings shall be sent by local governments.

### *California Health and Safety Code (Section 7050.5)*

Section 7050.5 of the Health & Safety Code requires that if human remains are found, the project proponent must halt construction or excavation activity within the area of discovery until a County Coroner can determine if the remains are Native American. If the remains are determined to be Native American, the County Coroner must contact NAHC pursuant to PRC Section 5097.98(b) and (e), as discussed above.

### *Confidentiality of Information on Archaeological Sites and Native American Places in California*

California Government Code Sections 6253, 6254, and 6254.10 authorize state agencies to exclude information on archaeological sites from public disclosure under the Public Records Act. In addition, the California Public Records Act (California Government Code 6250 et seq.) and California's open meeting laws (The Brown Act; California Government Code 54950 et seq.) protect the confidentiality of information on Native American cultural places.

The California Public Records Act, as amended in 2005, contains two exemptions that aid in the protection of records relating to Native American cultural places by allowing any state or local agency to deny a California Public Records Act request and withhold public disclosure of:

- Records of Native American graves, cemeteries, and sacred places and records of Native American places, features, and objects described in Sections 5097.9 and 5097.993 of the PRC maintained by, or in the possession of, the NAHC, another state agency, or a local agency (California Government Code 6254[r])
- Records that relate to archaeological site information and reports maintained by, or in the possession of, the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a California Native American tribe and a state or local agency (California Government Code 6254.10)

Additionally, the CHRIS maintained by the OHP prohibits public dissemination of records and information about site locations. In compliance with these requirements, and those contained in the codes of ethics of the Society for American Archaeology, Society for California Archaeology, and Register of Professional Archaeologists, information about the location and nature of cultural resources is considered confidential information with highly restricted distribution and is not publicly accessible.

### 3.13.4 Impact Analysis

This section describes the potential for environmental impacts related to TCRs as a result of Project implementation. It describes the thresholds used to determine whether an impact would be significant, as well as measures to mitigate potentially significant impacts, where appropriate.

#### Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to TCRs are considered significant if the project would cause a substantial adverse change in the significance of a TCR defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- A. Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC 5020.1(k); or,
- B. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC 5024.1. In applying the criteria set forth in subdivision (c) of PRC 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

#### Thresholds Requiring No Further Analysis

No thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project.

#### Methodology

The potential for significant impacts on TCRs was assessed by performing a record search through the SCCIC within the 0.25-mile search radius of the Project study area, and conducting intensive pedestrian field survey and visual inspection of the Project footprint and Project study area for all prehistoric or Native American cultural resources.

##### *Records Search*

A review of the SCCIC files identified 14 previous cultural resource investigations that intersect with the 0.25-mile records search radius. Three previously recorded cultural resources within the 0.25-mile search radius of the Project study area were identified. These resource types included a prehistoric isolate, a historic building, and a historic structure; however, none of these resources were determined to be Native American in origin.

A record search of the Sacred Lands File was requested from the NAHC. The NAHC replied on December 11, 2020 that the Sacred Lands File search conducted for the Project was negative. The NAHC also enclosed a list of Native American groups and individuals who may be able to provide information about Native American cultural resources in the vicinity of the Project site.

##### *Field Survey*

A pedestrian field survey of the Project study area conducted on May 21, 2020. The surveyed area consists of the Project study area, including 2.20-mile length of railroad ROW and the adjacent staging areas, grade crossing improvement areas, and construction access locations that extend outside of the general 100-foot-wide ROW. One survey transect was walked on either side of the railroad ROW.



Given the obscured ground surface from the ballast stone over most of the Project study area, this approach was adequate for survey coverage of the entirety of the railroad ROW. Additionally, open areas designated as staging areas were surveyed using parallel transects at 33-foot intervals.

The pedestrian field survey failed to identify any new cultural resources or TCRs within or adjacent to the Project study area.

## Impact Analysis

*Would the Project cause a substantial adverse change in the significance of a TCR, defined in PRC Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k)?*

### CONSTRUCTION

**Less than Significant with Mitigation.** Based on the negative results of the NAHC Sacred Lands File search along with the absence of prehistoric and/or ethnohistoric related cultural resources based on records search and archaeological survey of the Project study area, no TCRs have been identified within the boundaries of the Project footprint or in the immediate vicinity of the Project.

In the unlikely event that potentially significant archaeological materials are encountered during Project-related ground disturbing activities, implementation of Mitigation Measure CUL-2 would ensure that a qualified archaeologist would assess the significance of the archaeological resource and consult with local Native American tribes if the find is prehistoric or Native American in origin. Therefore, the Project would not cause substantial adverse changes in the significance of a TCR as defined in PRC Section 21074 or 5020.1(k). With implementation of Mitigation Measure CUL-2, impacts would be reduced to a less than significant level.

### OPERATION

**No Impact.** Once construction is complete, operation would involve passenger and freight train operations along the railroad corridor and periodic maintenance of the railroad within ROW. Therefore, no further ground disturbing activity that could impact buried TCRs, as defined in PRC Section 21074 or 5020.1(k), would occur during operation of the Project. No impact would occur.

*Would the Project cause a substantial adverse change in the significance of a TCR, defined in PRC Section 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1? In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

### CONSTRUCTION

**Less than Significant with Mitigation.** As stated above, the Sacred Lands File for the Project study area was completed with negative results along with the absence of prehistoric and/or ethnohistoric related cultural resources based on records search and archaeological survey of the Project study area, and no TCRs were identified within the boundaries of the Project footprint or in the immediate vicinity of the Project.

In the unlikely event that archaeological materials are encountered during Project-related ground disturbing activities, and are found to be prehistoric or Native American in origin, Mitigation Measure CUL-2 would require the qualified archaeologist to consult with local Native American tribes.

In the unlikely event that Native American human remains are found in proximity to the Project footprint, Mitigation Measure CUL-3 would require the Project to adhere to regulations legislated by Health and Safety Code 7050.5, CEQA 15064.5(e), and PRC 5097.98 so that the Project would not cause substantial adverse changes in the significance of a TCR as defined in PRC Section 21074 or 5024.1(c). Therefore, with implementation of Mitigation Measures CUL-2 and CUL-3, potentially significant construction impacts to TCRs would be reduced to a less than significant level.

#### OPERATION

**No Impact.** Once construction is complete, operation would involve passenger and freight train operations along the railroad corridor and periodic maintenance of the railroad within ROW. Therefore, no further ground disturbing activity that could impact buried TCRs, as defined in PRC Section 21074 or 5024.1(c) during operation of the Project would occur. No impact would occur.

### 3.13.5 Mitigation Measures

Mitigation Measures CUL-2 and CUL-3 are described in Section 3.4, Cultural Resources, and are proposed to avoid or minimize the Project's potential to significantly impact previously unidentified TCRs that may be encountered during construction.

### 3.13.6 CEQA Significance Conclusions After Mitigation

With implementation of Mitigation Measures CUL-2 and CUL-3, the Project would have a less than significant impact on TCRs.

## 3.14 Utilities and Service Systems

### 3.14.1 Introduction

The Utilities and Service Systems section describes the environmental setting and regulatory setting for utilities and service systems in the Project study area. It also describes the impacts on utilities and service systems that would result from construction and operation of the Project and mitigation measures that would reduce significant impacts, where feasible. Cumulative impacts on utilities and service systems, in combination with planned, approved, and reasonably foreseeable projects, are discussed in Chapter 4, Cumulative Impacts.

### 3.14.2 Environmental Setting

This section summarizes the existing environmental setting related to public utilities and service systems within the Project study area, including municipal water and sewer pipes, storm drainage facilities, natural gas lines, and electrical power lines.

The utility providers that service the project site are listed in Table 3.14-1.

**Table 3.14-1. Utility Service Providers**

Utility Services	Provider
Water	VCW, District Number 8
	Golden State Water Company
Wastewater	City of Simi Valley Sanitation Services
Stormwater	City of Simi Valley Environmental Compliance Division
Solid Waste	City of Simi Valley Franchise Waste Hauler
Electricity	SCE Corp
Natural Gas	SoCalGas

Notes:

SCE Corp=Southern California Edison Company; SoCalGas=Southern California Gas Company; VCW=Ventura County Waterworks

#### Water

Every five years, the City prepares an Urban Water Management Plan (UWMP) that contains future water demand and supply projections in accordance with the California Water Code and the California Urban Water Management Planning Act (UWMPA). The UWMP outlines current and future water supplies and demands and provides updates on local water resource development opportunities for recycled water and groundwater. The currently adopted 2015 UWMP serves as the overarching water resources planning document for the City. Table 3.14-2 lists the City's water demand and supply for the years 2020, 2025, 2030, and 2040. Demands are projected based upon current use, historical use trends, and forecasted development and population. Water supply is projected to remain consistent for normal, single-dry, and multiple-dry year conditions.

**Table 3.14-2. Projected Water Supply and Demand in the City of Simi Valley through 2040**

Water Supply/Demand	2020	2025	2030	2040
<b>Water Supply<sup>a</sup></b>				
Imported Water	19,248	19,429	19,610	19,791
Groundwater	1,000	1,000	1,000	1,000
Recycled Water	1,340	4,340	4,500	5,200
Simi Valley Basin (planned)	0	5,000	5,000	5,000
<b>Total</b>	<b>21,588</b>	<b>29,769</b>	<b>30,110</b>	<b>31,171</b>
<b>Water Demand</b>				
<b>Total</b>	<b>19,429</b>	<b>23,741</b>	<b>25,438</b>	<b>28,915</b>
<b>Difference</b>	<b>+2,159</b>	<b>+6,028</b>	<b>+4,672</b>	<b>+2,256</b>

Source: VCW 2015

Notes:

<sup>a</sup> Water is quantified in acre feet

The Project study area is located within the Ventura County Waterworks' (VCW) District No. 8 water service area. Water in VCW District No. 8 is predominantly (97 percent) imported from the State Water Project (SWP) from the Calleguas Municipal Water District (VCW 2015). The City also pumps water from two groundwater wells that extract water from the Gillibrand sub-basin of the Simi Valley Groundwater Basin and recycles small quantities of water (VCW 2015). According to the City's UWMP, the VCW forecasts sufficient water supplies through 2040 in normal, single-dry, and multiple-dry years (VCW 2015).

### Wastewater

The Project study area is in the service area of the City of Simi Valley Sanitation Services. The City's Sanitation Services is responsible for management, operation, maintenance, and capacity assurance of the City's sanitary sewer collection system. The City maintains approximately 380 miles of sewer line; 7,500 manholes; and three lift stations that transport wastewater from residential and commercial properties to the wastewater treatment plant. The City serves a population of approximately 127,000. The system's average daily flow is currently approximately 7.9 million gallons per day (City of Simi Valley 2019).

Wastewater within the City is conveyed and managed by the City of Simi Valley Sanitation Department and treated at the Simi Valley Water Quality Control Plant. According to the UWMP, approximately 2.8 million gallons of wastewater was treated in the 2015 fiscal year, while the plant has the capacity to treat approximately 10 million gallons of wastewater per day (VCW 2015; City of Simi Valley 2020b).

### Stormwater

The Project is within the Calleguas Creek Watershed, which drains an area of 343 square miles in southern Ventura County. The Calleguas Creek Watershed tributaries include the Conejo Creek, Arroyo Santa Rosa, Arroyo Simi, Arroyo Las Posas and Calleguas Creek, as well as Revelon Slough

and Mugu Lagoon (California Water Boards n.d.). Since its incorporation in 1969, the City has proactively designed, constructed, maintained and improved a large storm drainage network (City of Simi Valley 2014).

### Solid Waste

The City has an exclusive contract with a franchised hauler, Waste Management (G.I. Industries) that directly provides recycling and trash collection services. The Simi Valley Landfill and Recycling Center is located 5.8 miles northwest of the Projects' western terminus. The Simi Valley Landfill and Recycling Center has a maximum permitted throughput of 9,250 tons per day, and a remaining capacity of approximately 82,353,000 cubic yards (CalRecycle 2019).

### Electricity

The Project is within the electrical service area of the Southern California Edison Company (SCE Corp). SCE Corp supplies electricity for much of Southern California, with a service territory of approximately 50,000 square miles and 15 million customers. Existing electrical facilities in the Project study area include above and below ground electrical transmission and distribution lines at Sequoia Avenue, East Los Angeles Avenue, Goddard Avenue, and Hidden Ranch Drive.

### Natural Gas

The Project study area is within the natural gas service area of Southern California Gas Company (SoCalGas). SoCalGas distributes natural gas to more than 24,000 square miles in 500 communities in Central and Southern California. Existing natural gas facilities in the Project area include natural gas lines at Sequoia Avenue, East Los Angeles Avenue, Tapo Street, Arroyo lane, and Hidden Ranch Drive.

## 3.14.3 Regulatory Setting

This section summarizes federal, state, and local regulations related to utilities and service systems that are applicable to the Project.

### Federal

No existing federal regulations are applicable to the Project.

### State

#### *California Code of Regulations Title 24, Part 11, CALGreen*

CALGreen seeks to improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in areas of planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency and environmental quality. The code applies to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure throughout the State of California.

Under the CALGreen Code Chapter 5, Section 5.408, *Non-Residential Mandatory Measures - Construction Waste Reduction, Disposal and Recycling*, non-hazardous construction and demolition waste must be recycled and/or salvaged for reuse at a minimum of 65 percent.

### *Diversion Rule Assembly Bill 341*

Under commercial recycling law (Chapter 476, Statutes of 2011), AB 341 directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. AB 341 declared a state policy goal that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020.

### *Integrated Waste Management Act – Assembly Bill 939*

AB 939 mandates a reduction of waste being disposed and establishes an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. California Integrated Waste Management Board (CIWMB) oversees a disposal reporting system and facility and program planning. On January 1, 2010, all CIWMB duties and responsibilities, with the Department of Conservation Division of Recycling, transferred to the new CalRecycle, which is under the jurisdiction of the Natural Resources Agency.

### *Urban Water Management Planning Act*

The UWMPA requires that all urban water suppliers (either public or private) within the state of California prepare an UWMP. The UWMP provides a planning framework that guides the actions of water management agencies. It provides managers and the public with a broad perspective on water supply issues. The VCW District No. 8 UWMP was last updated in 2015 (VCW 2017).

### *Senate Bill X7-7 (SB X7-7)*

SB 7 of Special Extended Session 7 (SB X7-7) calls for progress towards a 20 percent reduction in per capita water use statewide by 2020. As a result, the legislation mandates each urban retail water supplier to develop and report a water use target in the retailer's 2010 UWMP. The legislation further requires that retailers report an interim 2015 water use target, their baseline daily per capita use and 2020 compliance daily per capita use, along with the basis for determining those estimates. Beginning in 2016, retail water suppliers are required to report on their compliance with the water conservation requirements in SBX7-7 in order to be eligible for State grants and loans (VCW 2017).

## Local

### *Regional Water Quality Control Board National Pollution Discharge Elimination System*

Under Section 402 of the Clean Water Act, the NPDES controls water pollution by regulating point sources that discharge pollutants into the waters of the U.S. Point sources are considered discrete conveyances such as pipes or man-made ditches. Pollutants include, but are not limited to, rock, sand, dirt and agricultural, industrial and municipal waste. Industrial, municipal, and other facilities must obtain NPDES permits if their discharges go directly to surface waters.

The City, as part of the Ventura Countywide Storm Water Quality Management Program, is under a stormwater permit from the RWQCB Los Angeles Region. The City is a permittee under an NPDES MS4 permit. Enforced under Title 6, Chapter 12 of the Simi Valley Municipal Code, the City addresses issues relating to stormwater quality management and regulates stormwater facilities in order to convey runoff in a safe, cost-effective manner, and prevent flooding.

### *City of Simi Valley General Plan*

The General Plan (City of Simi Valley 2012) includes goals and objectives related to recycling and diversion of solid waste to ensure compliance with the California Integrated Waste Management Act (IWMA) (AB 939), the California Solid Waste Reuse and Recycling Act, and the Solid Waste Diversion Rule (AB 341). Table 3.10-1 includes applicable General Plan goals and policies pertaining to utilities and service systems.

### 3.14.4 Impact Analysis

This section describes the potential for environmental impacts related to utilities and service systems as a result of Project implementation. It describes the thresholds used to determine whether an impact would be significant, as well as measures to mitigate potentially significant impacts, where appropriate.

#### Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to utilities and service systems would be considered significant if the Project would:

- A. Require or result in the relocation or construction of new or expanded water treatment or stormwater drainage, electrical power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects;
- B. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
- C. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- D. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or,
- E. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

#### Thresholds Requiring No Further Analysis

No thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project.

#### Methodology

Methodology used to analyze utilities and service systems included identifying utility companies with infrastructure or systems located within or adjacent to the Project study area. The study area for the utilities and service systems is the immediate footprint of the Project and service areas of utilities and service system providers that intersect the Project footprint. Utilities and service systems considered as part of the analysis included above and underground electrical lines; storm drains; gas lines; water supply lines and facilities; and the type, size, and location of the infrastructure potentially impacted by the Project.

## Impact Analysis

*Would the Project require or result in the relocation or construction of new or expanded water treatment or stormwater drainage, electrical power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?*

### CONSTRUCTION

**Less than Significant Impact.** Construction of the Project would require the extension or relocation of several existing utilities, as well as the implementation of drainage improvements throughout the study area. Utilities within the Project study area include municipal water and sewer pipes, storm drainage facilities, natural gas lines, and electrical power lines.

#### Water

Project construction would require the use of locally available water supplies, which are distributed by VCW District No. 8. During construction, water would be required for various activities, such as controlling dust, compacting soil, and mixing concrete. Overall, the total water needs for construction would be approximately 860,000 gallons (or 3 acre-feet). The City reports total citywide water demand for 2020 at 19,429 acre-feet. The Project's water demand during construction would represent less than 0.02 percent of the City's total 2020 water demand. The Project's construction water demand would be short-term and temporary and would not require the construction of new water facilities or expansion of existing facilities. Therefore, it is unlikely that the Project would result in the need for new or expanded off-site water facilities.

The Project would result in water utility relocation or casing extensions for the following water utilities:

- Golden State Water Company potable water lines in Sequoia Street, Goddard Avenue, Hietter Avenue, Tapo Street, and East Los Angeles Avenue; and,
- A new pump station at the low point of the pedestrian underpass at Simi Valley Station.

These water utilities would either be relocated or protected in place and extended and would not require the construction of new water facilities or expansion of existing facilities. As such, impacts would be less than significant. No mitigation is required.

#### Wastewater

Wastewater produced during construction would be minimal and would be discharged to the municipal sewer system or hauled offsite and the waste disposed at an appropriate facility in accordance with RWQCB regulations. As such, construction of the Project would not impact the City Sanitation Department's capacity to serve the Project's demand in addition to the provider's existing commitments.

The Project would result in wastewater utility conflict at the City's sewer and potable water lines at Sequoia Avenue, East Los Angeles Avenue, Tapo Canyon Road, and Hidden Ranch Drive. These utilities would either be relocated or protected in place and extended. Project construction would not require the construction of new wastewater facilities or expansion of existing facilities. Impacts would be less than significant. No mitigation is required.



### **Storm Drainage**

Construction would result in ground disturbing activities that could temporarily change drainage patterns in the immediate vicinity of the Project. A SWPPP, required under the Construction General Permit NPDES program, would ensure that runoff during construction would be controlled and would not require construction or expansion of storm drainage facilities. The Project would include the following proposed drainage improvements:

- Underdrains at the at-grade crossings where ditches are infeasible, and between the tracks at the platforms with the subgrade sloping toward the underdrain;
- Trackside ditches between crossings; and,
- Storm drain extensions or encasements where existing drainage systems intersect the proposed track infrastructure.

Reconfiguration or realignment of the storm drains would be conducted in coordination with the City of Simi Valley Public Works Department. Where possible, existing storm drains would be protected-in-place using casings, concrete blankets, or other industry-approved structural protection methods. All work would occur within an urbanized area and would not require the construction of new stormwater facilities or expansion of existing facilities. Impacts would be less than significant. No mitigation is required.

### **Electric Power, Natural Gas and Telecommunications**

The Project is located in a developed urban area of the City, which has existing infrastructure for electric power, natural gas, and telecommunication services. Electricity would be provided by SCE Corp and natural gas would be provided to the site by SoCalGas Company. Electricity and natural gas are not expected to be consumed in large quantities during construction-related activities, as construction equipment is expected to be fueled with diesel or gasoline. As described below, construction-related activities of the Project will result in fuel consumption from the use of construction tools and equipment, as well as transport of workers and materials to or from the construction site. This fuel consumption will be temporary and negligible relative to the overall consumption of petroleum in the state of California.

In summary, construction of the Project is anticipated to consume a total of approximately 2,894 gallons of gasoline and 47,989 gallons of diesel fuels over approximately 19 months. In comparison, California's consumption of petroleum gasoline and diesel fuels in 2019 were approximately 4,397,000 and 1,146,400 gallons per day, respectively (U.S. Energy Information Administration 2020c, 2020a). As such, consumption of petroleum during Project construction would represent approximately 0.07 percent and 0.03 percent of California's total consumption of gasoline and diesel, respectively. For a discussion of energy consumption during construction, see Section 3.5, Energy. Given that the Project would consume a relatively negligible amount of energy, new facilities and expansion of existing facilities would not be required to construct the Project.

The Project would result in multiple electric and natural gas utility crossings, including the following:

- The existing fiber optic cable, owned by a variety of telecommunications companies (AT&T, Verizon, Century Link), that runs parallel to the existing track under existing conditions would conflict with the new track, and would need to be relocated;
- Crimson gasoline pipeline (6- to 12-inch pipeline) at East Los Angeles Avenue and Tapo Canyon Road;

- SCE Corp electrical transmission and distribution (above and below ground) lines at Sequoia Avenue, East Los Angeles Avenue, Goddard Avenue, and Hidden Ranch Drive; and,
- SoCalGas natural gas lines at Sequoia Avenue, East Los Angeles Avenue, Tapo Street, Arroyo lane, and Hidden Ranch Drive.

Potholing would be implemented in conjunction with final design to verify the locations of all existing utilities within the Project study area and to determine which utilities would be protected in place and which utilities would require relocation or abandonment. Coordination with SCE Corp and SoCalGas would be required during final engineering design. Given the above, impacts would be less than significant. No mitigation is required.

#### OPERATION

**Less than Significant Impact.** Operation of the Project would not require the extension or relocation of existing utilities, including municipal water and sewer pipes, storm drainage facilities, natural gas lines, and electrical power lines.

#### Water

The City's 2015 UWMP reports total citywide water demand for 2020 at 21,588 acre feet per year (AFY). This is projected to increase by 9,583 AFY (or 44 percent) to 31,171 AFY in 2040. According to the City's UWMP, the City expects to meet projected water demand through 2040. Demand is based on the Water Supply Assessment, which assumes buildout of the City's General Plan for future land use. Water demand estimates are based on historical water usage and water demand factors within the Recycled Water Master Plan. The starting point for projections was the average water use from 2010 to 2014. The Project is a transportation project, which accounts for approximately 2,571.57 acres in 2040 and an assigned water duty factor of 0, and a water demand of 0 GPD in 2040. Therefore, the Project, as a transportation land use would not have any district water demand (VCW 2017) and would not require the construction of new water facilities or expansion of existing facilities. No impact would result.

#### Wastewater

During operation, the Project would not increase wastewater demand and would not require the construction of new wastewater facilities or expansion of existing facilities. No impact would result.

#### Storm Drainage

During operation, the Project would not increase runoff within the Project study area and would not require the construction of new storm drainage facilities or expansion of existing facilities. No impact would result.

#### Electric Power and Natural Gas

During operation, the Project would not increase electrical power or natural gas demand and would not require the construction of new electrical and natural gas facilities or expansion of existing facilities. Coordination with SCE would be needed for electrical needs at signal houses, platforms, underpass and the pump station.

Electrical demands currently exist at the five at-grade crossings to facilitate the operation of signaling equipment and at the Simi Valley Station for security lighting. Project operations currently require negligible use of natural gas at the Simi Valley Station. Passenger train operations currently require

the consumption of diesel fuel; however, this consumption is offset by an associated decrease in fuel consumption by passenger vehicles resulting from existing ridership and associated reductions in vehicle miles travelled.

Beyond the existing electrical demands described above, additional demand for electricity would be required to power new signal houses, light the new platform and pedestrian underpass, and operate the pump station. The net increase in electrical consumption following implementation of the Project would be negligible in the context of existing power demands. Impacts would be less than significant. No mitigation is required.

Project operations would not increase demands for natural gas at the existing Simi Valley Station. No new facilities (e.g., public restrooms) are proposed that would require consumption of natural gas at the station. Any minor increase in natural gas consumption from increased ridership would be negligible in the context of the existing station's overall energy consumption. For a discussion of energy consumption during construction, see Chapter 3.5, Energy. Impacts would be less than significant. No mitigation is required.

*Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

#### CONSTRUCTION

**Less than Significant Impact.** Construction of the Project would require the use of locally available water supplies from the VCW. During construction of each phase, water would be required for various activities, such as controlling dust, compacting soil, and mixing concrete. However, water use would be short-term and temporary and, as shown in Table 3.14-2, the City projects surplus water supplies through the planning horizon of 2040. Impacts would be less than significant. No mitigation is required.

#### OPERATION

**Less than Significant Impact.** Upon Project operation, the Project, a railroad improvements project, would not result in a notable increase in demand for water when compared to existing conditions. As discussed under Threshold (a), the City expects to meet projected demand needs through 2040 and the Project, as a transportation project would not require notable district water demand (VCW 2017).

Given the above, sufficient water supplies are available to serve the Project and reasonably foreseeable future development during normal, single-dry, and multiple-dry years. Impacts would be less than significant. No mitigation is required.

*Would the Project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

#### CONSTRUCTION

**Less than Significant Impact.** Wastewater produced during construction would be discharged to the municipal sewer system or hauled offsite and the waste disposed at an appropriate facility in accordance with RWQCB regulations. As such, construction of the Project would not impact the City Sanitation Department's capacity to serve the Project's demand in addition to the provider's existing commitments. Impacts would be less than significant. No mitigation is required.

## OPERATION

**Less than Significant Impact.** As discussed under Threshold (a) above, the Project, as a transportation project would not result in notable district water demand (VCW 2017). Therefore, the Project would not require the construction of new treatment facilities as the City's Sanitation Services would have adequate capacity to treat the wastewater produced by the Project. Impacts would be less than significant. No mitigation is required.

*Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

## CONSTRUCTION

**Less than Significant Impact.** Construction of the proposed Project would require the removal of soils and other construction and demolition debris from the Project site. An estimated 2,000 cubic yards of construction waste would be hauled offsite. The Project would comply with Section 5.408 of the CALGreen Code which requires that a minimum of 65 percent of all non-hazardous construction and demolition materials be recycled and/or salvaged for reuse. Those construction and demolition materials that cannot be recycled would be disposed of at the nearest, permitted landfill, the Simi Valley Landfill and Recycling Center, located 5.8 miles northwest of the Project's western terminus. The Simi Valley Landfill and Recycling Center has a maximum permitted throughput of 9,250 tons per day, and a remaining capacity of approximately 82,353,000 cubic yards (CalRecycle 2019). As such, the landfill has sufficient capacity to serve the Project together with other approved and planned projects. Impacts would be less than significant. No mitigation is required.

## OPERATION

**Less than Significant Impact.** Diversion rates are used to report solid waste disposal in the City and to address state and local recycling goals, which require each city in the state to divert at least 65 percent of its solid waste from landfill disposal through measures such as source reduction, recycling, and composting. According to CalRecycle's 2015 Jurisdiction Diversion/Disposal Rate Summary for Simi Valley, the City meets its target employment disposal rate of 21.80 pounds per person per day with an annual rate of 13.60 pounds per person per day (CalRecycle 2015). The Project would be required to comply with federal, state, and local statutes and regulations related to solid waste and recycling, such as AB 939, through participation in existing City's waste diversion programs.

With compliance with federal, state, and local statutes and regulations, the Project would not generate solid waste in excess of the capacity of local infrastructure and would not conflict with the attainment of solid waste reduction goals by reusing soil as feasible. Impacts would be less than significant. No mitigation is required.

*Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

## CONSTRUCTION

**Less than Significant Impact.** As discussed under Threshold (d) above, during construction of the Project, an estimated 2,000 cubic yards of construction waste would be hauled offsite. Any solid waste produced during construction and operation of the Project would be disposed in compliance with applicable federal, state, and local statutes, including the Section 5.408 of the CALGreen Code. In compliance with state and local requirements for waste reduction and recycling, including the 1989

California IWMA, which calls for a diversion target of 50 percent of solid waste, landfill demands would be minimized by recycling during project construction. Impacts would be less than significant. No mitigation is required.

#### OPERATION

**Less than Significant Impact.** Solid waste production during operation of the Project would be disposed in compliance with applicable federal, state, and local statutes, including Section 5.408 of the CALGreen Code. Impacts would be less than significant. No mitigation is required.

### 3.14.5 Mitigation Measures

The Project would have a less than significant impact on utilities and service systems. No mitigation is required.

### 3.14.6 CEQA Significance Conclusions After Mitigation

The Project would have a less than significant impact on utilities and service systems.

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## 3.15 Wildfire

### 3.15.1 Introduction

The Wildfire section describes the environmental setting and regulatory setting for wildfire hazards in the Project study area. It also describes the impacts on wildfire resources that would result from construction and operation of the Project and mitigation measures that would reduce significant impacts, where feasible. Cumulative impacts on wildfires, in combination with planned, approved, and reasonably foreseeable projects, are discussed in Chapter 4, Cumulative Impacts.

### 3.15.2 Environmental Setting

This section summarizes the existing environmental setting related to wildfires and related hazards within the Project study area.

A wildfire is an uncontrolled fire spreading through vegetative fuels. Wildfires can be caused by human activities (such as arson or campfires) or by natural events (such as lightning). Wildfires differ from other fires due to their large size, the speed at which the fires can spread, and the ability of the fire to change direction unexpectedly and to jump gaps, such as roads, rivers, and fire breaks. In areas like Simi Valley, where structures and other human development meet or intermingle with wildland or vegetative fuels (referred to as the wildland urban interface [WUI]), wildfires can cause significant property damage and present extreme threats to public health and safety. The City is set between two hilly and mountainous areas of brush-covered wildlands and the outbreak and spread of wildland fires is a potential danger. This is especially the case during the hot and dry summer months when the buildup of dry brush can provide fuel that results in potentially larger, more intense wildland fires.

The Project study area is located immediately adjacent to a north-facing slope with vegetation that consists of grass, low-lying brush, and isolated trees. Simi Valley has records of fires occurring every two to five years (City of Simi Valley 2007a). These fires primarily occur on the hillsides and ridgeline areas surrounding the Valley. CALFire has mapped a portion of the Project study area as a VHFHSZ as illustrated on Figure 3.15-1 (CALFire 2010).

The Project study area is located within the service boundaries of the Ventura County Fire Department's (VCFD), Battalion 4. The VCFD provides fire protection and emergency medical services to the City and maintains six stations within the City limits. Station 41 approximately 0.34 mile west of the Project's western terminus, Station 43 approximately 0.89 mile east of the Project's eastern terminus, and Station 46 approximately 2.0 miles northwest of the Project's eastern terminus (VCFD 2020).

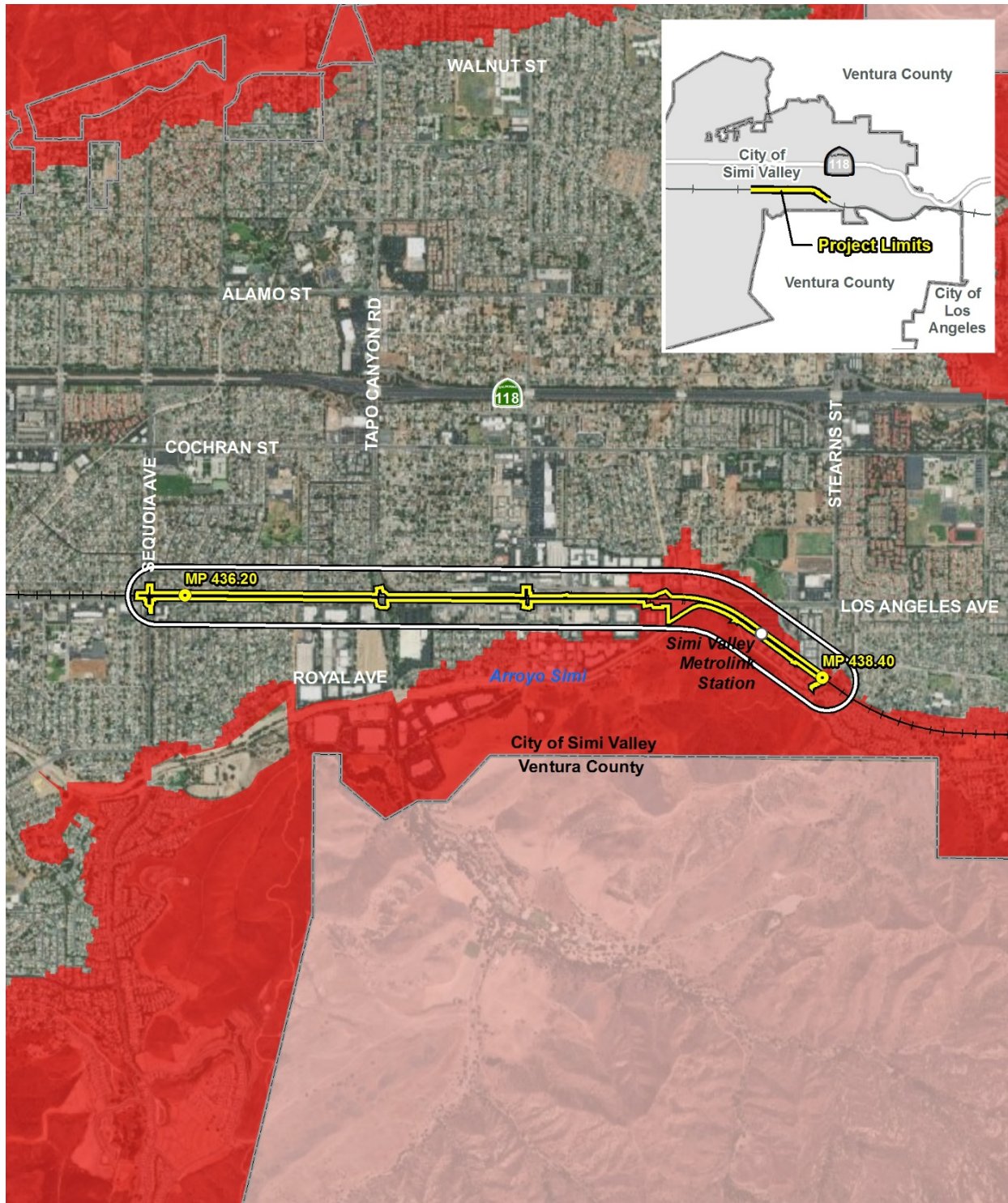
VCFD's goal for response times is between 5 to 7 minutes for emergency calls, and 9 to 12 minutes for non-emergency calls. In 2006, VCFD kept a 4 minute 56 second emergency response time, and 7 minute 18 second response time for non-emergency calls (City of Simi Valley 2007b). VCFD also provides incident response to hazardous materials incidents, mass disaster incidents, and medical aid assistance with American Medical Response for paramedic ambulance services.

Wildfire events documented in the Project study area include the 2003 Simi Valley Fire, 2005 Topanga Fire, and most recently the Peak Fire in 2020 (ABC 7 2020).

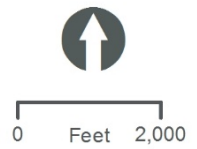
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Figure 3.15-1. Fire Severity and Responsibility Map



- |                   |  |
|-------------------|--|
| Project Footprint | City Boundary  |
| Study Area        | Fire Hazard Severity Zone in Local Responsibility Area |
| Mile Post         | Very High  |
| Existing Rail     | Fire Hazard Severity Zone in State Responsibility Area |
| Metrolink Station | Very High  |



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### 3.15.3 Regulatory Setting

This section summarizes federal, state, and local regulations related wildfires and related hazards that are applicable to the Project.

#### State

##### *California Fire Code (Title 24, Part 9, California Code of Regulations)*

The California Fire Code is Part 9 of the CCR, Title 24, also referred to as the CBSC. The California Fire Code incorporates the Uniform Fire Code with necessary California amendments. The California Fire Code prescribes regulations consistent with nationally recognized minimum standards for the safeguarding to a reasonable degree of life and property from the hazards of fire explosion, and dangerous conditions arising from the storage, handling and use of hazardous materials and devices, and from conditions hazardous to life or property in the use or occupancy of buildings or premises and provisions to assist emergency response personnel. All new buildings, homes, businesses, and agencies within Simi Valley must conform to standards within the California Fire Code.

##### *California Department of Forestry and Fire Protection*

CalFire is responsible for fire protection in various areas under state responsibility across the state. CalFire is split into 21 operational units, following County line divisions. Some of the units are operated by their respective counties with permission from CalFire.

##### *California Fire Plan*

The California Fire Plan provides information on reducing the risk for wildfires, including discussions of community risk, how to develop solutions for communities, and pre-fire management projects.

##### *California Public Resources Code 4201-4204 – Fire Hazard Severity Zones*

PRC 4201-4204 directs CalFire to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as Fire Hazard Severity Zones (FHSZ), define the application of various mitigation strategies to reduce risk associated with wildland fires. CalFire is remapping FHSZ for State Responsibility Areas (SRA) and VHFHSZ recommendations in LRAs to provide updated map zones, based on new data, science, and technology. This specific dataset is used to create the official "Maps of Fire Hazard Severity Zones in the State Responsibility Area of California". Refer to Figure 3.15-1 for the extent of FHSZs within the Project study area.

##### *California Public Utilities Commission General Order Number 118-A*

The CPUC adopted General Order 118-A on April 9, 1963 which established guidance on construction, reconstruction, and maintenance of walkways adjacent to railroads, and control of vegetation adjacent to the tracks. Walkways are required to be 2 feet wide at minimum, kept free of any vegetation, and provide for abatement of weeds and brush adjacent to walkways. The outer edge of the mainline walkways is required to be at minimum 8 feet 6 inches.

## Local

### *Simi Valley General Plan*

The Safety Element of the City's General Plan (City of Simi Valley 2012b) includes goals and objectives to reduce loss of life, injuries, property damage and dislocation resulting from fire, geologic hazards, flood and other natural or man-made hazards. Table 3.10-1 includes applicable General Plan goals and policies pertaining to wildfire hazards.

### *City of Simi Valley Emergency Operations Plan*

The Emergency Operations Plan (EOP), details the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies (City of Simi Valley 2001). The intent of the document is to guide persons through the proper responses and chain of notification of the proper persons associated with the emergency response from the City. The EOP includes information on management, operations, planning, logistics, fiancé, and required legal documents. An updated EOP plan is expected in 2021 but was not available for review at the time of this EIR.

### *City of Simi Valley Multi-Hazard Mitigation Plan*

The City is required to adopt and state and federally approved *Multi-Hazard Mitigation Plan* (City of Simi Valley 2015) under the regulations of the Disaster Mitigation Act of 2000. The overall intent of the *Multi-Hazard Mitigation Plan* is to be a strategic planning tool for the reduction or prevention of injury and damage from hazards in Simi Valley. The *Multi-Hazard Mitigation Plan* includes findings and recommendations that are intended to inform community members and public officials about the hazards in Simi Valley and methods to mitigate them.

Example include ensuring that street widths, paving and grades can accommodate emergency vehicles and evacuees, providing standards for open space around structures to promote fire safety, ongoing education programs for residents adjacent to wildland areas, and working with the Ventura County Fire Protection District to establish procedures that will enable the City to acquire near real-time data on wildfires to improve the response to an emergency.

### *City of Simi Valley Municipal Code*

#### **TITLE 4 PUBLIC SAFETY, CHAPTER 6 (FIRE PREVENTION)**

In 1980, the City adopted the Uniform Fire Code within the Simi Valley Municipal Code Chapter 6. Article 2 of this Chapter identifies the adopted Uniform Fire Code and associated amendments and provides standards and regulations for fire prevention and safety.

#### **CHAPTER 10 (TUMBLEWEEDS, WEEDS, GRASS, AND SIMILAR VEGETATION)**

Chapter 10 requires that an owner or occupant of any real property within the City prevent the accumulation or growth of any tumbleweeds, weeds, grass, or similar vegetation, trash, and debris on the property, minimizing the risk of a fire menace when dry.

### *County of Ventura Municipal Code*

While the project occurs within the City, the fire protection for the City is provided by VCFD and complies with the County of Ventura Municipal Code.

### VENTURA COUNTY FIRE DISTRICT ORDINANCE NO. 31

On October 15, 2019, Ventura County Fire District completed the adoption process of Fire Protection District Ordinance No. 31 that modified Appendix VII of Ordinance No. 31 of the Uniform Fire Code (2000 edition). Appendix W adopts building standards related to fire and life safety that are more restrictive than those adopted by the State Fire Marshal and contained within the California Building Code.

Appendix W of Ordinance No. 31 of the Fire Code includes provisions intended to identify hazard areas and mitigate the risk to life and Structures from intrusion of fire from wildland fire exposures and fire exposures from adjacent structures and to mitigate fires from spreading to wildland fuels that may threaten to destroy life, overwhelm fire suppression capabilities, or result in large property loss (VCFD 2019).

### 3.15.4 Impact Analysis

This section describes the potential for environmental impacts related to wildfires as a result of Project implementation and describes the thresholds used to determine whether an impact would be significant. Measures to mitigate potentially significant impacts are identified, where appropriate.

#### Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, Project impacts related to wildfires would be considered significant if the Project would:

- A. Substantially impair an adopted emergency response plan or emergency evacuation plan;
- B. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
- C. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or,
- D. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

#### Thresholds Requiring No Further Analysis

No thresholds were determined to result in no impact or are otherwise inapplicable to the actions associated with the Project.

#### Methodology

This analysis leverages publicly available mapping, reports, and information for the Project study area and evaluates the potential for the proposed Project to exacerbate existing wildfire hazards. The analysis considers both construction and long-term operation of the Project within the 2.20-mile Project study area and the relative proximity and overlap with areas designated as VHFHSZ.

## Impact Analysis

*Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?*

### CONSTRUCTION

**Less than Significant with Mitigation.** A portion of the Project study area, extending between Tapo Street and Stearns Street, is located within a VHFHSZ, as illustrated on Figure 3.15-1. The remainder of the Project study area is not located within a designated FHSZ. During Project construction, the increased movement of construction vehicles and equipment through the Project study area may result in temporary impacts to surrounding roadways; which could result in subsequent delays in emergency service providers' response times, including response times to calls for fire protection services. However, as described in Section 3.12 these impacts would be intermittent and temporary in nature and, as such, are not anticipated to result in significant impacts following the implementation of Mitigation Measure TRA-1.

As described in the setting, the City has an adopted EOP to manage emergency response operations (City of Simi Valley 2001). The EOP addresses the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies (City of Simi Valley 2015). The EOP designed evacuation routes that overlap with the Project study area at East Los Angeles Avenue, Royal Drive, Sycamore Avenue, the Ronald Regan Freeway (State Route 118), and Kuehrer Drive (Ventura County Star 2019). The closest VCFD stations to Project study area are Station 41 approximately 0.34 mile west of the Projects' western terminus, Station 43 approximately 0.89 mile east of the Projects' eastern terminus, and Station 46 approximately 2.0 miles northwest of the Projects' eastern terminus (VCFD 2020).

Construction of the Project would occur over an approximately 19 months duration. Approximately 84 construction personnel would be required at peak levels of construction; however, due to the phasing of the Project, this level of construction would fluctuate. Additionally, construction activities would be transition through Project study area and not be focused at any given location other than the Simi Valley Station. In the event of an emergency, VCFD Stations 43 and 46 would be the most likely to respond in the event of an emergency. Implementation of Mitigation Measure TRA-1, which requires the preparation of a TMP for construction and subsequently would coordinate Project construction activities with VCFD to maintain use of existing evacuation routes during construction and emergency access for VCFD incident response, would reduce potentially significant impacts to a less than significant level.

### OPERATION

**Less than Significant Impact.** Once operational, and like existing conditions, the Project is not anticipated to physically impede the existing emergency response plans, emergency vehicle access, or personnel access through the Project study area. The Project study area is located on the Valley floor and traverses an existing urban corridor. Operation of the Project would not require any closures of existing public roads or significantly affect current roadway intersection LOS. Further, the Project would not inhibit the implementation of the City's adopted EOP and Multi-Hazard Mitigation Plan in the event of a citywide emergency. In this context, Project-related impacts would be less than significant. No mitigation is required.

*Would the Project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** The Project study area is located on the valley floor and is characterized by minimal topographic relief. A portion of the Project study area between Tapo Street and Stearns Street is within a VHFHSZ and is within a local responsibility area (Cal Fire 2020). Construction of the Project would not include new habitable structures within VHFHSZs that could otherwise place additional people at significant risk from wildfires. Additionally, a majority of the work would be conducted within the railroad ROW, which contains ballast and minimal vegetation that could ignite. However, portions of the ROW contain trees along the edge and the eastern end of the Project is located within VHFHSZ. Given the Project would be constructed during portions of the year characterized by elevated fire danger, the Project's construction carries the potential exacerbate wildfire hazards, which would be a significant impact in the absence of mitigation.

Water trucks would also be onsite for dust suppression purposes. With these measures in conjunction with the closest proximity of multiple VCFD stations, which would respond to any emergency situations, impacts would be reduced to a less than significant level. Implementation of Mitigation Measure WLD-1, which would require fire suppression equipment to be held onsite in the unlikely event of ignition occurring onsite and Mitigation Measure TRA-1, which would ensure ease of access to the site in the unlikely event of an emergency, would reduce potentially significant impacts to a less than significant level.

#### OPERATION

**Less than Significant Impact.** Once complete, the Project would not exacerbate wildfire risk from the installation of additional rail track, station platform and pedestrian undercrossing. Use and operation of these facilities would not pose significant risk for fires during operation of trains along the rail lines and at the Simi Valley Station. The Project would not create any habitable structures for users. Future operations would include vegetation management along the ROW similar to existing conditions to reduce the build-up of ignitable fuels. Impacts would be less than significant. No mitigation is required.

*Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

#### CONSTRUCTION

**Less than Significant with Mitigation.** The Project is a railroad improvements project that would require the installation and subsequent maintenance of infrastructure including railroad tracks, roadway and sidewalk improvements and utility improvements. Most of the project components including sidewalk/undercrossing, retaining wall improvements, and additional station platforms would be built out of concrete and not combustible. The retaining wall would be constructed adjacent to the tracks and provide a fuel break between the track and adjacent slopes containing vegetation. These improvements would be constructed to CBSC standards and CPUC General Order 118-A, and, as such, would not exacerbate existing fire risk.

In the unlikely event of a fire during utility relocation or encasement during Project construction, Mitigation Measure TRA-1 would be required to maintain access for fire protection services. However, in the absence of onsite fire suppression equipment, temporary risks during construction result in a

potentially significant impact. Mitigation Measure WLD-1 would require the onsite storage of fire suppression equipment, which would reduce potentially significant impacts to a less than significant level.

#### OPERATION

**Less than Significant Impact.** Once operational, any infrastructure maintenance for gates, signaling, or the station platform and pedestrian undercrossing would be accessible by the rail ROW. These improvements and related maintenance would occur on land that contains minimal to no vegetation similar to existing conditions consistent with SCRRA’s maintenance of way requirements. SCRRA’s Integrated Pest Management program requires yearly one-time pre-emergent herbicide application scheduled during the months of December to February just prior to an expected rainfall event of at least 0.5 inch and yearly one-time post-emergent herbicide spot treatment program applied on an as needed basis from July to September (SCRRA 2021). Impacts would be less than significant. No mitigation is required.

*Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

#### CONSTRUCTION

**Less than Significant Impact.** The Project study area is relatively flat; however, it traverses through areas zoned A, AE, AO, and AH where base flood levels have been determined to vary from 1 to 3 feet under existing conditions (FEMA 2010). The Project would not involve the construction of habitable structures that could be susceptible to the risk of flooding, landslides, or wildfire. Project construction would occur in generally level areas and predominantly constructed within the existing SCRRA ROW. Therefore, the Project is unlikely to increase or exacerbate the potential for significant risks for landslides or post-fire instability. Impacts would be less than significant. No mitigation is required.

#### OPERATION

**Less than Significant Impact.** The Project would be designed and constructed in compliance with SCRRA’s DCM (as amended) (SCRRA 2021), California Building and Fire Code, CPUC guidelines, and Ventura County Fire Ordinances. One of the Project’s main objectives is to increase the safety of the existing corridor and Project improvements would include seismic design standards and extensive onsite drainage improvements to minimize changes in post-construction drainage conditions. Given the above, the Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant. No mitigation is required.



### 3.15.5 Mitigation Measures

The following mitigation is proposed to reduce the Project's potential to exacerbate existing wildfire hazards within the Project study area. Mitigation Measure TRA-1 is proposed to minimize one or more effects related to wildfire hazards and further described in Section 3.12, respectively.

**WLD-1**      **Provide accessible fire suppression equipment.** During construction of the Project, fire suppression equipment will be kept onsite for easy access in the event of a fire. Workers will undergo fire suppression training to ensure proper use of the equipment occurs. During periods of elevated fire danger, the contractor will designate an employee to monitor portions of the construction work areas overlapping areas designated VHFHSZ to enable rapid incident reporting to VCFD.

### 3.15.6 CEQA Significance Conclusions After Mitigation

With implementation of Mitigation Measures WLD-1 and TRA-1 and, the Project would have a less than significant impact associated with wildfire.

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## 4 Cumulative Impacts

The cumulative impact analysis is intended to identify impacts of the Project that may be minor when viewed in isolation, but which contribute to a larger impact when combined with similar impacts from past, present, and anticipated future projects. This chapter provides an evaluation of the Project's incremental contribution to cumulative impacts when considered with other reasonably foreseeable projects.

### 4.1 Regulatory Framework

CEQA requires an EIR to include an evaluation of a project's contribution to cumulative impacts. Cumulative impacts are the project's impacts combined with the impacts of the related past, present, and reasonably foreseeable future projects. CEQA Guidelines (Section 15355) define a cumulative impact as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." The CEQA Guidelines [Section 15130(a)(1)] further state that "an EIR should not discuss impacts which do not result in part from the project."

Section 15130(a) of the CEQA Guidelines provides that "[A]n EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable..." Cumulatively considerable, as defined in Section 15065(a)(3), "means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

### 4.2 Methods for Evaluating Cumulative Impacts

There are several steps involved in analyzing cumulative impacts. The initial steps involve analyzing direct and indirect impacts, followed by the application of those results to cumulative impacts. These steps are generally outlined below:

- Establish the geographic scope for the analysis used to analyze project-level and cumulative impacts and determine the appropriate scale for analysis, localized and/or regional.
- Characterize the thresholds of significance that are relevant to the resource issue areas.
- Identify the impacts associated with the project. If there are no direct or indirect impacts of the project on a resource or discipline area, then there cannot be any cumulative impacts.
- Identify other actions affecting the resource issue areas of concern. This includes consideration of past, present, and probable future related projects.
- Determine the magnitude and significance of cumulative impacts. Significance determinations are based on the methodology and thresholds of significance relevant to each resource issue area as presented in Sections 3.1 through 3.15.
- For cumulative impacts that are considered significant, identify the Project's incremental contribution and determine if it is cumulatively considerable.
- Identify potential mitigation measures for potential cumulative impacts. Potential mitigation measures could include reasonable, feasible options for mitigating or avoiding the Project's contribution to any significant cumulative effects.

## 4.3 Cumulative Impact Analysis

### 4.3.1 Projects Considered

Section 15130(b) of the CEQA Guidelines also identifies two basic methods for establishing the cumulative environment in which the Project is to be considered: (1) a list of past, present, and probable future projects producing related or cumulative impacts, or (2) a summary of projections contained in an adopted general plan or similar document, or in an adopted or certified environmental document, that described or evaluated conditions contributing to a cumulative impact. For this EIR, a combined list and plan approach have been used to generate the most reliable future projections possible for assessing potential cumulative impacts at both the local and regional scale, and temporally over the duration of Project construction and future operation.

The Project is composed of several components, including new track infrastructure and second platform at the Simi Valley Station. To facilitate consideration of these proposed improvements and their corresponding potential direct and indirect effects during construction and long-term operation of the Project, this analysis considers three types of cumulative projects: rail projects, other regional transportation improvement projects, and land development projects surrounding the Project study area. A list of reasonably current and foreseeable projects within the region including from the County of Ventura and City of Simi Valley are provided in Table 4-1 and on Figure 4-1. The geographic study areas (Table 4-2) considered for cumulative impact analyses vary by individual resource and can include different scales of impact (such as for criteria pollutants or GHG emissions).

To facilitate consideration of the capacity improvements provided by the build alternative, the cumulative analysis also considers a regional scale that encompasses the Metrolink VCL, which covers the northern portion of larger SCAG, six-county region. The regional cumulative analysis applies a “plan approach” and incorporates by reference SCAG’s 2020-2040 RTP/SCS EIR (SCAG 2020a), which includes consideration of the Project and several other key regional transit projects (e.g., SCRRA’s SCORE Program, etc.) that could result in cumulative operational effects throughout the regional transit network. Table 4-2 details the scale at which the cumulative analysis was conducted for each of the resource topics covered in Chapter 3, Environmental Analysis, Impacts, and Mitigation.

**Table 4-1. Adjacent Projects Considered in the Cumulative Analysis**

Project		Implementing/ Responsible Agency	Description	Location	Project Status	Location Relative to Project <sup>a</sup>
1	New Metrolink VCL Station in Simi Valley	UPRR and Metrolink	Provision of a west-side railroad station in the vicinity of Mountain Gate Plaza per Policy M-13.9 of the City's General Plan.	North of 1177 East Los Angeles Avenue	Proposed in General Plan	2.5 miles west of Project Study Area
2	Building Up: LOSSAN North Improvement Program	LOSSAN	As part of the Transit and Intercity Rail Capital Program, provide investments that increase Pacific Surfliner service to Santa Barbara from 5 to 6 round trips, and to San Luis Obispo from 2 to 3 round trips. The project also improves travel time, reliability and safety for both Metrolink and the Pacific Surfliner in the Los Angeles to San Luis Obispo corridor.	Various cities in California, including the City of Simi Valley	Under Construction	Overlaps with Project footprint at Simi Valley Metrolink Station
3	All Aboard 2018: Transforming SoCal Rail Travel	LOSSAN	Improve on-time performance and rail corridor capacity for Pacific Surfliner and Coaster trains by investing in signal optimization, a more robust capital maintenance program and new right of way fencing. These projects prepare the corridor for higher frequency services on the Pacific Surfliner and COASTER.	Various cities in California, including the City of Simi Valley	Under Construction	Overlaps with Project footprint at Simi Valley Metrolink Station
4	State Highway Operations & Protection Program Major Projects	Caltrans	In Simi Valley along SR-118, from 0.3 mile east of 1st Street to 0.1 mile east of Yosemite Street. Construct maintenance vehicle pullouts and access roads, pave gore areas, install smart irrigation controllers and access gates.	City of Simi Valley	Under Construction	0.60 miles north of Project study area
5			In Moorpark and Simi Valley, Pavement rehabilitation along SR-118 from east of Arroyo Simi Overhead to 2.1 miles west of the Los Angeles County line.	Cities of Simi Valley and Moorpark	Under Construction	0.60 miles north of Project study area
6			In and near Cities of Thousand Oaks and Moorpark, rehabilitate pavement from Route 101 to Route 118 (PM R11.451).	Cities of Thousand Oaks and Moorpark	Under Construction	6.4 miles east of Project study area

**Table 4-1. Adjacent Projects Considered in the Cumulative Analysis**

Project		Implementing/ Responsible Agency	Description	Location	Project Status	Location Relative to Project <sup>a</sup>
7			In and near City of Thousand Oaks, Moorpark, and Fillmore, from the Los Angeles County line to Route 126, construct stormwater BMPs.	Cities of Thousand Oaks, Moorpark, and Fillmore	Planned	6.4 miles east of Project study area
8	SR-23 Pavement Rehabilitation Project	Caltrans	The SR-23 Project will replace pavement on the outer two lanes from U.S. 101 to SR-118 to provide a service life of 40 years. The on- and off-ramps, connectors and adjacent shoulders also will be rehabilitated, and slabs will be replaced on the inner lane in both directions where needed. Existing curbs ramps will be upgraded where necessary in approximately 36 locations to comply with the ADA, and approach slabs and bridge rails will be replaced at select locations (5 locations). The performance measures for this project are 46.7 lane miles.	Ventura County	Construction - Summer 2020 – Fall 2023	6.4 miles east of Project study area
9	New Lanes (2019 FTIP ID VEN131202)	Caltrans	On SR-118, add one lane in each direction from Route 23 (New Los Angeles Avenue) to 0.4 mile west of Tapo Canyon Road, add a second lane in each direction from Collins Drive to Madera Road, and one lane each direction on Route 23 from 0.8 mile north of Tierra Rejada to Los Angeles Avenue.	Cities of Simi Valley and Moorpark	Design to begin 2019-2020, Construction Status Unknown	0.60 north of Project study area
10	Tapo Canyon Road Realignment	County of Ventura Public Works	Road Realignment at MP 1.04 due to slope failure. The project is funded by Hazard Mitigation Grant Program.	City of Simi Valley	Construction – 2022-2023	2.7 miles north of Project study area
11	Las Lajas Canyon – Arroyo Simi to Alamo Street	County of Ventura Public Works	Construct channel improvements from the Arroyo Simi to Alamo Street. Objective is the provide 100-year flood protection within the project reach.	City of Simi Valley	Design to begin 2024-2025, Construction Status Unknown	Overlaps with Project footprint

**Table 4-1. Adjacent Projects Considered in the Cumulative Analysis**

Project		Implementing/ Responsible Agency	Description	Location	Project Status	Location Relative to Project <sup>a</sup>
12	New Bicycle and Pedestrian Facilities (2019 FTIP ID VEN120417)	City of Simi Valley	Within the City of Simi Valley, widen West Los Angeles Avenue 10 feet to add bike lanes and sidewalk from the public services center to the west city limit (1.0 miles).	City of Simi Valley	Construction 2019-2020	4.8 miles northwest of the Project study area
13	Annual Major Streets Rehabilitation Program	City of Simi Valley	First Street from Fitzgerald Road to Bluegrass Street and Fitzgerald Road from Appleton Road to Sequoia Avenue.	City of Simi Valley	Design to begin 2020-2021, Construction Status Unknown	1.2 to 2.9 miles southwest of Project study area
14		City of Simi Valley	Cochran Street from Sycamore Drive to Sequoia Avenue.	City of Simi Valley	Construction 2017-2018	0.4 mile north of Project study area
15	Highway Bridge Program	City of Simi Valley	Widen existing four lane Cochran bridge (Bridge No. 52C0115) over Las Llajas Creek to accommodate center turn lane, sidewalks, curb and gutter. No added lane capacity.	City of Simi Valley	Construction 2016-2018	0.6 mile north of the Project Study Area
16		City of Simi Valley	Repair deck spalls and overlay deck with Portland cement concrete seal coat and construct metal beam guard rail on northeast approach of Madera Road bridge (Bridge No. 52C0150) over existing Metrolink and Amtrak railroad.	City of Simi Valley	Design 2018-2019, Construction Status Unknown	3.7 miles northwest of the Project study Area
17		City of Simi Valley	Rehabilitation of Los Angeles Avenue bridge (Bridge No. 52C0206). Widen existing 6-lane bridge enough to accommodate sidewalks and bike lanes (no added capacity).	City of Simi Valley	Design 2020-2021, Construction Status Unknown	2.8 miles northwest of Project study area
18		City of Simi Valley	Widen existing 2-lane Barnard Street bridge (Bridge No. 52C0231) over Las Llajas Creek with a 2-lane bridge to accommodate shoulders (no added capacity).	City of Simi Valley	Design 2017-2019, Construction Status Unknown	0.6 mile northeast of Project study area

**Table 4-1. Adjacent Projects Considered in the Cumulative Analysis**

Project		Implementing/ Responsible Agency	Description	Location	Project Status	Location Relative to Project <sup>a</sup>
19	Arroyo Simi Greenway Specific Plan	City of Simi Valley	The Arroyo Simi Greenway is primarily located within an established public ROW along the Arroyo Simi channel and owned by VCWPD. This project proposes development of a 12-mile greenway with many different components (parks and amenities, trail types, signage, landscaping, lighting, furniture, etc.) that will potentially be built out over the next 20-30 years, depending on funding availability.	City of Simi Valley	Phased approach – Construction is ongoing based on funding	Overlaps with Project footprint
20	Rancho Santa Susana Park	City of Simi Valley	Construct Phase 4 improvements to Rancho Santa Susana Park.	5005 East Los Angeles Avenue	Approved, Construction Status Unknown	Overlaps with Project Study Area to the north
21	UPRR Trail (Class I Bike Path)	City of Simi Valley	From Erringer Road to Ralston Street, construct a 3.5-mile trail adjacent to existing tracks.	City of Simi Valley	Planned, Construction Status Unknown	Overlaps with Project study area
22	Class III Bike Lanes	City of Simi Valley	Various segments with varying lengths and locations.	City of Simi Valley	Planned, Construction Status Unknown	Overlaps with Project study area
23	Pinehurst	City of Simi Valley	Construct 24 single- family residences.	Canyon Oaks Drive at northeast corner of Kuehner Drive and 118 Freeway	Approved, Construction Status Unknown	1.8 miles northeast of Project study area
24	Nehoray Townhomes	City of Simi Valley	Construct 8 townhomes.	Southeast of Los Angeles and Stow Street	Approved, Construction Status Unknown	0.5 mile northeast of Project study area



**Table 4-1. Adjacent Projects Considered in the Cumulative Analysis**

Project		Implementing/ Responsible Agency	Description	Location	Project Status	Location Relative to Project <sup>a</sup>
25	Stow Villas	City of Simi Valley	Construct 16 townhomes with three moderate income residences with an Affordable Housing Agreement.	5496 East Los Angeles Avenue	Approved, Construction Status Unknown	0.4 mile northeast of Project study area
26	Fountain Wood Estates	City of Simi Valley	Construct 13-single family residences.	Between the eastern terminus of Presidio Drive and Denton Avenue	Approved, Construction Status Unknown	1.9 mile north of Project study area
27	Sueno Apartments	City of Simi Valley	Construct a 10-unit multi-family dwelling with one affordable housing unit with an Affordable Housing Agreement.	Buyers Street and Shopping Lane	Approved, Construction Status Unknown	Overlaps with Project study area
28	Hacienda Peppertree	City of Simi Valley	Construct a 357-unit senior residential care facility.	Southwest corner of Tapo Canyon Road and Guardian Street	Approved, Construction Status Unknown	0.5 south of Project study area
29	Emerald Avenue Homes	City of Simi Valley	Construct three single-family residences on vacant lots.	3117 Alamo Street	Approved, Construction Status Unknown	1.0 mile northeast of Project study area
30	Patricia Place	City of Simi Valley	Construct a 12-unit senior assisted living facility.	1350 Patricia Avenue	Approved, Construction Status Unknown	2.4 miles southeast of Project study area
31	Good People USA	City of Simi Valley	Construct 26, 3-story townhome units with four affordable units. Concessions include reduced front setback (from 34' to 23') & 2 less parking spaces.	1260 and 1270 Patricia Avenue	Approved, Construction Status Unknown	2.5 miles southeast of Project study area

**Table 4-1. Adjacent Projects Considered in the Cumulative Analysis**

Project		Implementing/ Responsible Agency	Description	Location	Project Status	Location Relative to Project <sup>a</sup>
32	Vantage Apartments	City of Simi Valley	Construct a 54-unit apartment complex in a single building with four affordable units with an Affordable Housing Agreement.	1260 and 1270 Patricia Avenue	Approved, Construction Status Unknown	2.5 miles southeast of Project study area
33	Belwood Place	City of Simi Valley	Construct 48 single- family residences and a dog park detention basin on 11.7-acres.	3050 Kadota Street	Under Construction	1.2 mile north of Project study area
34	Oakmont	City of Simi Valley	Construct an 81-unit (92-bed) assisted living facility.	South side of Royal Avenue, 600 feet East of Corto Street	Under Construction	0.6 mile southwest of Project study area
35	Runkle Canyon	City of Simi Valley	Construct 298 single-family residences, 25 custom single-family homes, and 138 senior housing units.	Southern terminus of Sequoia Avenue	Under Construction	1.4 miles south of Project study area
36	Sycamore Landing	City of Simi Valley	Construct a 311-unit apartment complex with 212 market rate units and 99 senior affordable units with an Affordable Housing Agreement.	1692 Sycamore Drive	Under Construction	0.6 mile south west of Project study area
37	Arroyo View Apartments	City of Simi Valley	Construct a 6-unit apartment complex with detached carports.	1837 Hubbard Street	Under Construction	2.2 miles west of Project study area
38	Wagner RV campground	City of Simi Valley	Construct and operate a RV campground.	6502 Kathrine Road	Approved, Construction Status Unknown	1.5 miles east of Project study area
39	Starbucks	City of Simi Valley	Construct a 2,000 square foot drive-through coffeehouse and approve removal of an equestrian trail easement on west property line.	2595 Stearns Street	Approved, Construction Status Unknown	0.76 mile northeast of Project study area

**Table 4-1. Adjacent Projects Considered in the Cumulative Analysis**

Project		Implementing/ Responsible Agency	Description	Location	Project Status	Location Relative to Project <sup>a</sup>
40	Kaiser Simi Valley	City of Simi Valley	Rehabilitation of 27,639 square feet of landscape on site.	3900 Alamo Street	Approved, Construction Status Unknown	0.9 mil north of Project study area
41	Fairfield Inn & Suites	City of Simi Valley	Construct a three-story 106 room hotel by adding two stairwells, tower element, mechanical roof well, and increase parking spaces from 106 to 109.	2585 Cochran Street, Simi Valley	Planned, Planning Commission hearing is on 11/4/2020	0.9 mile northwest of Project study area
42	Griffin Plaza	City of Simi Valley	Construct a two-story, 102 bed, large residential care facility on a 2.9-acre portion of the existing retail center.	Northwest corner of Tapo Canyon Road and Cochran Street	Under Construction	0.5 mile north of Project study area
43	Chevron – Sycamore	City of Simi Valley	Construct a 2,727 square foot convenience store, demolish existing convenience store, and add fuel dispensers under existing fueling canopy.	2568 East Sycamore Drive	Under Construction	0.9 mile northwest of Project study area
44	Extra Space Storage	City of Simi Valley	Subdivide a 5.05-acre lot into four industrial parcels and construct a self-storage facility and three industrial buildings to create an industrial complex.	4758 Industrial Street	Approved, Construction Status Unknown	Overlaps with Project Study area
45	Parkinson Industrial Complex	City of Simi Valley	Construction of industrial buildings on a 2.87-acre site for a general contracting business.	600 and 620 East Cochran Street	Approved, Construction Status Unknown	3.2 miles northwest of Project study area
46	Compressed Natural Gas Station Expansion	City of Simi Valley	Expansion of Time Fill Station to the existing Compressed Natural Gas fueling station. Expansion to include three additional time fill areas, two truss systems and one Krail system.	195 West Los Angeles Avenue	Approved, Construction Status Unknown	4.3 miles northwest of Project study area

**Table 4-1. Adjacent Projects Considered in the Cumulative Analysis**

Project		Implementing/ Responsible Agency	Description	Location	Project Status	Location Relative to Project <sup>a</sup>
47	Xebec Royal Industrial Park	City of Simi Valley	Construct a 219,000 square foot industrial building.	1757 Tapo Canyon Road	Under Construction	Immediately south of Project study area
48	Darling Industrial	City of Simi Valley	Subdivide a 12.74-acre site into three industrial lots and Construct a 72,453 square foot industrial complex.	875 East Cochran Street	Under Construction	2.8 miles northwest of Project study area
49	Pre-con Recycling	City of Simi Valley	Construct and operate a concrete recycling and concrete product storage yard.	240 West Los Angeles Avenue	Under Construction	4.3 miles northwest of Project study area
50	Adams Bennett Concrete Batch Plant	City of Simi Valley	Ready-Mix and Precast Concrete products facility with related sand, gravel, Portland cement and concrete mixtures storage with periodic recycling of concrete along with material deliveries into and out of facility.	400 West Los Angeles Avenue	Under Construction	4.5 miles northwest of Project study area
51	All Valleys RV Storage	City of Simi Valley	Expand an existing RV storage yard to the south portion of the lot. 64 new spaces added to existing 385 spaces.	850 West Los Angeles Avenue	Under Construction	5.0 miles northwest of Project study area

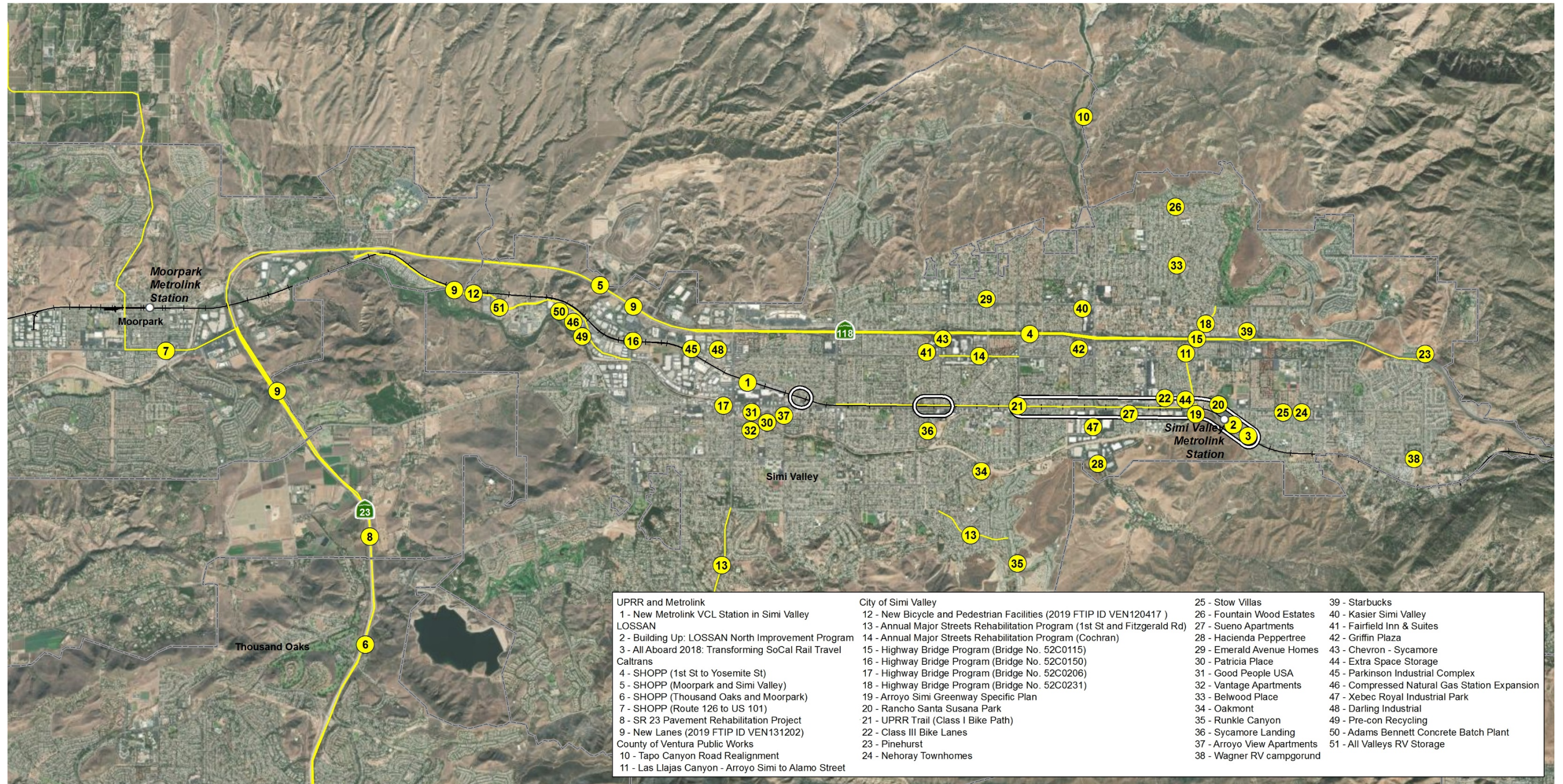
Source: Caltrans 2020; Caltrans n.d.; City of Simi Valley 2008; City of Simi Valley 2012b; City of Simi Valley 2018; City of Simi Valley 2020c; City of Simi Valley 2020d; County of Ventura Public Works 2020a; County of Ventura Public Works 2020b; SCAG 2018; SCAG 2020c; SCAG 2020d

Notes:

<sup>a</sup> The distance from the Project study area is the distance from the study area surrounding the 2.2-mile alignment.

ADA=Americans with Disabilities Act; BMP=best management practice; Caltrans=California Department of Transportation; FTIP=Federal Transportation Improvement Program; ID=identification; LOSSAN=Los Angeles-San Diego-San Luis Obispo; ROW=right-of-way; SR=state route; UPRR=Union Pacific Railroad; VCL=Ventura County Line; VCWPD=Ventura County Watershed Protection District

Figure 4-1. Cumulative Project Map



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**Table 4-2. Project Resource-Specific Study Areas**

Resource Areas	Geographic Area of Impact Assessed	Localized Impacts <sup>a</sup>	Regional Impacts <sup>b</sup>
Aesthetics	Project study area	Yes	No
Air Quality	Local: Project study area Regional: SCCAB (VCAPCD), SCAB, and SCAG Region	Yes	Yes
Biological Resources	Project study area	Yes	No
Cultural Resources	Project footprint and 0.25-mile buffer	Yes	No
Energy Resources	Service area electrical and natural gas provider	Yes	Yes
Geology and Soils	Project study area	Yes	No
Greenhouse Gas Emissions	SCCAB (VCAPCD), SCAB, statewide, and global	Yes	Yes
Hazards and Hazardous Materials	Project study area and 0.25-mile buffer	Yes	No
Hydrology, Flooding and Water Quality	Project study area, Upper Simi Arroyo sub-watershed within the Calleguas Creek watershed	Yes	Yes
Land Use and Planning	Project study area	Yes	Yes
Noise and Vibration	Noise: 750 feet of the commuter railroad Vibration: 200 feet of the commuter railroad	Yes	Yes
Public Services	Project study area	Yes	No
Transportation	Project study area	Yes	Yes
Tribal Cultural Resources	Project footprint and 0.25-mile buffer	Yes	No
Utilities and Services Systems	Service area of utilities and service area of providers	Yes	No
Wildfire	Project study area	Yes	No

Notes:

<sup>a</sup> Localized cumulative impacts would be generally confined to the project study area (and project footprint for each build alternative). Cumulative impacts within the Project study area would occur during construction and operation of the Project.

<sup>b</sup> Regional cumulative impacts would be expressed regionally, beyond the project study area, and distributed throughout the larger region. Cumulative impacts experienced at the regional scale would be associated with future operations.

SCAB=South Coast Air Basin; SCCAB=South Central Coast Air Basin; SCAG=Southern California Association of Governments; VCAPCD=Ventura County Air Pollution Control District

## 4.4 Summary of Cumulative Impacts

In this summary section, mitigated impacts and immitigable impacts will be discussed. Checklist Item criteria that will result in no impact are discussed in Chapter 3, Environmental Analysis, Impacts, and Mitigation, and are not reiterated here.

### 4.4.1 Aesthetics

The geographic scope of analysis for cumulative aesthetic impacts is the same study area established in Section 3.1, Aesthetics. The study area for aesthetic resources includes the Project footprint and adjacent land uses with views of the Project footprint. The Project footprint is visible from public roadways, surrounding residences, and recreational facilities. Viewer groups predominantly comprise transient members of the public traveling in north or south directions within these thoroughfares.

A cumulatively considerable aesthetic impact would result if the Project would contribute to a significant cumulative impact related to a substantial and adverse change on a scenic vista or a cumulative view blockage that would affect the overall scenic quality of a resource or result in the addition of a substantial cumulative amount of light and/or glare.

#### *Degradation of Visual Character or Quality*

Construction activities associated with cumulative project list in Table 4-1, have the potential to substantially degrade the existing visual character or quality of each individual project, and thereby also affect viewsheds (local visual character), as defined in Section 3.1, Aesthetics, of the surrounding area during construction activities. Construction activities would introduce visual changes to all user groups as a result of increased activity and the presence of construction equipment within the Project study area and Project vicinity. Additionally, as discussed in Section 3.1, Aesthetics, the Project study area does include distant views of both the Whiteface Escarpment to the north and the Simi Hills to the south, which are available from most north-south thoroughfare viewer locations along the Project corridor. However, these visual changes and impacts would be short-term visual impacts that would only occur during the construction phase. Furthermore, implementation of AES-1 would reduce construction-related visual impacts to a less than significant level by requiring temporary screening of construction material and staging areas that are visible from nearby roads, residences, and recreational areas. Therefore, visual changes resulting from introducing construction activities and equipment into the viewsheds of all user groups would not result in significant impacts, and no cumulatively considerable impact would result.

As discussed in Section 3.1, Aesthetics, minor longer-term direct and indirect visual impacts of the Project would result from the installation of new railroad infrastructure within the corridor; however, the Project would not represent any substantial change to the existing visual character of the Project area. Further, in the context of surrounding projects and their visual impacts, PRC Section 21099(d)(1) states that aesthetic impacts will not be considered a significant impact on an infill site within a transit priority area. As shown in Table 4-1, there are reasonably foreseeable future development and roadway infrastructure projects within the Project study area and within the broader Simi Valley area that would be constructed prior to, during, or after the Project is operational. However, each project would be subject to a separate environmental review process, which would address localized visual effects of each project. Based on these considerations, the Project in conjunction with other projects considered in Table 4-1 in the Project study area, would not result in cumulatively considerable visual impacts.



### *Nighttime Light and Glare*

The Project is located in an urban setting with substantial existing sources of light and glare associated with surrounding commercial, industrial, and residential uses. However, construction activities associated with the cumulative project list in Table 4-1, may create new temporary sources of light pollution due to light trespass and glare, specifically during nighttime construction activities. These new sources of lighting may contribute to nighttime glare and significantly affect nighttime views. Furthermore, due to the adjacency of residences to the Project and within the Project vicinity, residents could be exposed to higher levels of lighting during nighttime hours especially if they are not already screened from nighttime glares. Therefore, the cumulative projects could result in significant visual impacts from new sources of temporary nighttime lighting during construction.

Implementation of Mitigation Measure AES-2 would reduce construction-related light and glare impacts to a less than significant level by shielding light or directing light toward the construction area during nighttime construction. Depending on location, viewers may also see staging areas, worker parking, and equipment and materials storage areas, which would temporarily introduce non-conforming visual elements into viewsheds. However, changes to the visual character of the area because of construction activities would only be temporary and placed in select locations. Therefore, the Project's contribution to cumulative aesthetics impacts as a result of construction would not be considerable with mitigation.

All new or replacement lighting would comply with standard state glare ratings and be directed away from residential uses per Mitigation Measure AES-3. Therefore, the proposed Project components (including the new platform, pedestrian underpass, additional track, and at-grade crossing improvements), would not result in new substantial sources of light or glare would be added to the area by the Project when compared to existing conditions during operation. Given the existing urban setting that comprises infill development and urban infrastructure surrounding the Project study area (i.e., varying industrial uses and residential land uses), daytime light and glare within the Project study area is not an existing source of nuisance, and is limited to glare generated from building materials such as glass and steel, which are both common in urban environments. Although there are reasonably foreseeable future development projects within the Project's cumulative geographic scope (Table 4-1), these projects would be required to implement similar mitigation, minimizing these impacts and individually meet applicable building code requirements; as well as the requirements of local policies for light, glare, and aesthetics. Therefore, no cumulatively considerable impacts would result.

### 4.4.2 Air Quality

The geographic scope of analysis for cumulative air quality impacts is the same study area identified in Section 3.2, Air Quality, which includes the Project study area for local impacts, and VCAPCD, and SCAB for regional impacts. Cumulative impacts on sensitive receptors (e.g., dust) and odors are considered at a more localized level due to the more limited area of dispersion, and include the surrounding neighborhoods and areas close to the source.

A significant cumulative impact to air quality would result if the Project, in conjunction with past, present, and reasonably foreseeable future projects, would contribute to a local violation of air quality standards, would impede regional attainment of air quality standards, or subject surrounding areas to objectionable odors.

## Air Quality Plans

Project construction would occur within the jurisdiction of VCAPCD. The Project would not exceed the thresholds VCAPCD has set for emissions of O<sub>3</sub> precursors with the use of Tier 4 construction equipment per Mitigation Measure AQ-1 and compliance with Rule 403. The operation of the Project would enhance passenger train operations consistent with SCAG's 2020-2045 RTP/SCS (SCAG 2020a) and as a component of Project No. 720001.

The Project is subject to the 2016 AQMP of the VCAPCD and SCAQMD, which are required by CAA to reduce emissions of criteria air pollutants for which the basin is designated nonattainment. The AQMP identify transportation control measures that are derived from the applicable RTP. Both Ventura County and the SCAB are within the jurisdiction of SCAG, and the governing RTP relevant to the Project study area is SCAG's adopted 2020–2045 RTP/SCS. The Program EIR (SCAG 2019a) prepared in support of SCAG's 2020-2045 RTP/SCS (SCAG 2020a) is incorporated by reference into this EIR and the corresponding air quality analysis, which covers projects identified in the SCAG 2020-2045 RTP/SCS. As provided in Section 3.21 of the 2020-2045 RTP/SCS Program EIR, compared to existing conditions, PM<sub>2.5</sub> emissions would increase in Imperial, Riverside, and San Bernardino Counties and remain the same or decrease from existing conditions in the other counties, including Ventura, in 2045 (SCAG 2019a). Additionally, in Table 3.3-12 of the 2020-2045 RTP/SCS Program EIR (SCAG 2019a), SCAQMD forecasts that total pollutant emissions under the plan conditions would be reduced through at least 2031, except for small increases in SO<sub>x</sub> and PM<sub>2.5</sub>.

Compared to previous RTP/SCS, the 2020-2045 RTP/SCS includes additional transportation projects, including more plans for active transportation and investments for transit and passenger rails; as well as refined land use strategies that would further reduce emissions and improve public health (SCAG 2019a). The transportation projects listed in the 2020-2045 RTP/SCS, which include the Project, would reduce emissions from mobile sources by reducing VMT per capita. Therefore, in conjunction with SCRRRA's plans to upgrade to Tier 4 locomotives by 2024 entirely, the Project as a component of the 2020-2045 RTP/SCS (SCAG 2020a) would not result in cumulatively considerable emissions of criteria air pollutants in nonattainment areas. As such, the Project is considered consistent with the region's AQMP and would not conflict with or obstruct implementation of the applicable air quality plan.

## Criteria Pollutant Emissions

Project construction would result in emissions above VCAPCD regional significance thresholds for NO<sub>x</sub> during the 2023 construction year. The majority of NO<sub>x</sub> emissions are due to off-road construction equipment activity, with rubber-tired dozers being the largest single source. Use of Tier 4 construction equipment per Mitigation Measure AQ-1 would reduce emissions below VCAPCD regional significance thresholds and would not exceed significance thresholds for pollutants for which the region is nonattainment under the NAAQS or CAAQS.

Upon operation, Metrolink service within the Project area would increase from 33 to 48 revenue trains per weekday on the VCL. Therefore, Project operation has the potential to generate long-term emissions from transit operations and changes in regional traffic patterns. These increased operates would be cumulatively offset by Metrolink's locomotive fleet turnover, which is expected to be comprised entirely of Tier 4 locomotives by 2024. Therefore, although the Project would result in increased rail fuel consumption along the VCL when compared to existing conditions, the emission reductions associated with the new locomotive fleet on a per-gallon-consumed basis combined with regional VMT reductions from the increased ridership would contribute to cumulative emissions reductions.

Throughout longer-term operations, cumulative projects would incrementally improve cumulative air quality conditions through the enhanced service frequency and reliability, transit connectivity, and expanded regional/intercity rail service throughout the Project study area and surrounding region. Some of these improvements would also encourage the use of alternative modes of transportation to the automobile. Particularly for the rail projects that may overlap with the Project or affect services upstream or downstream and are currently being constructed, include those identified in the SCAG 2020-2045 RTP/SCS (SCAG 2020a) and include California High-Speed Rail Authority (CHSRA), Los Angeles-San Diego-San Luis Obispo (LOSSAN) Corridor-wide Strategic Implementation Plan projects, and Metrolink's SCORE Program projects, would not result in cumulatively considerable emissions. Further, other cumulative projects would be subject to implementing mitigation measures to reduce project-level emissions and also be subject to the requirements of the applicable AQMPs. Therefore, based on these considerations, the Project in combination with other projects would not result in cumulatively considerable impacts related to emissions of criteria air pollutants.

### Toxic Air Contaminants

Project-related temporary, short-term construction and long-term operations could expose nearby sensitive receptors to TACs. TAC emissions associated with temporary, short-term construction activities and stationary sources are site-specific. The 19-month construction time frame of the Project is much shorter than the assumed 9-, 30-, or 70-year exposure period typically used to estimate lifetime cancer risks. Diesel-equipment activity on site would be short term and transitory and would occur at distances not expected to expose sensitive receptor locations to substantial pollutant concentrations. Therefore, construction-related pollutant emission concentrations would be expected to be well dispersed and minimal at any given location and would not expose any receptors to substantial pollutant concentrations.

Although an increase in rail operations would result with Project operations, the projected cancer risk and chronic health hazard in the Project (2025) condition would be less than the VCAPCD thresholds. For this reason, Project-related impacts as it relates to the generation of long-term TACs would be less than significant and the Project's incremental contribution to health risks would not be cumulatively considerable.

### 4.4.3 Biological Resources

The geographic scope of analysis for cumulative biological resources impacts is the same study area identified in Section 3.3, Biological Resources, which is the Project study area.

A significant cumulative impact on biological resources would result if the Project would contribute to cumulative impacts related to sensitive habitat or species, sensitive habitat/natural communities, federally protected wetlands, or wildlife movement corridors.

### Special-Status Species

The urban nature of the Project study area provides minimal habitat value for special status plant and wildlife species. As discussed in Section 3.3, Biological Resources, the Project would result in a total of 31.49 acres of impacts on vegetation communities (ornamental) and other land cover types (disturbed and urban/developed) within the Project study area. Riparian habitat and other special-status vegetation communities, such as California sagebrush scrub, occur outside of the Project footprint and would not be directly affected by the Project. However, California sagebrush scrub (Catalina mariposa lily and Payne's bush lupine) and valley oak woodland (Southern California black

walnut) occur along the southeastern edge of the Project study area. One state rare plant species has the potential to occur within California sagebrush scrub: Santa Susana tarplant (*Deinandra minthornii*). However, this habitat occurs outside of the Project footprint.

As discussed further in Section 3.3, Biological Resources, construction of the Project would have no direct impact on federally and/or state-listed, or special status, plant species. However, indirect impacts on CAGN, LBVI, SWFL, bats, and yellow warbler could occur if these species were present in areas adjacent to the Project footprint during construction. Federally protected wetlands, as defined by Section 404 of the CWA, occur outside of the Project footprint and would not be directly affected by the Project. During construction, the Project would be required to implement BMPs (e.g. designation of a Project biologist and providing training programs) to minimize direct and indirect impacts on biological resources per Mitigation Measure BIO-1, and conduct preconstruction surveys for nesting bird surveys per Mitigation Measure BIO-2 and protected trees per Mitigation Measure BIO-3 to reduce potentially significant impacts to special-status species. Therefore, Mitigation Measure BIO-1 and BIO-3 would reduce potential impacts to special-status species to a less than significant level.

Similarly, other cumulative projects may result in the removal of suitable foraging habitat and migratory bird habitat as part of construction; however, these projects would be required to implement similar mitigation to minimize similar biological impacts and abide by the same federal, state, and local regulations. Therefore, the loss of this marginal habitat, in combination with other cumulative projects, is not anticipated to be substantial relative to the available foraging habitat for these potentially occurring species, especially within the existing urbanized character of the Project study area and surrounding vicinity. Furthermore, operation of the Project would involve increased train traffic and periodic maintenance in the railroad ROW; however, wildlife which utilize the habitats adjacent to the ROW have adapted to the presence of trains and periodic maintenance activities. The Project in combination with other cumulative projects, is not anticipated to result in cumulatively considerable impacts on sensitive species or MBTA species.

### Wildlife Movement

The Project would have no impact on suitable habitat for fish. The Project study area is highly urbanized and the Project footprint does not contain suitable corridors for wildlife movement; therefore, Project construction would have no impact on wildlife movement corridors. However, suitable nesting and foraging habitat for birds protected by the MBTA and California Fish and Game Code Sections 3300 through 5500 occurs within and adjacent to the Project footprint. Therefore, implementation of Mitigation Measure BIO-2 would reduce impacts on nesting birds to a less than significant level by requiring preconstruction nesting bird surveys.

Other cumulative projects may result in the removal of suitable foraging habitat and migratory bird habitat as part of construction; however, these projects would be required to implement similar mitigation to minimize impacts to birds protected by the MBTA and California Fish and Game Code Sections 3300 through 5500. Therefore, the Project in combination with other cumulative projects, is not anticipated to result in cumulatively considerable impacts on sensitive species or MBTA species.

### Conflict with Local Policies or Ordinances Protecting Biological Resources

During construction, the Project would maintain consistency with the City of Simi Valley Tree Preservation ordinance, Municipal Code Chapter 9-38 by implementing Mitigation Measure BIO-3. This measure would require an arborist, horticulturist, or registered landscape architect to conduct a preconstruction survey for protected trees within the Project footprint to determine the potential for

direct impacts on protected trees, prepare a tree report, and outline the requirements for a tree removal permit. Therefore, potential impacts to protected trees would be reduced to a less than significant level.

Other cumulative projects may result in the removal of protected trees as part of construction; however, these related projects would be required to comply with the City of Simi Valley Tree Preservation ordinance, Municipal Code Chapter 9-38. Therefore, the Project in combination with other cumulative projects, is not anticipated to result in cumulatively considerable impacts as it relates to conflicts with local policies or ordinances protecting biological resources.

#### 4.4.4 Cultural Resources

The geographic scope of analysis for cumulative cultural resource impacts is the same study area identified in Section 3.4, Cultural Resources, which includes the Project footprint and a 0.25-mile buffer.

A significant cumulative impact on cultural resources would result if the Project would contribute to cumulative impacts on historical resources or archaeological resources.

##### Historical and Archeological Resources

A review of the SCCIC files identified 14 previous cultural resource investigations that intersect with the 0.25-mile records search radius. These previous investigations identified three previously recorded cultural resources (P-56-100001, P-56-152301, and P-56-153135) within the 0.25-mile search radius of the Project study area. These resource types included a prehistoric isolate, a historic building, and a historic structure.

As discussed above P-56-152301, the Santa Susana Depot, is the only previously recorded and known cultural resource that partially overlaps with the Project study area. Data from the SCCIC has recorded P-56-152301 at its original location of the Santa Susana Depot; however, no remnants of the removed depot have been recorded at its original location. Notwithstanding this circumstance, Project-related ground disturbing activities within the vicinity of resource P-56-153201, may encounter buried remnants of the original historic depot or the ancillary buildings. This is a potentially significant impact in the absence of mitigation. Mitigation Measure CUL-1 would reduce potential impacts to undiscovered resources by requiring an archeological monitor be present during all ground-disturbing activities within 50 feet of P-56-153201 and the corresponding impact would not be cumulatively considerable.

Project related construction would not directly impact cultural resources located outside of the Project study area. Additionally, soils within the Project footprint are generally highly disturbed due to prior construction of the railroad and mass grading in support of existing development. Therefore, it is unlikely that intact subsurface deposits would be encountered during construction and no additional cultural resource management measures are recommended outside of the vicinity of P-56-153201. In this context, the Project in combination with other cumulative projects, would not contribute to cumulatively considerable impacts to historic-era cultural resources.

##### Previously Unidentified Archaeological Resources

Due to prior ground disturbance related to construction of the currently existing railroad and surrounding development, subsurface soils within the ROW that may have contained cultural material(s) have likely been removed, altered, or replaced with artificial fill during construction. In this

context, it is unlikely that intact subsurface deposits would be encountered during construction since the sediments within the Project footprint are highly disturbed. Notwithstanding these circumstances, the Project would continue to carry the potential to encounter previously, undocumented archaeological resources. Mitigation Measure CUL-2 would reduce potential impacts to undiscovered resources to a less than significant level by requiring proper treatment of unanticipated cultural discoveries. Other cumulative projects would be required to implement mitigation to minimize impacts to cultural resources consistent with federal, state, and local laws and therefore, past and reasonably foreseeable projects would not result in a cumulatively significant impact.

## Human Remains

Ground-disturbing construction activities associated with the Project have the potential to impact human remains. Mitigation Measure CUL-3 would reduce this impact to a less than significant level by requiring the Project to abide by the requirements of State of California Health and Safety Code Section 7050.5 and PRC Section 5097.98 if human remains or unassociated funerary objects are discovered. Other cumulative projects with potentially significant impacts on human remains would be required to comply with the same state and local regulations and ordinances protecting human remains through implementation of similar Project-specific mitigation measure(s) during construction. In this context, with the implementation of Mitigation Measure CUL-3, the Project's incremental contribution to cumulative impacts on human remains would not be cumulatively considerable.

## 4.4.5 Energy

The geographic scope of analysis for cumulative energy impacts includes the regional SCE and SoCal Gas service areas. A cumulative energy consumption impact would occur if development within the geographic scope of the cumulative impact analysis for energy use combined would result in inefficient, wasteful, or unnecessary energy consumption throughout the region.

### Energy Consumption

As discussed in Section 3.5, Energy, construction of the Project would result in temporary increases in demand for energy in the form of fuel and electric power used for construction vehicles, tools, and other equipment used during site clearing, grading, and construction; as well as, transport of workers and materials to or from the construction site. Electricity and natural gas are not expected to be consumed in large quantities during construction-related activities as construction equipment is expected to be fueled with gasoline or diesel, and consumption would be considered less than significant.

Once operational, the Project would consume energy such as electricity for signal houses, lighting for the new platform and pedestrian underpass, and new pump station; as well as fuel which is expected to increase by approximately 717,428 gallons due to the expansion of passenger rail service. However, the net increase in electricity consumption for these Project components are considered to be negligible in the context of existing power demands because the Project would have to comply with energy efficiency standards as identified in CCR Title 24. Although diesel fuel consumption would increase, the addition of a new platform and track would greatly improve reliability and increase the operational frequency on the Metrolink VCL, thereby increasing ridership and decreasing regional VMT. This mode shift would reduce on road fuel consumption by approximately 983,713 gallons of gasoline.

Given the planning period available, energy providers such as SCE would have sufficient information to include the Project in their demand forecasts as well as other cumulative projects. In the context of other cumulative projects being considered, all projects would be required to comply with the energy efficiency standards as identified in CCR Title 24; as well as regional and local plans that seek to improve public transit, bicycle, and pedestrian infrastructure to decrease VMT and increase safety. Based on these factors, cumulative impacts would be reduced to a less than significant level, and the Project's contribution to cumulative energy impacts would not be cumulatively considerable.

#### 4.4.6 Geology, Soils, and Seismicity

The geographic scope of cumulative geological resources is similar to the study area identified in Section 3.6, Geology and Soils, which is the Project study area.

A significant cumulative impact on geology and soils would result if the Project would contribute to cumulative impacts related to exacerbating the potential of a fault rupture, strong seismic ground shaking, ground failure, erosion, unstable soils, lateral spreading, subsidence, liquefaction, collapse, expansive soils, or the use or installation of septic tanks or alternative wastewater disposal systems.

The incremental loss of paleontological resources over time as a result of construction-related surface disturbance or vandalism and unlawful collection would represent a significant cumulative impact because it would result in the destruction of nonrenewable paleontological resources and the associated irretrievable loss of scientific information.

##### Ground Shaking and Liquefaction

Geologic hazards based on the local geologic characteristics of a project are typically site-specific and addressed on a project-by-project basis, rather than on a cumulative basis. Multiple active and potentially active faults are located in within 10 miles of the Project study area; however, no faults traverse the Project study area. The Project study area partially overlaps a liquefaction zone and the California Landslide Inventory dataset map by CGS shows three existing rock landslide features located in the foothills south of the existing railroad ROW. Project construction of the proposed railroad improvements would not increase or exacerbate the potential for fault rupture or ground failure, including liquefaction, to occur; however, the potential for ground failure exists within the Project study area. Therefore, implementation of Mitigation Measure GEO-1 would reduce the potentially significant impact of seismic-related ground failure to a less than significant level by requiring the preparation of a final geotechnical report in support of the Project's final design. Other cumulative projects would be subject to the same risks of ground shaking along faults in close proximity to the Project study area and subject to similar mitigation requirements per federal, state, and local requirements. Therefore, the Project's incremental contribution to cumulative impacts related to ground shaking and liquefaction would not be cumulatively considerable.

##### Soil Erosion

The Project study area is generally located on a surficial deposit which is characterized as unconsolidated to slightly consolidated, undissected to slightly dissected boulder, cobble, gravel, sand, and silt deposits. Because the Project would disturb approximately 36.69-acres of soil, the Project would be required to implement a SWPPP prepared under the SWRCB's Construction General Activity NPDES Permit (Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ, NPDES No. CAS000002) per Mitigation Measure HWQ-1, and the SCRRA DCM (Metrolink 2021) to control on- and off-site erosion. The Project would also be subject to permit approvals from the City of Simi

Valley, which would confirm the Project's compliance with City regulations pertaining to erosion and sediment control, including compliance with Section 6-12.508, City Requirements for Construction Sites and Industrial Facilities Requiring a General Permit. Implementation of these regulatory requirements would reduce the potential for significant erosion impacts resulting from construction activities to a less than significant level.

The other cumulative projects would be required to incorporate the same degree or methods of treatment as the Project; and each cumulative project would be required to comply with its NPDES General Construction Permit. Therefore, the Project's incremental contribution to cumulative impacts related to erosion would not be cumulatively considerable.

### Expansive Soils

The Project would be constructed in accordance with the Project-specific *Simi Valley Double Track and Platform Preliminary Geotechnical Design Report* (Appendix H of this EIR), the SCRRRA DCM (Metrolink 2021), the CBSC, and the City of Simi Valley Municipal Code, all of which include extensive construction and facility design requirements (Metrolink 2021). Mitigation Measure GEO-1 would reduce the potentially significant impact of expansive soils to a less than significant level by requiring the preparation of a final geotechnical report in support of the Project's final design. Other cumulative projects would be required to construct facilities in accordance with standard engineering practices, the CBC, and local standards. Therefore, the Project's incremental contribution to cumulative impacts related to expansive soils would not be cumulatively considerable.

### Paleontology

Excavations within the Project study area that impact middle Eocene-age Lajas Formation at the surface (between Simi Valley Station and Tapo Canyon Road at-grade crossing), or Pleistocene-age older sedimentary deposits, middle Eocene-age Lajas Formation, or Paleocene-age Santa Susana Formation at depths greater than 6 feet deep could encounter scientifically important paleontological resources. Therefore, Project-related construction activities have the potential to unearth previously unrecorded paleontological resources. This potentially significant impact would be reduced to a less than significant level by requiring a paleontological monitor to be present for all ground disturbing activities per Mitigation Measure PAL-1, PAL-2, PAL-3, and PAL-4. Probable future cumulative projects with potentially significant impacts on paleontological resources would be required to comply with state and local regulations and ordinances protecting paleontological resources through implementation of similar project-specific mitigation measures during construction. In this context, the Project's incremental contribution to cumulative impacts on paleontological resources would not be cumulatively considerable.

## 4.4.7 Greenhouse Gas Emissions

GHG emissions and global climate change represent cumulative impacts; therefore, GHG emissions contribute cumulatively to the significant adverse environmental impacts of global climate change. The emissions from any single project mix in the atmosphere and contribute to local, regional, and global impacts over long periods of time. Therefore, the analysis in Section 3.7, Greenhouse Gas Emissions, is inherently a cumulative analysis. A summary of the discussion is included below.



## Greenhouse Gases

Project construction would generate direct emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O from mobile and stationary construction equipment exhaust, as well as employee haul truck vehicle exhaust. Construction of the Project would generate a total of 523 metric tons of CO<sub>2</sub>e during the 19-month construction period. Since VCAPCD does not have a threshold for GHGs, SCAQMD's guidance was applied and emissions were amortized over a 30-year project. As presented in Section 4.4.2, construction emissions are negligible relative to operational emissions and would be offset by emissions reductions from reduced regional VMT. Therefore, impacts would be less than significant.

As discussed in Section 4.4.2, Project operations have the potential to generate long-term emissions from increased passenger services and changes in regional traffic patterns. However, the GHG emission reductions associated with the new locomotive fleet on a per-gallon-consumed basis more than offset the increase in fuel consumption. Additionally, regional VMT reductions from the increased ridership would lead to additional GHG emissions reductions. The Project would also contribute to the SCAG 2020-2045 RTP/SCS (SCAG 2020a) GHG reduction goals for the SCAG region, in addition to statewide GHG reduction targets, as represented by the California EO S-03-05 long-term goal of reducing statewide emissions by 80 percent below 1990 levels by 2050 and the California EO S-55-18 long-term goal of being carbon neutral by 2045. In this context, the reductions in GHGs in 2045 as facilitated by the Project is considered less than significant and no cumulatively considerable impact would result.

### 4.4.8 Hazards and Hazardous Materials

The hazards and hazardous materials geographic scope consists of the Project footprint and a 0.25-mile buffer. In general, cumulative projects occurring within 0.12 mile of the Project footprint (and in the case of active release sites, within 0.25 mile) were considered in this analysis due to the localized nature of potential impacts associated with the release of hazardous materials into the environment.

A significant cumulative impact on hazards and hazardous materials would result if the Project were to contribute to impacts related to the routine transport, use, or disposal of hazardous materials; the release or emission of hazardous materials; safety hazards related to airport operations; or interference with an adopted emergency response plan when evaluated within the context of past, present, and reasonably foreseeable future projects.

#### Routine Transport, Use, or Disposal of Hazardous Materials

Project construction would use commercially available hazardous materials such as lubricants (grease and oils), petroleum fuels, cleaning solvents, and paints—all of which are commonly used in urban construction projects. Project operation would also involve the routine use of some hazardous materials such as fuels, lubricants, and solvents to power and maintain the locomotives. This includes active freight service. These activities would be similar to existing operations and would not represent unusually hazardous conditions. Additionally, the handling and transport of hazardous materials are extensively regulated by federal, state, and local laws, regulations, and policies such as Cal/OSHA health and safety regulations, SCRRA's DCM, and the SWRCB's NPDES Construction General Permit. Mitigation Measure HAZ-1 which requires the preparation of a hazardous materials management program (HMMP) to outline provisions for safe storage, containment, and disposal of chemicals and hazardous materials, contaminated soils, and contaminated groundwater during construction would also be implemented. Compliance with these regulations and HAZ-1 would reduce potential impacts to a less than significant level.

In this context, the Project and cumulative projects identified in Table 4-1 would all involve the storage, use, disposal, and transport of hazardous materials to varying degrees during construction and operation. These cumulative projects would be required to implement and comply with existing hazardous materials laws, regulations, and policies to reduce potential releases of hazardous materials into the environment. Therefore, the Project's incremental contribution to cumulative impacts associated with the storage, use disposal, and transport of hazardous materials, contaminated soil, and groundwater would not be cumulatively considerable.

### Accidental Release of Hazardous Materials into the Environment

The Project would add 2.20 miles of main track and increase the passenger capacity at the Simi Valley Station by adding an additional platform and pedestrian crossing. The EDR database search resulted in 524 regulatory listings within the 0.50-mile buffer zone; however, no regulatory listings were noted in the EDR report as of potential concern to the Project footprint (Appendix I of this EIR).

The Project rail infrastructure would largely be constructed within existing railroad ROW owned by SCRRRA and UPRR. During Project construction, grading and excavation activities may result in the disturbance of hazardous materials in soil, ballast, and other railroad structures. Although unlikely, these activities could result in significant impacts as a result of releasing hazardous materials into the environment. Implementation of Mitigation Measures HAZ-1, which requires preparation of a HMMP; HAZ-2, which requires that the construction contractor halt construction if significantly stained soil is encountered during subsurface excavation; and, HAZ-3 which requires the preparation of a SMP to outline a health and safety plan to manage work in potentially impacted soils, would reduce potential hazardous impacts to a less than significant level. Furthermore, any hazardous wastes or materials encountered through ground-disturbing activities would be handled and disposed of in accordance with federal, state, and local regulatory requirements.

Future cumulative projects within the Project study area would be subject to compliance with similar hazardous federal, state, and local regulations as the Project. These regulations require an individual site evaluation and, if hazardous materials are encountered, cleanup and proper disposal by the responsible party. Therefore, the Project's incremental contribution to cumulative impacts associated with creating a significant hazard to the public or the environment would not be cumulatively considerable.

### Emergency Response Plan

Construction-related impacts on the local transportation network would be compounded if other cumulative projects are constructed at the same time as the Project. Concurrent construction activities would contribute incrementally to the local roadway network and may interfere with emergency response and access if not properly coordinated. Implementation of Mitigation Measure TRA-1 would reduce potential impacts to emergency response to a less than significant level.

Upon operation, although Metrolink service within the Project area would increase, these additional Metrolink passenger rail service trips would not impair implementation of, or physically interfere with, the City of Simi Valley's Emergency Plan. Future cumulative projects in the Project study area and vicinity would be required to implement similar mitigation and remain consistent with the City of Simi Valley's Emergency Plans. Therefore, the Project's incremental contribution to cumulative impacts related to emergency response and adopted emergency response plan would not be cumulatively considerable.

#### 4.4.9 Hydrology, Flooding, and Water Quality

The geographic scope of analysis for cumulative impacts on hydrology, flooding and water quality includes the Project study area and the Upper Simi Arroyo sub-watershed which is within the Calleguas Creek watershed. This includes most of the cumulative projects listed in Table 4-1.

A significant cumulative impact on hydrology, flooding and water quality would result if the Project were to contribute to impacts related to water quality standard violations, waste discharge requirements, or degradation of surface or groundwater quality; alterations to drainage patterns leading to erosion or flooding; increased runoff in excess of available capacity; or increased flood hazards.

##### Soil Erosion and Water Quality

Local hydrology, drainage, and groundwater conditions are often affected by multiple activities within the watershed. Generally, the limits of the City and Project study area contain mainly developed areas including paved roads, existing structures, and other impervious surfaces (e.g., parking lots).

During the construction period, the Project may temporarily alter stormwater drainage patterns and result in erosion with the potential to degrade surface water quality. However, the proposed drainage improvements would comply with interim BMPs required by the NPDES Construction General Permit and be required to prepare a SWPPP to limit runoff volumes and soil erosion, and minimize impacts to water quality during construction in accordance with Mitigation Measure HWQ-1 and the Ventura County MS4 Permit's hydromodification requirements per Mitigation Measure HWQ-2. Further, the drainage improvements would be implemented in coordination with Mitigation Measure HWQ-3 to minimize the Project's hydrologic impacts to adjacent properties through the preparation of a formal H&H study.

With the proposed mitigation measures, the Project would be designed and maintained in accordance with the water quality requirements of the City of Simi Valley and Los Angeles RWQCB to reduce the pollutant concentrations from runoff from the proposed structures, platforms, and rail tracks during operation. Because the Project would create a negligible amount of new impervious surfaces runoff rates and volumes, as well as associated pollutants would be similar to existing conditions. Therefore, the Project would not result in substantial erosion and sedimentation or violate any water quality standards, and implementation of Mitigation Measures HWQ-1 to HWQ-3 would reduce impacts to a less than significant level.

Present and future cumulative projects could also contribute pollutants such as oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens into the stormwater conveyance system and receiving waters. However, they would also be subject to state and local regulatory standards that must be achieved during construction and operation to reduce or avoid polluted runoff to the maximum extent practicable. The Project, combined with cumulative projects, could result in increased urban pollutants in dry weather and stormwater runoff that is discharged to existing drainage facilities downstream of the Project, including the Arroyo Simi. Similar to the Project, each cumulative project disturbing more than 1 acre is required to comply with NPDES permitting requirements to avoid impacts on water quality and local hydrology. Smaller projects are required to comply with local City's low impact development (LID) Ordinance adopted to comply with the MS4 Permit. Each project must consider impaired receiving waters and annual TMDL loads for receiving waters. Therefore, the incremental contribution of the Project to cumulative impacts on water quality would not be cumulatively considerable.

## Floodplain Encroachment

As discussed in Section 3.9, Hydrology, Flooding, and Water Quality, the eastern portion of the Project study area is currently susceptible to flooding as a result of hydromodification from urbanization within the larger watershed. Widespread shallow flooding may occur if runoff generated during the 100-year storm exceeds existing capacity of local drainage infrastructure in the Project study area. Therefore, the proposed station platform and track improvements within the limits of the 100-year flood zone would be susceptible to damage from flood waters. Based on pre-existing drainage limitations the City, the placement rail infrastructure within the 100-year flood zone would occur at multiple locations and is inconsistent with SCRRRA and Department of Transportation (DOT) standards. In considering these Project-specific effects in conjunction with other past, present, and reasonably foreseeable projects within the Project study area, let alone the larger watershed, the Project infrastructure and new development (e.g., transit-oriented development) would be subject to cumulatively considerable flooding impacts in the absence of mitigation.

In addition to Mitigation Measure HWQ-2, as described above, because portions of the Project are within a FEMA 100-year floodplain (Zone AO, Zone AE), a H&H analysis would be required per Mitigation Measure HWQ-3 to minimize post-Project stormwater runoff volumes and changes to the frequency and depth of inundation on adjacent properties to the maximum extent practical. Mitigation Measure HWQ-3 would also confirm that Project improvements are coordinated with overlapping cumulative projects such as the Las Lajas Canyon project (Table 4-1 and Figure 4-1) which proposes to construct channel improvements from the Arroyo Simi to Alamo Street in an effort to provide 100-year flood protection within the project's reach. Therefore, Mitigation Measures HWQ-2 and HWQ-3 are proposed to reduce these adverse impacts, in the form of flood damage to new Project-related structures in the event of flooding, to a less than significant level.

Ventura County in coordination with the City, USACE, and FEMA is in the process of planning and securing the necessary funding for a combination of drainage improvements that would effectively reduce the threat of flooding. The timing and implementation of these larger watershed-scale flood control improvements, that are currently subject to funding limitations, remains uncertain. However, these drainage improvement projects would be subject to regulatory requirements to mitigate significant impacts to floodplains and would incrementally help to alleviate these flooding issues. In this context, the Project's incremental contribution to cumulative impacts would not be cumulatively considerable.

### 4.4.10 Land Use and Planning

The geographic scope of analysis for cumulative land use and planning impacts to which the Project may contribute is study area identified in Section 3.10, Land Use and Planning, which is the Project study area.

A significant cumulative impact on land use would result if the Project were to contribute to or result in conflicts with applicable land use plans and policies adopted for the purposes of avoiding significant environmental impacts.

#### Division of Established Communities

As discussed in Section 3.10, Land Use and Planning, the Project improvements would be constructed primarily within existing railroad ROW owned by SCRRRA and UPRR with limited extensions into the City's roadway ROW at the five at-grade crossings. The Project would not require any new property acquisitions that could otherwise impede existing access or create new structures that could otherwise

physically separate the existing community. Although Project construction activities, TCEs, and staging areas would result in temporary impacts on local circulation (i.e. vehicular, pedestrian, and bike access), implementation of a TMP per Mitigation Measure TRA-1 and strategies to maintain pedestrian and bicycle access per Mitigation Measure TRA-2 would reduce short-term impacts to a less than significant level. Therefore, the incremental contribution of the Project to cumulative impacts on land uses would not be cumulatively considerable.

### Plan Consistency

Implementation of the Project and other projects listed in Table 4-1 and identified in the 2020-2045 RTP/SCS (SCAG 2020a) would be compatible with uses adjacent to the Project alignment. In general, land uses within 150 feet of Project construction could experience nuisance impacts (e.g. dust); although existing commercial and industrial uses would be less sensitive to these transportation projects. As described in Section 3.10, Land Use and Planning, the Project could create nuisance conditions for adjacent land uses (i.e. low and high-density residential areas) through a variety of mechanisms. These may include changes in the visual character of adjacent areas as a result of the external appearance of Project-related facilities and new sources of nighttime lighting (e.g., security lighting). Other projects listed in Table 4-1 could also incrementally add to these changes. These effects would be largely temporary and minimized through mitigation measures and consistent with the high-quality transit corridor in which the Project is located and, therefore, not cumulatively considerable.

Construction of the Project would have the potential to affect community mobility, viability of local businesses, community resources and events, population, housing, and employment. Construction of other local, un-programmed transportation and infrastructure projects (e.g., flood control maintenance) could overlap with the Project construction period. Based on this cumulative context, the Project in conjunction with other cumulative projects could potentially result in adverse effects to community mobility, viability of local businesses, and community resources. Concurrent construction as a result of these combined projects could result in multiple street closures and the use of multiple construction staging areas simultaneously. Mitigation Measures TRA-1, NV-1, NV-2, and AES-1 would be effective in minimizing and/or avoiding these adverse effects such that they would not be cumulatively considerable.

#### 4.4.11 Noise and Vibration

The geographic scope of analysis for cumulative noise and vibration impacts considers the Project's localized construction impacts and the broader VCL from an operational perspective. For the Project level noise impact assessment, noise sensitive uses within 750 feet of the Project alignment and vibration sources within 200 feet were considered. The cumulative impact assessment for future operations considers the broader VCL and incorporates by reference the noise and vibration analysis prepared in support of the 2020-2045 RTP/SCS (SCAG 2020a) Program EIR.

A significant cumulative impact on noise and vibration would result if the Project were to contribute to impacts related to exceedances of noise standards, ground-borne vibration, or ambient noise levels when evaluated in conjunction with past, present, and reasonably foreseeable future projects.

#### Noise Effects

Noise from construction activity is generated by the broad array of powered, noise-producing mechanical equipment used in the construction process. This equipment ranges from hand-held

pneumatic tools to excavators, loaders, a variety of trucks, and tie and rail handling equipment. Construction would be limited to daytime hours to the extent practicable. Since the local noise regulations exempt daytime construction noise, there would be no significant impacts during the day. The predicted noise levels carry the potential to exceed FTA's local nighttime construction noise criteria of 70 dBA  $L_{eq}$  at residential uses. If constructed concurrently, cumulative development projects within the Project study area, including those listed in Table 4-1, could add to the construction noise levels identified for the Project, and add to the number of existing noise sensitive receptors in the Project study area once constructed. Although implementation of Mitigation Measure NV-1 to employ noise and vibration reduction measures and Mitigation Measure NV-2 to prepare and maintain a community notification plan would reduce Project noise impacts during construction, the impacts resulting from nighttime construction would still remain significant and unavoidable for multiple locations.

Upon operation, Metrolink service within the Project area would increase from 33 to 48 revenue trains per weekday on the VCL. Therefore, operation of the Project would result in increased noise levels from sources including train horn noise, traffic noise, and wheel/rail noise from daily passenger rail operations; as well as, train movements back and forth along the railroad corridor. Because the trains would operate in closer proximity to sensitive receptors in conjunction with modest increases in rail traffic on the Metrolink VCL impacts would be significant in the absence of mitigation. Noise impacts are generally more pronounced at existing at-grade crossings where trains use their horns and where special trackwork (crossovers) would be installed as part of the Project. Therefore, implementation of quiet zones at the five at-grade crossings as part of the Project per Mitigation Measure NV-3 or wayside horns if quiet zones are not approved per Mitigation Measure NV-4 would reduce potentially significant operational noise impacts to a less than significant level.

Cumulative projects considered in the cumulative analysis include local development and transportation projects as well as general growth within the SCAG region. This noise and vibration analysis include localized analysis of projected rail traffic increases related to forecasted population growth and corresponding service increases in the future condition (2045); therefore, the Project-level impact analysis already considers the cumulative effect of regional/intercity rail operational noise within the Project study area.

Additionally, cumulative noise and vibration impacts are also considered by SCAG as part of the Program EIR prepared for the 2020-2045 RTP/SCS (SCAG 2020a), which is incorporated by reference. The cumulative, regional noise and vibration impacts identified in that EIR includes those noise generators typically associated with improvements along transportation corridors (e.g., railroads, highways, and transit). The most prevalent noise sources identified in the 2020-2045 RTP/SCS (SCAG 2020a) would be associated with roadway vehicle traffic, rail/transit, and aviation activity. Several impacts were identified within 500 feet of major transportation sources of noise, including rail lines used by regional/intercity rail. It is anticipated that all transportation sectors will gradually increase in noise as a result of regional population growth and transportation projects identified in the 2020-2045 RTP/SCS (SCAG 2020a) Program EIR.

Mitigation of these cumulative effects was also identified in the 2020-2045 RTP/SCS (SCAG 2020a) Program EIR, demonstrating that some form of mitigation is possible. For example, in that analysis of noise barriers near highways are identified as a potential mitigation measure. Mitigation measures for regional impacts would be the responsibility of the service providers (e.g., Metrolink, HSR) and implemented prior to the start of or increase in service. Therefore, the operational and construction noise impacts identified in Section 3.11, Noise and Vibration, are inclusive of cumulative effects within the Project study area and mitigation would achieve reductions of both direct and cumulative noise

and vibration impacts. However, in the case of Project construction in combination with other projects, even following the application of the proposed mitigation, noise and vibration impacts could be cumulatively significant and unavoidable during nighttime construction.

### Vibration effects

Construction vibration annoyances are projected at sensitive receptors located within approximately 73-feet of the proposed construction. Nineteen of the receptors analyzed as part of the Project-level analysis are predicted to experience annoyances from vibration during construction activities. However, implementation of Mitigation Measure NV-1 to employ noise and vibration reduction measures and Mitigation Measure NV-2 to prepare and maintain a community notification plan would minimize Project vibration impacts to less than significant level during construction.

The most prevalent noise and vibration sources identified in the 2020-2045 RTP/SCS Program EIR (SCAG 2020a) are associated with railroads, as well as freeway, arterial and transit noise. Combined with other cumulative projects, cumulative noise and vibration impacts could be considered significant. Although increases in passenger train counts would occur as a result of the current cumulative rail projects that that may overlap with the Project or affect services upstream or downstream, these cumulative projects in conjunction with the Project are needed in order to increase operational efficiency and safety of the rail network as needed. These rail projects in particular, affect the same passenger rail system or connecting systems, and are therefore planned and designed as a coordinated system to meet increases to passenger rail service by implementing improvements that allow for less delays, idling, improvements to at-grade crossings that would allow for the application of quiet zones; or the incorporation of wayside horns as needed to reduce noise and vibration impacts. In this context, the Project's incremental contribution to cumulative impacts would not be cumulatively considerable.

### 4.4.12 Public Services

The geographic scope of analysis for cumulative public emergency service impacts includes the general service areas of the public emergency service providers servicing the Project study area. Cumulative impacts on public emergency services could result when past, present, and reasonably foreseeable future projects combine to increase demand on public services facilities such that additional facilities must be constructed to maintain acceptable levels of service, and the construction of such facilities would result in a physical impact on the environment.

### Emergency Services and Protection

Increased traffic congestion caused by construction vehicles and access disruptions, such as road closures or road construction, could affect emergency response times. Construction-related impacts on the local transportation network would be compounded if other cumulative projects are constructed at the same time as the Project. Concurrent construction activities would contribute incrementally to the local roadway network and could result in multiple roadway closures at the same time if not properly coordinated. The Project would be required, per Mitigation Measure TRA-1, to prepare and implement a TMP to maintain flow of vehicular traffic throughout the study area and operation of the study intersections at an acceptable LOS to minimize temporary Project disruptions to local circulation and emergency vehicles during construction to a less than significant level.

The cumulative projects would also be required to adhere to similar requirements as it pertains to a project's construction impact to local circulation. Furthermore, although there are development

projects identified in the cumulative project list, these projects or future developments are infill projects that would be implemented in an already existing urban setting or have been anticipated within an adopted land use plan. In this context, the Project's incremental contribution to cumulative impacts to public emergency services would not be cumulatively considerable.

#### 4.4.13 Transportation

The geographic context for the analysis of cumulative impacts on transportation varies by subject area. For construction impacts, the geographical area is the same as discussed in Section 3.12, Transportation and Traffic, which includes the Project Study Area. For operations impacts, the geographic focus of the analysis is the transportation network at and near at-grade crossings. Because the Project is a railroad improvement project which is anticipated to improve reliability and increase the operational frequency on the Metrolink VCL, thereby increasing in ridership and decreasing regional VMT, no further evaluation of the Project's consistency with CEQA Guidelines, Section 15064.3 is required.

Cumulative impacts on transportation could also occur if the Project, when combined with past, present, and probable future projects, would conflict with applicable programs, plans, ordinances or policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Additionally, cumulative impacts could occur if the Project, when combined with past, present, and probable future projects, would result in substantial increases in hazards due to geometric design features or incompatible uses, or result in inadequate emergency access.

##### Program Plan, Ordinance, and Policies

The construction of the Project would be conducted in three phases. Each phase would sequentially close at-grade railroad crossings while Project upgrades are made, and a portion of the Arroyo Simi Bike Path (west of Hidden Ranch Drive) would be temporarily detoured by a staging area needed for the improvements at the Simi Valley Station. Therefore, these temporary impacts could result in potentially significant temporary disruptions to vehicular (including bus), pedestrian, and bicycle traffic that pass through the Project study area. Construction activities would be scheduled during time frames that allow for exclusive track occupancy by construction crews to minimize effects on Metrolink operations and include weekend work when Metrolink service is reduced. Multiple absolute work windows (full railroad closures) would be required during construction, resulting in temporary cessation of bus service between Los Angeles and Ventura. Therefore, Implementation of a TMP per Mitigation Measure TRA-1 and strategies to maintain pedestrian and bicycle access per Mitigation Measure TRA-2 would reduce potentially significant short-term construction impacts on local circulation to a less than significant level.

The Project is included in the SCAG 2020–2045 RTP/SCS (SCAG 2020a) as Project No. 720001 and supports the goal for more frequent rail service set out in the *California State Rail Plan* (Caltrans 2018), and would generally conform to local and regional programs, plans, ordinances, and policies. Therefore, Project operation would not conflict with applicable any applicable program plan, ordinance or policy addressing the circulation system.

During construction, cumulative projects could disrupt transit, roadway, bicycle, or pedestrian facilities, which could conflict with transportation programs, plans, ordinances, or policies; substantially increase hazards; and/or result in inadequate emergency access. Considering the Project in conjunction with these cumulative projects, potential effects on transportation may be amplified where construction activities are concentrated in close proximity, or when they take place concurrently and result in



significant impacts without mitigation. However, other cumulative projects would be subject to implementing mitigation measures and construction methods, such as TMPs or phased construction in coordination with transit providers and other public agencies, to reduce construction related impacts to traffic and circulation.

Throughout operations, cumulative projects would further improve inefficient transportation networks through the reduction in inefficient operations and/or improvements to transportation systems that no longer meet growing service demands. Other cumulative projects would enhance transit connectivity, provide expanded regional/intercity rail service as well as enhanced pedestrian, and bicycle access throughout the Project study area and surrounding region. Some of these improvements would also encourage the use of alternative modes of transportation to the automobile, thereby remaining consistent with local and regional plans.

Any future rail projects that are identified in land use plans, such as the new Metrolink station identified in Policy M-13.9 of the City's General Plan (City of Simi Valley 2012) would be accommodated by the Project. Applicants for other cumulative project applicants would be required to coordinate with transit providers on a project-by-project basis to identify, avoid, and minimize disruptions to the circulation system, as well as be consistent with any applicable program plan, ordinance or policy addressing the circulation system. In this context, the Project's incremental contribution to cumulative impacts would not be cumulatively considerable.

### Design Hazard Impacts

During the construction phases, at-grade crossings will be closed while upgrades are made. Closure of at-grade crossings during construction has the potential to create hazardous conditions due to disruption of traffic flow without mitigation. Additionally, use of oversized vehicles during construction related activities could create a hazard to the public by limiting motorist views by limiting motorist views on roadways and obstructing space as these vehicles are slow to accelerate and require larger distances to decelerate or stop when compared to passenger cars. To facilitate acceptable LOS at study intersections and maintain mobility and access as construction progresses, a TMP would be prepared to manage vehicular traffic per Mitigation Measure TRA-1, and pedestrian and bicycle access would be detoured as needed per Mitigation Measure TRA-2. Therefore, potentially significant and hazardous short-term construction impacts on local circulation would be reduced to a less than significant level.

The Project would be designed in accordance with the SCRRRA's DCM (Metrolink 2021), the CBSC, and the City of Simi Valley Municipal Code, as applicable. Therefore, once constructed, the proposed infrastructure would not result in sharp curves or dangerous intersections. The Project features would be engineered to comply with applicable agency standards and specifications to maximize the safe movements for both motorized and non-motorized forms of transportation. Other cumulative projects would be required to implement similar project specific mitigation measures during construction, comply with applicable agency standards and specifications, and to coordinate with public agencies, as applicable. Therefore, the incremental impact of the Project on transportation safety would not be cumulatively considerable.

### Emergency Access and Queuing Impacts

Increased construction activity within the Project area would result in short-term roadway delays and at-grade crossing closures which may require detours. However, these impacts would be intermittent and temporary in nature, and are not anticipated to result in inadequate emergency access with

mitigation. A TMP per Mitigation Measure TRA-1 would be prepared to maintain flow of vehicular traffic throughout the study area and operation of the study intersections at an acceptable LOS to minimize delays to emergency vehicles. Therefore, potentially significant short-term construction impacts on emergency access would be reduced to a less than significant level.

During operations, no permanent roadway closures are proposed; however, traffic queuing across the railroad tracks specifically at the Tapo Canyon Road and Tapo Street at-grade crossings could result in potential spillover impacts that could be potentially significant to emergency access. Therefore, per Mitigation Measure TRA-3, installation of pre-signals at these crossings as part of the Project would prevent vehicles from queuing in the railroad crossing, reducing safety risks from occupying the crossing beyond the duration of the traffic signal cycle to a less than significant level. Therefore, the Project's incremental contribution to cumulative impacts would not be cumulatively considerable.

#### 4.4.14 Tribal Cultural Resources

The geographic scope of analysis for TCRs is the same as discussed in Section 3.14, Tribal Cultural Resources, which includes the Project footprint and 0.25-mile buffer.

Cumulative impacts on TCRs could result when past, present, and reasonably foreseeable future projects combine to cause a substantial adverse change in the significance of a TCR defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe.

##### Tribal Cultural Resources

As discussed in Section 3.13 Tribal Cultural Resources, based on a record search with SCCIC and NAHC for Sacred Lands File, none of these previously recorded resources were determined to be Native American in origin and a Sacred Lands File search for the Project site was completed with negative results.

During Project construction-related ground disturbing activities, in the unlikely event that potentially significant archaeological materials are encountered and are found to be prehistoric or Native American in origin, proper treatment of unanticipated cultural discoveries per Mitigation Measure CUL-2 would be followed. If human remains are discovered and determined to be prehistoric or Native American in origin, notification of NAHC is required to identify a most likely descendant per Mitigation Measure CUL-3. Therefore, implementation of Mitigation Measures CUL-2 and CUL-3 would reduce impacts to a less than significant level.

Probable future cumulative projects with potentially significant impacts on TCRs would be required to implement similar project-specific mitigation measures during construction. Furthermore, probable future cumulative projects would be required to comply with AB 52. In this context, the Project's incremental contribution to cumulative impacts on TCRs would not be cumulatively considerable.

#### 4.4.15 Utilities and Service Systems

The geographic scope of analysis for cumulative utilities and service systems impacts includes the projects listed in Table 4-1, and the general service areas of the service providers. Cumulative impacts on utilities and service systems may occur when projects combine to increase demand such that additional services are required or additional facilities constructed.

## Water, Wastewater, Stormwater, and Solid Waste Facilities

As discussed in Section 3.11, Utilities and Service Systems, the Project would require the extension or relocation of several existing utilities, as well as the implementation of drainage improvements throughout the study area. The Project would continue to be serviced by existing providers and facilities for wastewater, water, stormwater, and solid waste; and would not require the construction of new wastewater, water, or stormwater facilities.

Project construction would also result in minimal wastewater discharge, temporary changes to drainage patterns, and generation of solid waste. Wastewater would be discharged to the municipal sewer system or hauled offsite and the waste disposed at an appropriate facility in accordance with RWQCB regulations and the City's NPDES program. Additionally, the Simi Valley Landfill and Recycling Center has a maximum permitted throughput of 9,250 tons per day, and a remaining capacity of approximately 82,353,000 cubic yards (CalRecycle 2019). Therefore, the Project's incremental contribution to cumulative impacts related to increasing demands on utilities/service systems during construction would not be cumulatively considerable.

The development projects listed in Table 4-1 such as the residential and hotel developments are considered high-water and high-energy use projects that would result in an increase in demand for the utility providers. The City of Simi Valley prepares an UWMP every 5 years and projects water demand based upon current use, historical use trends, and forecasted development and population. The demand and supply for the years 2020, 2025, 2030 and 2040 has been projected and water supply is projected to remain consistent for normal, single-dry, and multiple-dry year conditions. Prior to construction, future project applicants would be required to coordinate with utility providers on a project-by-project basis to determine the demand and capacity of facilities. The appropriate service providers are responsible for ensuring adequate provision of public utilities within their jurisdictional boundaries. Therefore, the Project's impacts on utilities/service systems would not be cumulatively considerable.

### 4.4.16 Wildfire

The geographic scope of analysis for cumulative biological resources impacts is the same study area identified in Section 3.15 Wildfire, which is the Project study area.

A cumulatively considerable wildfire risk impact would result if the Project would contribute to a significant cumulative impact related to impairing an emergency response or evacuation plan, exposing occupants to wildfire risks and pollutant concentrations from wildfire, and exposing people or structures to post-fire slope instability.

### Emergency Plans

The City of Simi Valley adopted the Emergency Operation Plan to address the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies (City of Simi Valley 2015). Construction activities would contribute incrementally to the local roadway network and cause subsequent delays in emergency service providers' response times, including response times to calls for fire protection services; as well as contribute to gridlock on roadways in the event of a sudden emergency evacuation. Therefore, impacts on the City of Simi Valley's local transportation network would be compounded and considered significant if other cumulative projects are constructed at the same time as the Project.

A TMP per Mitigation Measure TRA-1 would be implemented during construction to maintain flow of vehicular traffic, pedestrians, and bicyclists throughout the study area; maintain operation of study intersections at acceptable LOS to minimize delays to emergency vehicles; and coordinate with police and fire departments regarding changes in emergency access route. Other cumulative projects are anticipated to be subject to similar provisions during construction. Therefore, the Project's incremental contribution to cumulative impacts related to emergency response would not be cumulatively considerable and would not interfere with an adopted emergency plan.

### Wildfire Risk

A portion of the Project study area between Tapo Street and Stearns Street is within a VHFHSZ and a local responsibility area. The Project study area is within an urbanized area and characterized as having a relatively flat topography.

The Project would be designed and constructed in compliance with SCRRA's DCM (Metrolink 2021), California Building and Fire Code, CPUC guidelines, and Ventura County Fire Ordinances. Therefore, the Project would not expose people or structures to significant risks during operation. Development of transportation or housing projects in wildfire-prone areas could cause an increase in population exposed to wildfire risk and exacerbate exposure of those populations to pollutant concentrations from wildfires, particularly populations living downwind of the fire. However, other cumulative projects would be required to implement project specific mitigation measures during construction to reduce the risk of fire and to comply with applicable California Building and Fire Codes, CPUC guidelines, Ventura County Fire Ordinances, and jurisdictional design standards and specifications for approval of permits. Therefore, the Project's incremental contribution to cumulative impacts related to wildfire risk would not be cumulatively considerable.

## 5 Alternatives

The Alternatives chapter describes and analyzes a range of reasonable alternatives to SCRRA's proposed Project that could feasibly attain most of the basic Project objectives while avoiding or substantially lessening one or more of the significant effects of the Project. The primary purpose of this chapter is to provide a comparative analysis that enables for informed decision making by SCRRA, CEQA responsible agencies, and public participation in the environmental process.

### 5.1 Regulations and Requirements

The identification and analysis of alternatives is a fundamental concept under CEQA. CEQA requires the consideration of alternatives to the proposed Project and a comparative analysis of the potential impacts associated with those alternatives. Through comparison of these alternatives to the Project, the advantages and disadvantages of each alternative may be weighed and analyzed. CEQA Guidelines Section 15126.6 requires that a reasonable range of alternatives to the Project be discussed and analyzed in the Draft EIR. Section 15126.6(a) of the CEQA Guidelines requires that an EIR “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant impacts of the project, and evaluate the comparative merits of the alternatives.”

Section 15126.6(c) of the CEQA Guidelines requires that an EIR identify any alternatives that were considered but were rejected as infeasible.

Additionally, Sections 15126.6(e) and (f) of the CEQA Guidelines state:

- The specific alternative of “no project” shall also be evaluated along with its impact. If the environmentally superior alternative is the no project alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.
- The range of alternatives required in an EIR is governed by a rule of reason that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the proposed project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the proposed project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision-making.

Pursuant to the CEQA Guidelines stated above, a range of alternatives to the proposed Project were considered for evaluation in this EIR. Alternatives to the proposed Project were identified throughout the conceptual and preliminary design process phase for the Project in addition to input from other responsible agencies and organizations during the NOP scoping process. Section 5.2 provides additional detail on SCRRA's alternative selection process and those alternatives to the proposed Project considered by SCRRA but dismissed from further analysis.

## 5.2 Alternatives Screening Process

SCRRA considered multiple alternatives for the proposed siding track, at-grade crossing improvements, and new platform at Metrolink's Simi Valley Station. The range of feasible alternatives was determined through a combination of conceptual and preliminary engineering design for the Project components identified in Chapter 2, Project Description, and coordination with local stakeholders during the scoping period.

Over the course of SCRRA's preliminary design process, multiple alternatives were considered, but rejected from consideration. The discussion of these alternatives considered, but rejected from further analysis, follows the outline below.

- A description of the alternative(s)
- An analysis of whether the alternative(s) meet the objectives of the Project
- A comparative analysis of the alternative(s) with the proposed Project and SCRRA's rationale for not considering in the Draft EIR Project. Emphasis is placed on whether the alternative(s) are capable of avoiding or reducing the significant environmental impacts of the Project.

Each of the potential alternatives were initially evaluated in terms of their ability to meet the basic Project objectives. As discussed in Chapter 2, Project Description, the Project's objectives are as follows:

- Improve safety and reliability of the existing rail system;
- Increase operational capacity of the existing VCL passenger rail system and increase passenger capacity at the Simi Valley Station; and,
- Implement infrastructural improvements that will support the City's future applications to FRA for quiet zone status along the alignment.

Secondarily, the analysis of environmental impacts contained in Chapter 3, Environmental Analysis, Impacts, and Mitigation, identified the following significant and unavoidable impacts of the Project:

- Temporary nighttime construction and vibration associated with construction of Phase I, II, and III improvements

All other Project impacts were found to be less than significant or could be reduced to a less than significant level through the implementation of recommended mitigation measures.

## 5.2.1 Alternatives Considered but Rejected

In addition to specifying that the EIR evaluate “a range of reasonable alternatives” to the project, Section 15126.6(c) of the CEQA Guidelines requires that an EIR identify any alternatives that were considered but were rejected as infeasible or would otherwise not meet the stated project objectives. As part of SCRRRA’s evaluation and selection process, the following criteria was considered:

- **Technical and Engineering Feasibility.** An alternative must be technically and physically feasible. An alternative must be based on existing and accepted engineering concepts and practices. Also, an alternative must not be dependent upon either the availability or acquisition of site locations that cannot be reasonably assured in order to meet a project’s operational objectives.
- **Environmental Fatal Flaw.** An alternative cannot have environmental impacts that are so significant as to negate the positive attributes of the alternative, or simply transfer potential environmental impacts from one location to another.
- **Economic Feasibility.** An alternative cannot be economically impractical or infeasible. Similarly, an alternative cannot result in excessive operation and maintenance costs.
- **Public Health and Safety.** An alternative should be able to meet all existing and anticipated future State and Federal health and safety requirements.
- **Timing.** An alternative must be capable of being implemented within a reasonable timeframe such that the benefits and needs of the project are not unduly delayed.
- **Institutional.** An alternative cannot possess significant uncertainty that all permits, licenses, or other logistical requirements can be reasonably obtained.

In considering the above criteria, the following alternatives were rejected from further consideration in the EIR:

**Alternative Mode Technologies.** Metrolink operates existing passenger rail service and is in the process of upgrading its locomotive fleet to comply with U.S. EPA’s Tier IV regulations. No new train technologies were considered for operation along the Project alignment based on Metrolink’s pre-existing revenue service fleet and current upgrade process. Additionally, such an upgrade would not be feasible to implement along the Project alignment and cost-prohibitive unless performed system wide. Based on these reasons, the alternative involving train technologies were eliminated from consideration in the EIR.

**New Rail Alignment Alternatives.** SCRRRA did not consider the acquisition of additional railroad ROW due to its pre-existing ownership of the Ventura Subdivision. The acquisition of a new ROW required to secure a new rail alignment would result in substantial displacements of existing residential and commercial uses within the City, thereby increasing land use and community/neighborhood impacts resulting from the Project. A new ROW could also result in an additional encroachment into the Arroyo Simi Channel, which is a designated regulatory floodway (Zone AE), and corresponding indirect impacts on the adjacent 100-year floodplain. Additionally, the construction of a new ROW could contribute to greater cumulative impacts on local and regional traffic circulation compared with the proposed Project.

Beyond the operational and physical impacts, a new ROW and additional property acquisition would add substantially to the cost of this alternative. Based on the added ROW requirements, the additional cost would render this alternative cost prohibitive. An alternative corridor would be inconsistent with

the grant funding awarded to SCRRA as part of the Transit and Intercity Rail Capital Program (TIRCP) administered by the California State Transportation Agency (CalSTA), which is allocated for use on existing Metrolink service lines. Further, the completion of the property acquisition process for securing the necessary ROW would not occur within the timeframe required for approval of the Project. The Project under this alternative would result in more substantial environmental impacts, as well as greater significant and unavoidable impacts than the proposed Project, as listed above. Based on these reasons, the alternative involving new alignments were not carried forward for consideration in the EIR.

**New Station Alternatives.** SCRRA received comments during the NOP comment period requesting a new station stop within the City and as mentioned in the City's General Plan (City of Simi Valley 2012b). The General Plan contemplates a new station near the Mountain Gate Plaza which is west of MP 433.96 and approximately 5 miles from the existing Simi Valley Station. Although SCRRA supports additional station stops along Metrolink's VCL, the construction and programming of a new station would be located outside of the Project study area in which improvements are needed and is not necessary to achieve the Project's operational service objectives as part of Phase 1 of the SCORE Program.

Additionally, the land requirements for a new station, particularly in a relatively built-up area within the City, would result in greater land use and construction-related impacts than the proposed Project. Based on review of properties around the portion of the rail alignment that parallels the Mountain Gate Plaza to the north, there is very limited space to construct a new station and associated ancillary components such as a platform and park and ride lot. Therefore, acquisition of a new ROW would be required to secure enough land to construct a new station, and displacements of existing commercial and industrial uses within the City would occur; thereby increasing land use and community/neighborhood impacts by incorporating this new station into the Project. Furthermore, the mobilization and construction effort to implement this new station would also require a substantially greater amount of equipment and workers on-site to facilitate construction within the required project schedule.

According to FEMA FIR), the general location of the new station would be located within the 100-year floodplain (Zone AO). Therefore, the installation of a new station would not eliminate the Project's impacts related to the placement of additional fill and/or structures within the limits of 100-year flooding. In this context, another station location in place of a new platform at the existing Simi Valley Station would not avoid Project-related floodplain encroachments that could require a FEMA map revision.

Given the issues identified above, an additional station would significantly increase construction and operational risks, costs, and impacts for all environmental resource topic areas compared with the proposed Project. Additionally, the Project under this alternative could result in greater significant and unavoidable impacts as listed above for the proposed Project. Based on these reasons, the alternative involving a new station was not carried forward for consideration in the EIR.

New station stops beyond the immediate Project study area along the VCL as envisioned in the adopted 2020-2045 RTP/SCS (SCAG 2020a) are considered and further discussed in Chapter 4, Cumulative Impacts, as part of the cumulative analysis.

**Siding Extension East of Hidden Ranch Drive.** During preliminary design, SCRRA considered potential alternative designs that would lessen the level of infrastructure needed by the Project; thereby reducing impacts and Project costs. One of these alternative designs included shifting the Project double track east to begin at approximately MP 437.50, just east of the Tapo Street grade crossing,



extending approximately 1.7 mile east to the existing Hasson siding (MP 439.20). MP 439.20 is where the current single track becomes double track, east of Hidden Ranch Drive (MP 438.30).

This alternative design would exclude SSM improvements to the at-grade railroad crossings at Sequoia Avenue, Tapo Canyon Street, and Tapo Street, and the new CPs and intermediate signal locations would likely be shifted further east or eliminated. The alternative would still include 2,300 feet of track shifting, shifting of the UPRR spur track, reconfiguration of the existing platform at Simi Valley Station, including a new second platform, and new pedestrian underpass. Beyond the Project improvements, this alternative would require expansion of the existing Arroyo Simi Bridge to accommodate a double track. Consistent with FEMA's requirements for the AE flood zone, the bridge improvements would be required to achieve a no-net rise to existing water surface elevations during the 100-year event.

As provided in Section 3.3, Biological Resources, the Project currently avoids impacts on waters of the U.S. and state. Extension of the Project under this alternative track configuration would require the expansion of the existing Arroyo Simi Bridge structure to accommodate a second track, which would likely result in the permanent discharge of fill to the Arroyo Simi Channel. The Arroyo Simi Channel is identified as a jurisdictional aquatic resource that includes freshwater emergent wetland and may provide suitable habitat for the Arroyo toad which has a moderate potential to occur, and the California red-legged frog which has a low potential to occur. Both of these species are federally and/or state-listed wildlife species. The Arroyo Simi Channel also serves as a potential west-to-east corridor for wildlife. Therefore, this alternative would result in substantially greater impacts on biological and wetland resources compared with the proposed Project. These additional impacts would in turn trigger regulatory permitting approvals from multiple agencies including USACE, RWQCB, and CDFW.

Portions of the Project alignment from Tapo Street to the Arroyo Simi Channel are located within the AE flood zone. Therefore, extension of the Project east would not avoid or reduce encroachment of the Project infrastructure into the 100-year floodplain and AE flood zone compared with the proposed Project. Additionally, this alternative design would require a more extensive encroachment into the Arroyo Simi to facilitate bridge construction and potentially modification of the concrete channel. These alterations could trigger additional permitting under the Rivers and Harbors Act thereby increasing construction costs and substantially delaying the Project's schedule.

This alternative would likely affect fewer noise sensitive receptors given a majority of the eastern extension is adjacent to open space or underdeveloped land uses. However, this eastward shift in the track improvements would preclude the SSM improvements at the Sequoia Avenue, Tapo Canyon Road, and Tapo Street at-grade railroad crossings. Therefore, only the Tapo Street, East Los Angeles Avenue, and Hidden Ranch Drive at-grade railroad crossings would be constructed to enable for quiet zone-ready status per FRA requirements. There are no other at-grade railroad crossings between Hidden Ranch Drive and the Hasson siding at MP 439.20. By not implementing any SSM improvements proposed by the Project at the Sequoia Avenue, Tapo Canyon Road, and Tapo Street at-grade railroad crossings, it may be more difficult for the City to obtain an overall Quiet Zone Risk Index (QZRI) score below the Risk Index With Horns (RIWH) threshold that would allow the City to implement quiet zones in coordination with FRA at these locations. Because these crossings would be located outside of this alternative's study area, any improvements, whether or not it is needed to qualify for a quiet zone application in the future, would have to be completed separately.

Based on these combined reasons, alternatives involving the extension of track further east of Hidden Ranch Road were not carried forward for consideration in the EIR.

**Reduced Double Tracking.** During preliminary design, SCRRA considered potential alternative designs that would lessen the level of infrastructure needed by the Project; thereby reducing impacts and Project costs. One of these alternative designs included reducing the proposed siding extension from 2.20 miles to 1.60 miles in length. Even with the reduction in siding track and proposed Project improvements to the Sequoia Avenue and Tapo Canyon Street at-grade crossings, SCRRA would be able to achieve the hourly bi-directional service and other service enhancement objectives for the VCL as proposed under the Project.

However, the Project under a reduced double tracking alternative design would still result in the same significant impacts as listed in Section 5.2 for the proposed Project. Further, a reduced double tracking alternative would preclude SSM improvements at two of the at-grade crossings, which could limit the City's ability to obtain an overall QZRI score below the RIWH threshold to enable the City to implement quiet zones. Because these crossings would be located outside of this alternative's study area, any improvements whether or not required to qualify for a quiet zone application in the future, would have to be completed separately.

Based on these reasons, alternatives providing less than the required 2.20-miles of double tracking were not carried forward for consideration in the EIR.

**At-Grade Pedestrian Station Crossing.** During preliminary design, SCRRA considered potential alternative crossing designs at the Simi Valley Station to reduce the grading impacts and cost of constructing an underpass. One of these alternative designs included constructing an at-grade pedestrian crossing between the existing and newly proposed platform, instead of the pedestrian underpass as proposed under the Project. The location of the at-grade pedestrian crossing was placed at the east end of the platform to avoid the sharp curve on the west end for improved site distance and to be closer to the existing bike trail access. However, an at-grade crossing at the station combined with the track curvature to the west of the station, would add operational limitations that would limit SCRRA's ability to implement the desired operational benefits consistent with the project objectives. Additionally, this alternative design would not avoid or minimize the significant and unavoidable impacts identified for the proposed Project and would add an additional regulatory approval from CPUC to facilitate the approval of a new at-grade crossing.

Based on these reasons, an alternative design involving at-grade pedestrian at the Simi Valley Station was not carried forward for consideration in the EIR.

**Pedestrian Bridge.** A pedestrian bridge (or overcrossing) at the Simi Valley Station was initially considered, but rejected, to connect the existing and new platforms. Unlike the proposed underpass, a new overpass structure would create a new visual encroachment, which may be considered disruptive to adjacent residences, and obstruct existing views of the Whiteface Escarpment to the north and the Simi Hills to the south. Additionally, an overpass would require more extensive grading and potentially greater ROW acquisitions compared to the proposed pedestrian underpass.

Furthermore, because the pedestrian bridge would include stairs and elevators instead of the stairs and ramps proposed for the pedestrian underpass, the flow efficiency of passengers traversing between the two platforms during peak hours or an emergency event would be less efficient, especially if the elevators require maintenance. This would particularly impact passengers carrying their bikes at the station and those with disabilities for whom ramps may be a better option. Based on these reasons and the increased energy consumption required to operate elevators, alternatives involving a pedestrian bridge (or overcrossing) at the Simi Valley Station were not carried forward for consideration in the EIR.

**Widening of Pedestrian Underpass.** SCRRA received a comment during the NOP comment period requesting consideration of a wider pedestrian underpass at the Simi Valley Station. The comment specifically requested either widening the underpass from the proposed 14-feet to 16-feet or elevating the top of the tunnel to 16-feet and angling the walls down to a 14-foot-wide tunnel floor, to comply with the 2016 CROW *Design Manual for Bicycle Traffic*. However, the design standards of the CROW *Design Manual for Bicycle Traffic* do not apply to this Project, as it is subject to comply with the SCRRA DCM (Metrolink 2021).

The proposed pedestrian underpass would be designed to be 14-feet wide and 10.5-feet high consistent with Section 7.8.2, Station Underpass, of the SCRRA DCM (Metrolink 2021), which states that a pedestrian underpass structure cannot be less than 14-feet wide and 9-feet high. Cycling within the tunnel will be prohibited which is consistent with SCRRA's existing policy at existing undercrossings and station platforms to promote the health and safety for all users. Additionally, the pedestrian underpass would use tunnels that are constructed and brought to site as precast boxes; therefore, widening and/or raising the height of the pedestrian underpass would result in greater impacts to cost and mobilization during construction. More extensive grading and excavation below the trackbed would be necessary and could potentially result in greater impacts to underground utilities.

Based on these reasons, alternatives involving a wider or taller pedestrian underpass at the Simi Valley Station were not carried forward for consideration in the EIR.

**Alternative Noise Mitigation (Noise Barriers).** Given that the proposed Project would add a new second mainline track to the 2.20-mile segment of the proposed Project to accommodate bi-directional and increased passenger train service, SSMS are required at the existing railroad at-grade crossings within this 2.20-mile segment to qualify them for application and approval of quiet zone status from FRA. As provided in Section 3.11, Noise and Vibration, implementation of the FRA quiet zone along the Project study area's 2.20-mile alignment is the most effective means for reducing the moderate noise impacts from increased passenger train services during Project operation. Additionally, SCRRA has identified implementing quiet zones as part of the Project a key objective (Section 5.2) and received formal support from the City for future implementation and adoption.

In the absence of implementing the quiet zones, SCRRA considered the construction of 16-foot-high noise barriers at strategic locations along the railroad ROW, where feasible. These noise barriers were considered for installation along the property line of the mobile home park (at MP 438.30) and the railroad west of Hidden Ranch Drive.

Although a noise barrier would eliminate some of the moderate impacts, this alternative form of noise mitigation was rejected because of the reduced effectiveness at mitigating train horn noise at existing roadways and waterways. These gaps in turn allow noise to flank around the ends of barriers thereby reducing their effectiveness. Furthermore, construction of a noise barrier could result in significant visual impacts, since these homes are below the existing track bed. As a result, a 16-foot noise barrier would result in significantly greater visual impacts than the quiet zones.

Based on these reasons, alternatives involving the use of noise barriers to mitigate operational noise in lieu of the quiet zones were not carried forward for consideration in the EIR.

### 5.3 Alternatives Considered

As described in Section 5.2, several key factors narrowed the range of build alternatives for consideration in this EIR. Of these factors, SCRRA's goal of optimizing passenger rail service and

frequency, minimization of impacts on adjacent properties through the use of SCRRA's and UPRR's existing ROW, and avoidance of environmental resources were the most critical. This EIR considers that the No Project Alternative and Alternative 1, Reduced MT-2 Platform and Construction Staging, are consistent with the requirements of CEQA and a comparative analysis is provided below.

### 5.3.1 No Project Alternative

The CEQA Guidelines require analysis of the no project alternative (PRC Section 15126). According to Section 15126.6(e), "the specific alternative of 'no project' shall also be evaluated along with its impacts. The 'no project' analysis shall discuss the existing conditions at the time the NOP is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."

For the purpose of this EIR, the no project alternative is evaluated in this section as the No Project Alternative and assumes that the Project, herein referred to as the proposed Project, would not be implemented as part of SCRRA's SCORE Program. Compared with the proposed Project, under the No Project Alternative none of the improvements to the Simi Valley Station would be constructed and existing conditions would remain within the existing railroad corridor, including existing operational limitations.

The following analysis provides a comparative analysis of the proposed Project to the No Project Alternative.

#### Aesthetics

Changes to the existing aesthetic conditions would not occur under the No Project Alternative. This alternative does not include infrastructure elements or improvements that would introduce new sources of light or glare that could adversely affect day or nighttime views in the area. Additionally, no construction activity would occur that would impact views of the Whiteface Escarpment to the north and the Simi Hills to the south from north-south thoroughfare viewer locations along the Project alignment. Compared with the proposed Project, the No Project Alternative would avoid significant impacts related to temporary construction-related impacts on aesthetics. However, given the Project-components are at or below existing topographical grades, once operational, the visual impacts of the proposed Project would be less than significant and comparable to the No Project Alternative.

#### Air Quality

Under the No Project Alternative, the existing configuration of Simi Valley Station would remain, and the proposed 2.20 miles of double track would not be constructed. Construction related activities would be avoided in the near term; however, the absence of the proposed rail infrastructure would preclude SCRRA's ability to increase operational capacity on Metrolink's VCL consistent with the SCORE Program. Train movements and frequency would remain similar to existing conditions and would continue to experience the air quality benefits of SCRRA's ongoing upgrade of the Metrolink fleet to Tier IV locomotives. However, this alternative would not enable for further reductions in regional VMT as a consequence of continuing modal shifts from passenger car to rail and increased ridership as a result of an absence of additional passenger rail capacity.

Further, given the State's continued emphasis on transit and passenger rail and the recent award of TIRCP grant funding for SCORE, increased rail infrastructure will ultimately be required along multiple

sections of the VCL to achieve the service objectives in SCAG's 2020-2045 RTP/SCS (SCAG 2020a). As a result, construction of the proposed improvements would be delayed under the No Project Alternative in the near-term, but unlikely avoided in the longer-term.

Based on these considerations, the maximum reduction of operational emissions and associated air quality benefits as facilitated by the proposed Project, would not be realized under a No Project Alternative. Compared with the proposed Project, the No Project Alternative would avoid near-term emissions related to construction and, therefore, would result in no impact. Over the long-term and in the absence of the Project, SCRRRA would be unable to achieve more frequent and convenient passenger rail service on Metrolink's VCL, which would conflict with plans adopted by the VCAPCD and SCAQMD for the purposes of reducing regional VMT and associated emissions of criteria air pollutants. This impact would be potentially significant.

### Biological Resources

Under the No Project Alternative, there would be no construction activities and no increase in operational capacity at the Simi Valley Station or along the 2.20-mile Project alignment. Therefore, existing conditions in the biological study area would remain unchanged under this alternative. Compared with the proposed Project, the No Project Alternative would avoid potentially significant impacts related to biological resources such as potential nesting and foraging habitats, federally and/or state-listed wildlife species, and non-listed special status species that may be present within the proposed Project footprint or proposed Project adjacent areas.

Once operational the Project would result in less than significant impacts on biological resources, which would be comparable to the passenger rail service operations under the No Project Alternative.

### Cultural Resources

No construction-related ground disturbance or demolition would occur under the No Project Alternative; therefore, known and undiscovered cultural resources within the Project study area would not be disturbed. Compared with the proposed Project, the No Project Alternative would avoid impacts on previously recorded cultural resource P-56-152301. Additionally, this alternative would avoid potentially significant construction-related impacts on previously undiscovered archaeological resources and human remains.

Once operational the Project would avoid potentially significant impacts on cultural resources, which would be comparable to the passenger rail service operations under the No Project Alternative.

### Energy

No construction activities and no increase in operational capacity at the Simi Valley Station would occur under the No Project Alternative; therefore, increased demand on utilities and service systems would not occur. The No Project Alternative would not result in an unnecessary consumption of energy resources or conflict with initiatives for renewable energy or energy efficiency during construction or operation. Compared with the proposed Project, the No Project Alternative would avoid minor increases in energy demand and impacts on utilities/service systems.

## Geology, Soils, and Seismicity

No changes to geologic conditions in the proposed Project study area would occur under the No Project Alternative since grading or construction activities would be avoided. Therefore, risks associated with liquefaction hazards, soil erosion, lateral spreading, or expansive soils would be avoided. Compared with the proposed Project, the No Project Alternative would avoid significant impacts related to geology and soils.

## Greenhouse Gas Emissions

Under the No Project Alternative, a continuation of existing conditions would result in generation of similar GHG emissions as existing conditions. Additionally, because no construction activity would occur there would be no emission of CO<sub>2</sub>, methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O) from mobile and stationary construction equipment exhaust, as well as employee haul truck vehicle exhaust. Therefore, no conflict with the AQMP would occur, and no new GHG emissions would be generated under the No Project Alternative.

As described in Section 3.7, Greenhouse Gas Emissions, proposed Project operation has the potential to generate long-term GHG emissions from increased passenger services and changes in regional traffic patterns. However, the emission reductions associated with the new locomotive fleet on a per-gallon-consumed basis offsets this increase in fuel consumption. Additionally, regional VMT reductions from the increased ridership under the Project would lead to additional emissions reductions. Therefore, the proposed Project would reduce operational GHG emissions and provide a net GHG and environmental benefit to the region. The No Project Alternative would not realize these GHG reduction benefits.

The proposed Project is also identified in the 2020-2045 RTP/SCS (SCAG 2020a) under project number 720001 and would contribute to the 2020-2045 RTP/SCS GHG reduction goals for the SCAG region, in addition to statewide GHG reduction targets, as represented by the California Executive Order (EO) S-03-05. Based on these considerations, the reduction of operational GHG emissions and beneficial impacts as facilitated by the proposed Project, would not be realized under the No Project Alternative. Hence, the No Project Alternative would be inconsistent with State and local plans and policies adopted for the purposes of reducing GHG emissions. This impact would be potentially significant and avoided by the Project.

## Hazards and Hazardous Materials

Under the No Project Alternative, there would be no ground-disturbing activities associated with construction that would carry a potential to encounter contaminated soils. Although the proposed Project would mitigate potential impacts from encountering hazardous materials during construction, the No Project would avoid the potential to exacerbate an existing, documented and undocumented sources of hazardous materials condition. Compared with the proposed Project, the No Project Alternative would avoid impacts on identified hazardous materials cleanup sites including leaking underground storage tank (LUST) sites because no excavation activities would occur. This includes avoiding the potential for asbestos-containing materials (ACM) or lead-based paint (LBP) to be released into the environment because no existing structures would be demolished. Compared with the proposed Project, this alternative would avoid potentially significant impacts related to hazards and hazardous materials.

## Hydrology, Flooding, and Water Quality

No construction activities would occur under the No Project Alternative and existing drainage conditions would remain unchanged. Therefore, surface hydrology, groundwater recharge, and flow routing would be unaffected and no new stormwater drainage improvements, or water quality measures would be required under the No Project Alternative. Compared with the proposed Project, the No Project Alternative would avoid impacts related to the placement of new structures within the 100-year floodplain. Based on these considerations, the No Project Alternative would avoid impacts on hydrology, water quality, and floodplains.

## Land Use and Planning

Under the No Project Alternative, no construction related land use conflicts would result with existing or planned land uses and existing conditions with the railroad corridor would remain. Land use development would continue to occur in the proposed Project study area pursuant to the City's General Plan and zoning regulations. Compared with the proposed Project, the No Project Alternative would avoid temporary impacts related to access disruptions. Once operational the No Project Alternative and Project would function similarly with all existing access routes maintained.

The No Project Alternative would not be consistent with federal, state, regional, and local land use plans policies and regulations that promote integration of transportation and land use planning together to create more sustainable communities. In particular, the No Project Alternative is inconsistent with the regional land use and transportation goals of the 2020-2045 RTP/SCS, which identifies the railroad corridor as a high-quality transit corridor and specifically call for increased passenger rail capacity. Additionally, the No Project Alternative would not promote modes of transportation other than the automobile or enhance accessibility to neighborhoods and community and regional centers. Based on this inconsistency with the regional plan for transportation and land use, this is considered a significant impact. No mitigation is proposed beyond the implementation of the Project per the SCAG 2020–2045 RTP/SCS project list (SCAG 2020b; Project Number 720001).

## Noise and Vibration

Under the No Project Alternative, construction-related noise and vibration impacts, including nighttime activities, identified for the Project would be avoided. Additionally, existing sensitive land uses would not be subjected to changes in operational noise as a result of the new track configuration and increased operations. However, in the absence of the proposed SSM improvements to the grade-crossings, the City will not be able to apply for the quiet zone status with FRA under the No Project Alternative.

Compared with the proposed Project, under the No Project Alternative, existing noise levels would remain unchanged and less than significant. Although the No Project Alternative would not necessarily negate the application of the quiet zone for each individual grade crossing, because the No Project Alternative would not implement any improvements to the at-grade crossings, the City may not be able to qualify or may have difficulty in obtaining an overall QZRI score below the RIWH threshold that would allow the City to implement quiet zones in coordination with FRA for all five grade crossings. Any improvements, whether or not it is needed to qualify for a quiet zone application in the future, would be completed separately to qualify for the quiet zone, which would be capable of reducing post-Project noise levels to below existing, ambient noise levels.

## Public Services

Under the No Project Alternative, no construction would occur; therefore, the temporary impacts on emergency access and public services would not occur. Compared with the proposed Project, the No Project Alternative would avoid potentially significant impacts on public services related to emergency response times. Once operational, the Project and No Project Alternatives would have no impacts on public services.

## Transportation and Traffic

Under the No Project Alternative, the existing configuration of Simi Valley Station would remain, and the 2.20 miles of double track would not be constructed to facilitate increased operational capacity on the VCL. No construction activities would result under this alternative or short-term increases in construction-related vehicle trips or short-term interruptions to pedestrian and bicycle facilities. Compared with the proposed Project, this alternative would avoid potentially significant impacts associated with construction-related delays such as disruption to train operations or service in the traffic study area and no impact would result.

The Metrolink VCL accommodates Amtrak and UPRR train services through use agreements with the SCRRA which specifies certain train counts each rail service is allowed to operate along SCRRA lines. Under the No Project Alternative, train movements for the Opening Year (2023) No Project conditions are anticipated to remain similar to the current condition. The No Project Alternative would not allow for bi-directional service or increases in the number of Metrolink revenue trains achievable under the proposed Project. Even though SCRRA has some flexibility with the Metrolink VCL schedule and would likely have to adjust the schedule for Future Year (2045) No Project conditions, the current configuration and capacity provided by the existing single track and platform at the Simi Valley Station would be unable to achieve SCRRA's operational objectives.

The Project is included in SCRRA's SCORE Program as part of the improvements to the VCL and listed in the 2020–2045 RTP/SCS (SCAG 2020a) under Project Number 720001. Under the No Project Alternative, SCRRA would be unable to meet the SCORE Phase 1, 30-minute bi-directional service goals of up to 48 revenue trains per weekday on the VCL as anticipated under the proposed Project. Furthermore, the operational and scheduling flexibility for both Amtrak and Metrolink trains would not be improved upon without the proposed new secondary passenger platform and the upgraded signal systems which would have supported Metrolink's SCORE service plans. Without the addition of a new second passenger platform, eastbound and westbound trains would still not be allowed to occupy the station at the same time; and without the upgraded signal system service headway would not be reduced from the current 8 minute headway to the 5 minute headway goal called for within the Metrolink SCORE service plans. Therefore, the No Project Alternative would conflict with applicable plans and programs to meet current and future demands of the public transportation and a significant impact would result.

The Opening Year (2023) No Project conditions would be the same as the Opening Year (2023) Project conditions with all study intersections operating at an acceptable LOS C or better, except for the intersection of Tapo Canyon Road at Cochran Street in AM and PM peak hours. Additionally, based on the existing close proximity of the at-grade crossings on Tapo Canyon Road and Tapo Street to the intersections to the south on East Los Angeles Avenue, the vehicular queues have the potential to back up and spill over to the adjacent intersection. The Future Year (2045) No Project conditions would be the same as Future Year (2045) Project conditions with insufficient northbound through



storage lengths at the at-grade crossing could also result in the blockage of other intersection movements. Therefore, as a result of northbound traffic queuing during Opening Year (2023) and Future Year (2045) No Project and Project conditions at the at-grade crossing adjacent to Tapo Canyon Road and Tapo Street, potential spillover impacts are identified as a result of insufficient storage for vehicles. However, unlike the proposed Project which proposes to implement pre-signals to reduce queuing and increase safety at Tapo Canyon Road and Tapo Street at East Los Angeles Avenue at-grade crossing, the No Project Alternative would not implement such signal improvements. This represents a potentially significant impact.

The No Project Alternative would avoid potentially significant impacts during construction. However, when compared with the proposed Project, the No Project Alternative would operationally result in a significant impact by conflicting applicable RTPs that would be unavoidable in the absence of implementing the proposed Project.

### Tribal Cultural Resources

No construction-related ground disturbance or demolition would occur under the No Project Alternative; therefore, undiscovered TCR within the proposed Project study area would not be disturbed. Although the Sacred Lands File Search conducted for the proposed Project came back with negative results, unlike the proposed Project, the No Project Alternative would avoid potentially significant impacts on unanticipated discovery of TCRs because of an overall avoidance of construction activities.

### Utilities and Service Systems

Under the No Project Alternative, the demand for water, generation of wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities, and generation of solid waste would remain unchanged from existing conditions. Compared with the proposed Project, the No Project Alternative would avoid potentially significant impacts on utilities and service systems because no improvements would be implemented, and utility protection and relocation would be avoided.

### Wildfire

Under the No Project Alternative, there would be no construction activities and no operational changes in the Project study area. Therefore, there would be no potential for exacerbating the risk of wildfire in the Project study area during construction, including within a VHFHSZ. Compared with the proposed Project, the No Project Alternative would avoid potentially significant impacts associated with the risk of wildfire because no improvements would be implemented.

### Conclusion – No Project Alternative

Under the No Project Alternative, the construction-related impacts associated with implementation of the proposed Project would be reduced overall; including impacts on aesthetics, biological resources, cultural resources, energy, geology/soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services, TCRs, utilities and service systems, and wildfire.

While the No Project Alternative is theoretically feasible, it would fail to meet any of the Project objectives (Section 5.2). Because the No Project Alternative would not implement any of the railroad, at-grade crossing, or platform upgrades proposed under the proposed Project, enhancements to

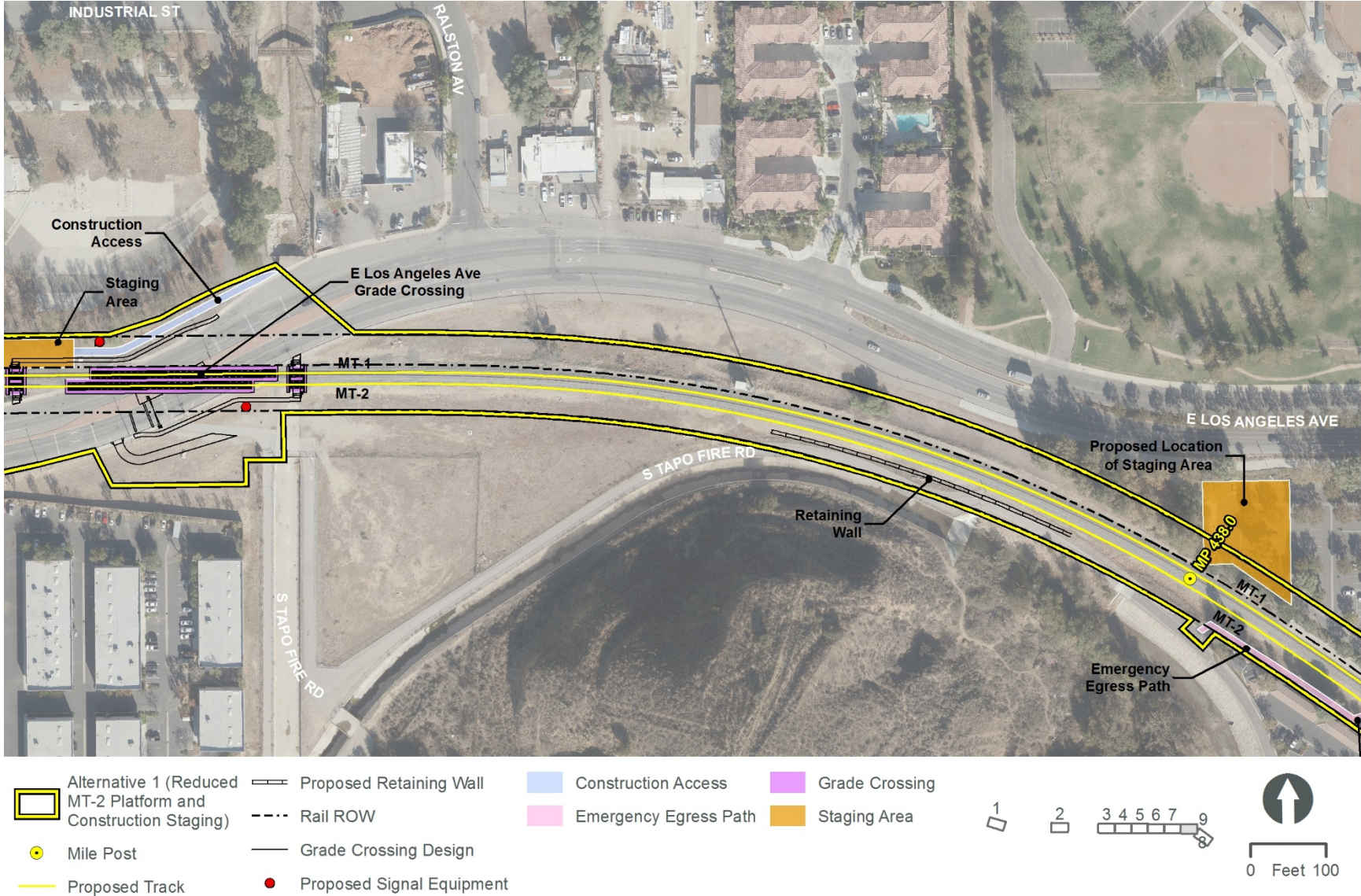
at-grade crossing safety, service frequency, and reliability would not be improved. Additionally, due to the constraints of the existing rail infrastructure, operational capacity, safety, and efficiency would not be enhanced to meet the demands of the VCL and broader rail system; thereby further constraining SCRRRA's ability to accommodate forecasted travel demands on Metrolink's passenger service. The lack of upgrades to the Sequoia Avenue, Tapo Canyon Road, Tapo Street, East Los Angeles Avenue, and Hidden Ranch Drive at-grade railroad crossings may limit the City's ability to obtain an overall QZRI score below the RIWH threshold to enable the City to implement quiet zones in the future.

Furthermore, the Project under the No Project Alternative would not be consistent with the SCORE Phase 1, 30-minute service goals; and as a project identified within the 2020–2045 RTP/SCS (SCAG 2020a), would not support the goal for more frequent rail service set out in the *California State Rail Plan* (Caltrans 2018), or contribute to the 2020-2045 RTP/SCS GHG reduction goals for the SCAG region and statewide GHG reduction targets. Given future projections of increased rail service demand and implementation of other transportation related projects within the region, the No Project Alternative would result in a disjointed rail system causing operational inefficiencies and safety issues. Therefore, the No Project Alternative would ultimately contribute to a longer-term worsening of existing conditions related to transportation and traffic congestion, increased criteria air quality pollutants, and regional GHG emissions.

### 5.3.2 Alternative 1 - Reduced Main Track 2 Platform and Construction Staging

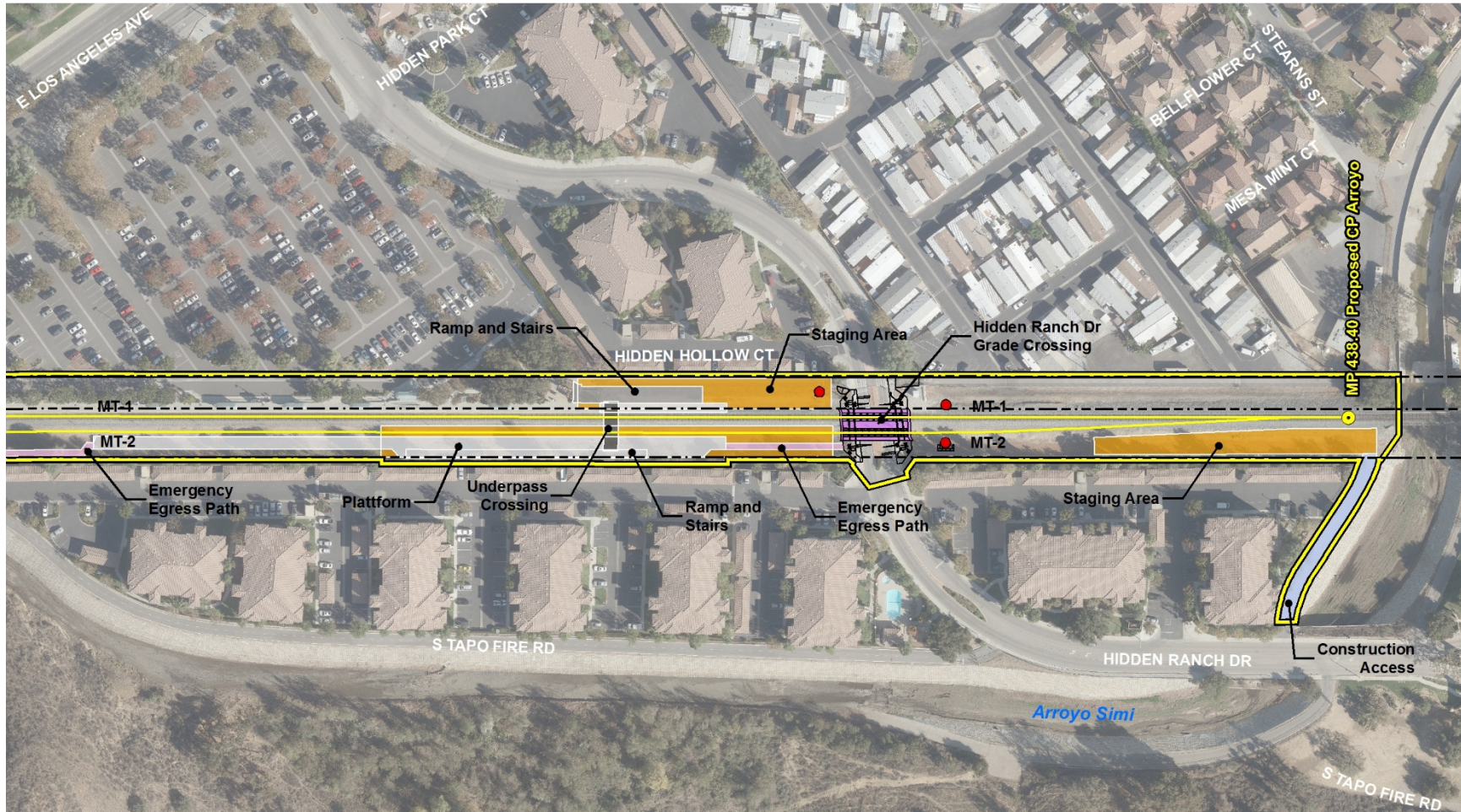
During the development of the preliminary design, SCRRRA considered an alternative design that would construct a new, narrower MT-2 platform at the Simi Valley Station. The narrower, nonstandard MT-2 platform would still include all standard safety features (e.g. yellow 'do not cross' line, truncated domes, directional train boarding tiles, handrails, etc.). To achieve reductions in ROW impact, Alternative 1 would include a 14-foot-wide platform compared with the standard 16-foot-wide platform. Additionally, the northern ramp wall for the MT-2 ramp would be situated under the reduced MT-2 platform which would reduce 1.5-feet of ROW acquisition and remove the TCE for the staging area needed from a multifamily property located south of the newly proposed MT-2 platform at 5008 Arroyo Lane. This alternative would also consolidate construction staging and laydown in the northwest portion of the parking lot at the Simi Valley Station. Figure 5-1 depicts the portion of the Alternative 1 Project limit and components that differ from the Project, as seen on Figure 2-3.

Figure 5-1. Alternative 1 Project Limit  
 (Sheet 1 of 2)



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Figure 5-1. Alternative 1 Project Limit  
 (Sheet 2 of 2)



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## Aesthetics

Implementation of Alternative 1 would also result in short-term visual impacts due to construction activity and the presence of construction equipment within the Project corridor. Therefore, similar to the proposed Project, construction under this alternative would result in temporary short-term impacts to views of the Whiteface Escarpment to the north and the Simi Hills to the south from north-south thoroughfare viewer locations along the Project alignment. This also includes exposure of adjacent residences to higher levels of lighting during nighttime hours. However, visual and aesthetic impacts from construction activities would be reduced for residents south of the proposed MT-2 platform since the TCE for the staging area that impacts the landscaped area of the multifamily property would not be required. Additionally, the construction staging area proposed under the Project, located south of the Ralston Street and East Los Angeles intersection, would be consolidated into the construction staging and laydown area located within the northeast corner of the Simi Valley Station parking lot under Alternative 1. This staging area would be placed away from residential properties.

This alternative would be required to mitigate impacts from construction by requiring temporary screening of construction material and staging areas that are visible from nearby roads, residences, and recreational areas per Mitigation Measure AES-1. Construction-related light and glare level impacts would also require shielding light or directing light toward the construction area during nighttime construction per Mitigation Measure AES-2.

The narrower second platform would not present a significantly notable change or impact to the existing visual character of the Project study area since the existing setting which includes the Simi Valley Station and related railroad infrastructure are currently visible from public roadways, surrounding residences and recreationalists. However, compared to the proposed Project, the narrower design would allow the Main Track 2 platform to be setback and further from the southern adjacent multifamily property. New or replacement lighting under this alternative would also comply with state standard glare ratings and be directed away from residential uses per Mitigation Measure AES-3. Therefore, similar to the proposed Project, once Alternative 1 is constructed, impacts to the visual character of the Project area following the proposed mitigation would be similar to the proposed Project.

## Air Quality

Alternative 1 would require similar counts of on-site workers, equipment, and truck hauls, and therefore similar short-term emissions from these construction activities to the proposed Project. This alternative would also be subject to the use of Tier 4 construction equipment per Mitigation Measure AQ-1.

Operational emissions would be the same as the proposed Project as Alternative 1 would still allow for the desired operational improvements (i.e. increased headway and reduction in conflicting train movements) resulting in bi-directional service and increase in service predicted for the proposed Project. Therefore, this alternative would still be consistent with the Project's purpose and needs, objectives, and with the goals of the SCAG 2020-2045 RTP/SCS.

Impacts on air quality under Alternative 1 would be similar to the proposed Project and the same mitigation measure, AQ-1, would still apply. Therefore, when compared overall to the proposed Project, which results in a significant impact requiring mitigation, Alternative 1 would result in a similar environmental impact.

## Biological Resources

Alternative 1 would share a relatively similar footprint and study area as the proposed Project since the extent of the Project would not change. Therefore, the existing vegetation identified within the proposed Project would be the same for Alternative 1 and would have the same potential construction impacts on vegetation communities (i.e. Riparian habitat and other special-status vegetation communities, such as California sagebrush scrub) identified for the proposed Project.

California sagebrush scrub (Catalina mariposa lily and Payne's bush lupine) and valley oak woodland (Southern California black walnut) occur along the southeastern edge of the Project study area, and suitable nesting and foraging habitat for birds protected by the MBTA and California Fish and Game Code Sections 3300 through 5500 occurs within and adjacent to Project footprint. Therefore, Alternative 1 may also indirectly impact CAGN, LBVI, SWFL, bats, and yellow warbler if these species were present in areas adjacent to the alternative's Project footprint during construction. Indirect impacts would be mitigated through the implementation of BMPs regarding special status species per Mitigation Measure BIO-1 and preconstruction nesting bird surveys if construction occurs between January 15 and September 15 per Mitigation Measure BIO-2. This alternative would also be subject to compliance with the City Tree Preservation ordinance which requires an arborist, horticulturist, or registered landscape architect to conduct a survey for protected trees within the Project footprint per Mitigation Measure BIO-3.

Impacts on biological resources under Alternative 1 would be similar to the proposed Project and the same mitigation measures, BIO-1 through BIO-3, would apply. Therefore, when compared to the proposed Project, which results in a significant impact requiring mitigation, Alternative 1 would result in a similar environmental impact.

## Cultural Resources

Alternative 1 would have a physical footprint and APE similar to the proposed Project; therefore, the potential for this alternative to encounter undiscovered cultural resources would be similar to the proposed Project. During construction of Alternative 1, although unlikely, buried remnants of the original historic depot (P-56-152301) or the ancillary buildings, undiscovered archeological resources, or human remains may be encountered. Therefore, the same mitigation measures requiring a qualified archaeologist to monitor all ground disturbing activity per Mitigation Measure CUL-1, proper treatment of unanticipated cultural discoveries per Mitigation Measure CUL-2, and proper handling of human remains pursuant State of California Health and Safety Code Section 7050.5 and PRC Section 5097.98 per Mitigation Measure CUL-3 would apply to this alternative.

Impacts on cultural resources under Alternative 1 would be similar to the proposed Project and the same mitigation measures, CUL-1 through CUL-3, would apply. Therefore, when compared overall to the proposed Project, which results in a significant impact requiring mitigation, Alternative 1 would result in a similar environmental impact.

## Energy

Construction of Alternative 1 would result in temporary increases in demand for energy in the form of fuel and electric power used for construction vehicles and other equipment used during site clearing, grading, and construction; as well as electrical equipment. Construction-related activities would also result in fuel consumption from the use of construction tools and equipment and transport of workers and materials to or from the construction site. Alternative 1 does not include any unusual design characteristics that would cause the use of construction-related equipment to be less energy efficient.



compared with other construction sites in the region; therefore, the consumption of energy resources during construction would be similar to the proposed Project.

Alternative 1 would result in the similar operational consumption of energy resources as the proposed Project. This alternative would also improve operational capacity and efficiency through increased headway and reductions in conflicting train movements to allow for bi-directional service within the Project corridor. Therefore, when compared overall to the proposed Project, which results in a less than significant impact, Alternative 1 would result in a similar environmental impact.

### Geology, Soils, and Seismicity

Similar to the proposed Project, construction of Alternative 1 would not increase or exacerbate the potential for fault rupture or ground failure, including liquefaction, and would be subject to the same level of ground motion in the event of an earthquake. However, as discussed in Section 3.6, Geology, Soils, and Seismicity, the potential for ground failure exists within the Project study area. Therefore, this alternative would also be required prepare a final geotechnical report in support of the Project's final design per Mitigation Measure GEO-1.

Similar to the proposed Project, this alternative would add over 1 acre of impervious area. Therefore, this alternative would also be required to implement a SWPPP prepared under the SWRCB's Construction General Activity NPDES Permit (Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ, NPDES No. CAS000002) per Mitigation Measure HWQ-1.

Alternative 1 would still include grading and excavation for the proposed pedestrian underpass. Therefore, although unlikely, ground disturbing activities during construction have the potential to unearth previously unrecorded paleontological resources. This alternative would also be required to retain a qualified paleontologist to monitor excavations impacting geologic units with moderate paleontological potential per Mitigation Measure PAL-1, have a qualified paleontologist conduct spot checks during such excavations per Mitigation Measure PAL-2, conduct proper treatment of unanticipated paleontological resources per Mitigation Measure PAL-3, and prepare a report at the completion of ground-disturbing activities per Mitigation Measure PAL-4.

Operation of Alternative 1 would not result in any significant changes to the physical environment that would result in soil erosion, loss of topsoil, and impacts to paleontological resources; nor would this alternative exacerbate the risk of ground failure.

Impacts on geology and soils under Alternative 1 would be similar to the proposed Project and the same mitigation measures, GEO-1, HWQ-1, and PAL-1 through PAL-4, would apply. Therefore, when compared overall to the proposed Project, which results in significant impacts requiring mitigation, Alternative 1 would result in a similar environmental impact.

### Greenhouse Gas Emissions

As discussed in the Air Quality section above, Alternative 1 would also require similar counts of on-site workers, equipment, and truck hauls; therefore, short-term emissions from these construction activities would not be substantially significant compared to the proposed Project.

Operational emissions would be the same as the proposed Project since Alternative 1 would achieve the same desired operational improvements (i.e. increased headway and reduction in conflicting train movements) resulting in 30-minute bi-directional service during peak hours. Therefore, this alternative would also be consistent with the Purpose and Need and with the goals of the SCAG 2020-2045

RTP/SCS. The GHG emission reductions achieved by this alternative would be the same as the Project thereby facilitating attainment of state and local GHG reduction goals by 2045.

Impacts on GHG emissions under Alternative 1 would be similar to the proposed Project. Therefore, when compared overall to the proposed Project, which results in a less than significant impact, Alternative 1 would result in a similar environmental impact.

### Hazards and Hazardous Materials

Similar to the proposed Project, Alternative 1 would require the use of hazardous materials and substances during construction and hazardous wastes would be generated during operation of construction equipment. Therefore, this alternative would also be subject to federal, state, and local laws, regulations, and policies such as Cal/OSHA health and safety regulations, SCRRRA's DCM, and the SWRCB's NPDES Construction General Permit. Additionally, this alternative would be required to prepare a HMMP per Mitigation Measure HAZ-1.

Because Alternative 1 has a relatively similar footprint and study area as the proposed Project, the hazardous material cleanup sites identified for the proposed Project would be the same for this alternative. Due to the nature of construction activities, Alternative 1 may potentially expose construction workers and members of the general public to contaminated soils and groundwater during grading and excavation within close proximity to other previously identified LUST sites. Therefore, similar to the proposed Project, this alternative would be required to halt construction if significantly stained soil is encountered during subsurface excavation per Mitigation Measure HAZ-2 and prepare a Soil Management Plan per Mitigation Measure HAZ-3.

Construction of this alternative would still result in increased movement of construction vehicles and equipment through the area which may result in temporary impacts to surrounding roadways, delays in emergency service providers' response times, and interference with the City's Emergency Plan. Additionally, this alternative is still within a VHFHSZ and construction could indirectly expose construction workers to an increased risk of loss, injury, or death involving wildland fires. Therefore, similar to the proposed Project, Alternative 1 would also be required to implementing a TMP per Mitigation Measure TRA-1 and provide fire suppression equipment and training to workers per Mitigation Measure WLD-1 during construction.

Potential hazards and hazardous material impacts under Alternative 1 would be similar to the proposed Project and the same mitigation measures, HAZ-1 through HAZ-3, TRA-1, and WLD-1, would apply. Therefore, when compared overall to the proposed Project, which results in a significant impact requiring mitigation, Alternative 1 would result in a similar environmental impact.

### Hydrology, Flooding, and Water Quality

Alternative 1, would reduce some construction impacts to a regulatory floodway (Zone AE) by consolidating the staging area south of the Ralston Street and East Los Angeles Avenue intersection with the construction staging and laydown area within the Simi Valley Station Parking lot. Although, the parking lot is still within a 100-year floodplain (Zone AE), Alternative 1 would no longer include a construction staging and laydown area on land within a regulatory flood way (Zone AE); which requires land adjacent to a watercourse to be reserved for base flood discharge so that a cumulatively increase in water surface elevation does not exceed a designated height.

Similar to the proposed Project, Alternative 1 would not require groundwater extraction for consumptive use and, therefore, would not substantially deplete groundwater supplies or substantially interfere with groundwater recharge. Because this alternative also proposes to construct a pedestrian

underpass, the Project would be required to obtain General Permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4 2018 0125, NPDES No. CAG994004).

Alternative 1 would still add over 1 acre of impervious area; therefore, runoff rates and volumes, as well as associated pollutants from automobile and pesticide use would be similar to what they are under existing conditions and the proposed Project. Improvements under Alternative 1 would also temporarily alter stormwater drainage patterns and would be required to comply with interim BMPs required by the NPDES Construction General Permit and be required to prepare a SWPPP to limit runoff volumes and soil erosion, and minimize impacts to water quality during construction in accordance with Mitigation Measure HWQ-1 and the Ventura County MS4 Permit's hydromodification requirements per Mitigation Measure HWQ-2.

Additionally, because this alternative overlaps with most of the Project footprint, it would encroach into the 100-year floodplain (Zone AO and Zone AE). Therefore, similar to the proposed Project a H&H analysis is required to confirm the Project improvements would not redirect existing flood flows or increase base flooding depths per Mitigation Measure HWQ-3. However, due to a smaller platform, this alternative would create less impervious surface when compared to the Project and would likely result in less impact to existing drainage patterns.

Impacts on hydrology and water quality under Alternative 1 would be similar to the proposed Project and the same mitigation measures, HWQ-1 through HWQ-3, would apply. Therefore, when compared overall to the proposed Project, which results in a less than significant impact with mitigation, Alternative 1 would result in a similar environmental impact.

## Land Use and Planning

As previously stated, the narrower platform design proposed under Alternative 1 would no longer require the TCE and reduce the size of the partial ROW acquisition needed from the railroad ROW adjacent landscaped area belonging to a multifamily property south of the newly proposed Main Track 2 platform. A portion of the construction staging area that would have been needed for a standard Main Track 2 platform; as well as the construction staging area south of the Ralston Street and East Los Angeles Avenue intersection would be relocated to the Simi Valley Metrolink Station parking lot. Further, by relocating and consolidating the construction staging area south of the Ralston Street and East Los Angeles Avenue, impacts to two properties (Assessor Parcel Number [APN] 644-0-144-0440 and 644-0-210-185) would be avoided. Therefore, these changes to the proposed Project components would not result in a new impact that could divide a community or significantly conflict with any adopted land use plans, policies, or regulations. Although parking spaces may be temporarily impacted, there is a sufficient number of parking spaces to accommodate park and ride passengers during the construction phases.

Additionally, similar to the proposed Project, the majority of this alternative would be constructed primarily within existing railroad ROW owned by SCRRA and Union Pacific Railroad or within the City's roadway ROW. During construction of the project under this alternative, temporary detours would be required for motorists per Mitigation Measure TRA-1, and pedestrians and bicyclists per Mitigation Measure TRA-2 to avoid disruptions to access and mobility. Therefore, Alternative 1 would not impede access or create barriers or changes to the existing community and would comply with applicable polices within the City General Plan and the SCAG 2020–2045 RTP/SCS.

Impacts on land use under Alternative 1 would be slightly reduced; however, the same mitigation measures, TRA-1 and TRA-2, would apply. Therefore, when compared overall to the proposed Project,

which results in a significant impact requiring mitigation, Alternative 1 would result in a similar environmental impact.

## Noise and Vibration

Alternative 1 would generate construction noise and vibration from the use of powered mechanical equipment (e.g. included compressors, welding machines, mobile cranes, front end loaders, rollers, dozers, graders, and excavators). Similar to the proposed Project, construction of this alternative would still be limited to daytime hours to the extent practicable and would not exceed any thresholds as construction noise exempt. However, in the absence of mitigation, this alternative would also result in significant and unavoidable noise impacts by exceeding FTA's nighttime construction noise criteria of 70 dBA  $L_{eq}$  at residential uses adjacent to the Project footprint. Given that this alternative would remove the TCE impacting the multifamily property and relocate a portion of the staging area to the northeast corner of the Simi Valley Metrolink Station parking lot, away from residential properties, noise impacts from construction activities, particularly during nighttime, may be slightly reduced for the residential receptors (R39 to R44) when compared to the proposed Project.

Vibration levels were evaluated for the three closest receptors (R95 to R97) to construction for the proposed Project. These receptors are located east of the Tapo Canyon Road and north of the existing ROW and would be the same receptors closest to the Alternative 1 Project footprint. Based on analysis for the proposed Project, it is anticipated that this alternative would also be below the damage impact criteria; however, annoyances from vibration during construction activities, and a maximum vibration level of 84 VdB is predicted at the nearest receptor.

However, even with the slight reduction in impacts to southern adjacent residential uses, overall construction noise and vibration impacts to sensitive land uses within this alternative's study area would be relatively similar to the proposed Project. Therefore, mitigation for construction noise and vibration impacts which include strategies and BMPs (e.g. operation sequencing and alternative construction methods) to reduce construction related impacts per Mitigation Measure NV-1 and preparation of a community notification plan prior to construction per NV-2 would be implemented.

Operational noise and vibration impacts identified under the proposed Project would be similar for this alternative. Therefore, as discussed in Section 3.11, Noise and Vibration, trains would operate in closer proximity to sensitive receptors, particularly the Tradewinds Mobilehomes Park residences located north of the tracks and east of the Simi Valley Station. This alternative would also exceed the 5 dB threshold at the Tradewinds Mobilehomes Park by increasing sound levels to 5.6 dB. Significant impacts would also occur in the absence of mitigation for areas within 0.25-mile of an existing grade crossing. Alternative 1 would upgrade the same grade crossings as the proposed Project in order to qualify all five for application of the FRA quiet zone per Mitigation Measure NV-3. If the application of the quiet zones is not approved, wayside horns will be implemented per Mitigation Measure NV-4. Similar to the proposed Project, no vibration or ground-borne noise impacts are predicted during operation of the Project under this alternative.

Noise and vibration impacts under this alternative would be slightly reduced during construction; however, the same mitigation measures, NV-1 through NV-4, would apply. Therefore, when compared overall to the proposed Project, which results in a significant impact requiring mitigation, Alternative 1 would result in a similar environmental impact.

## Public Services

Similar to the proposed Project, Alternative 1 would result in no impacts to schools, parks, or other public facilities. This alternative would also not increase demand on fire or police services; however, during construction increased traffic congestion caused by construction vehicles and access disruptions, such as road closures or road construction, could affect emergency response times. Similar impacts on law enforcement services could also occur, thereby further affecting response times. These disruptions under this alternative are expected to be temporary and intermittent and would be mitigated through the implementation of a TMP per Mitigation Measure TRA-1. Once this alternative is operational, emergency access, service ratios, response times, or other performance objectives throughout operation would not be affected.

Impacts on public services under this alternative would be similar to the proposed Project and the same mitigation measure, TRA-1, would apply. Therefore, when compared overall to the proposed Project, which results in a significant impact requiring mitigation, Alternative 1 would result in a similar environmental impact.

## Transportation

Impacts resulting from construction activity for Alternative 1 would be the same as the proposed Project. Therefore, short-term interruptions to pedestrian and bicycle facilities and short-term closures would still be required for the remaining crossings being upgraded. The improvements would be completed in phases such that only one crossing is closed at once. Construction activities would be scheduled during time frames that allow for exclusive track occupancy by construction crews to maximize the safety of Metrolink operations and workers in the ROW, including the weekends. Due to nature of the improvements which include the construction of new tracks and a second platform with pedestrian at-grade crossing, work windows which would result in the temporary cessation of service would be required during construction. Therefore, during construction of this alternative a TMP would be prepared to manage vehicular traffic per Mitigation Measure TRA-1, and pedestrian and bicycle access would be detoured as needed per Mitigation Measure TRA-2 to minimize impacts to riders and the local transportation network.

Similar to the proposed Project, improvements under Alternative 1 would allow for passenger and freight trains to pass each other on the new siding, reducing both passenger and freight train delays, and providing the ability to meet the SCORE Phase 1, 30 minute service goals. The construction of a narrower second passenger platform, new track, and upgraded signal systems would also support Metrolink's SCORE service plans and allow for eastbound and westbound trains to occupy the station at the same time, providing greater operating and scheduling flexibility for both Amtrak and Metrolink. Metrolink service would also be able to increase service from 33 trains per weekday to 48 revenue trains per weekday on the VCL similar to the proposed Project.

During Opening Year (2023) conditions and Future Year (2045) conditions the frequency of trains would increase, resulting in more frequent gate closures at the crossings during peak periods. Because of the improvements to several at-grade crossings, potential spillover impacts are identified for northbound traffic queuing during Opening Year (2023) conditions and Future Year (2045) conditions at Tapo Canyon Road at East Los Angeles Avenue and Tapo Street at East Los Angeles Avenue, which may reduce safety. Therefore, this alternative will also be subject to implementing pre-signals to reduce queuing and increase safety for the at-grade crossings per Mitigation Measure TRA-3.

Impacts on transportation under this alternative would be similar to the proposed Project and the same mitigation measures, TRA-1 through TRA-3, would apply. Therefore, when compared overall to the proposed Project, which results in a significant impact requiring mitigation, Alternative 1 would result in a similar environmental impact.

### Tribal Cultural Resources

Although this alternative would have slightly less impacts to the multifamily property south of the newly proposed platform, the potential of ground disturbing activities encountering unanticipated TCRs is still possible, and the reduction in ROW impacts would not reduce the likelihood of a potentially significant impact. In the event an unanticipated discovery is determined to be prehistoric or Native American in origin, consultation with local Native American Tribes who have expressed interest and concern regarding the Project will be undertaken per Mitigation Measure CUL-2; and if a human remains are discovered and determined to be prehistoric or Native American in origin, notification of NAHC to notify a most likely descendant would be required per Mitigation Measure CUL-3.

Potential impacts on TCRs under this alternative would be similar to the proposed Project and the same mitigation measures, CUL-2 and CUL-3, would apply. Therefore, when compared overall to the proposed Project which results in a potentially significant impact requiring mitigation, this alternative would result in a similar environmental impact.

### Utilities and Service Systems

Utilities within the Project study area include municipal water and sewer pipes, storm drainage facilities, natural gas lines and electrical power lines. Construction of this alternative would result in similar short-term impacts to utilities and drainage patterns; as well as produce similar amounts of solid waste and wastewater as the proposed Project. Impacted utilities that cross this alternative's Project footprint would be relocated or protected in place and extended. No additional utility lines or substations would be needed to support the operation of the Project under this alternative. As with the proposed Project, Alternative 1 would be required to abide by regulatory design requirements and to coordinate with all utility providers, including the CPUC, and the City to obtain approvals and to avoid or minimize potential disruption of service to the maximum extent feasible.

Operation of Alternative 1 would also not increase the demand on wastewater facilities or storm drainage facilities. However, increases to Metrolink passenger service would increase diesel fuel consumption, and operation of new rail infrastructure such as new signals, lighting, signal houses, and new and expanded platforms would slightly increase electricity demands. These minimal increases would be similar between the proposed Project and this alternative and would not be considered significant since sufficient capacity and supplies are available. No new or expanded facilities would be required to be built to accommodate the Project under this alternative.

Impacts on utilities and service systems under Alternative 1 would be similar to the proposed Project. Therefore, when compared overall to the proposed Project, which results in a less than significant impact, Alternative 1 would result in a similar environmental impact.

### Wildfire

Alternative 1, east of Tapo Street, overlaps with the same VHFHSZ as the proposed Project. The area west of Tapo Street is not within a fire hazard zone. Because this alternative overlaps with a VHFHSZ, construction could indirectly expose construction workers to an increased risk of loss, injury, or death involving wildland fires. Construction would also require the relocation and extension of utility lines and

increase movement of construction vehicles and equipment through the area. These construction activities may temporarily increase the risk of fire. Therefore, similar to the proposed Project, Alternative 1 would also be subject to implementing a TMP per Mitigation Measure TRA-1 and providing fire suppression equipment and training to workers during construction per Mitigation Measure WLD-1.

Once the Reduced Main Track 2 Platform Alternative is operational, emergency access, service ratios, response times, or other performance objectives throughout operation would not be affected and demands on emergency services would not increase since no habitable structures would be constructed. Additionally, this alternative would be designed and constructed in compliance with SCRRRA DCM (Metrolink 2021), CBSC, CPUC guidelines, and Ventura County Fire Ordinances. Therefore, the installation of additional rail track, station platform and pedestrian undercrossing would not exacerbate wildfire risk. Use and operation of these facilities would not pose significant risk for fires during operation of trains along the rail lines and at the Simi Valley Station.

Wildfire risks under this alternative would be similar to the proposed Project and the same mitigation measures, TRA-1 and WLD-1, would still apply. Therefore, when compared overall to the proposed Project, which results in a less than significant impact with mitigation, Alternative 1 would result in a similar environmental impact.

### Conclusion – Reduced Main Track 2 Platform Alternative

Under Alternative 1, the reduction of the ROW acquisition, removal of the TCE, and relocation of a portion of the staging area impacting the multifamily property south of the proposed platform would minimize impacts to land use, visual, and noise resources, particularly during construction. However, the overall impacts on aesthetics, biological resources, cultural resources, energy, geology/soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise and vibration, public services, transportation, TCRs, utilities and service systems, and wildfire would be similar to the proposed Project. Therefore, the same mitigation measures and regulatory approvals recommended for the proposed Project would apply to this alternative.

While this alternative would reduce ROW costs, the narrower design for the new platform would have less capacity for riders on- and off-boarding passenger trains; and may result in less efficient passenger flow compared to a platformed that is of standard width. However, Alternative 1 is feasible and would meet the Project objectives to enhance at-grade crossing safety, service frequency, and reliability since this alternative would implement the same railroad, at-grade crossing and platform improvements proposed under the proposed Project. Therefore, this alternative would be consistent with the SCORE Phase 1, 30-minute service goals; and as a project identified within the 2020–2045 RTP/SCS (SCAG 2020a), support the goal for more frequent rail service set out in the California State Rail Plan (Caltrans 2018), and contribute to the 2020-2045 RTP/SCS GHG reduction goals for the SCAG region and statewide GHG reduction targets. Given future projections of increased rail service demand and implementation of other transportation projects.

## 5.4 Environmentally Superior Alternative

This section identifies the environmentally superior alternative among the alternatives considered in this EIR. As provided in Table 5-1, the No Project Alternative would avoid the construction impacts identified for the proposed Project, and would have the fewer environmental impacts during operation. As discussed in Section 5.1, a range of alternatives required in an EIR is governed by a rule of reason that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The

alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the proposed project. Given the existing setting and limitation within the Project study area, the most reasonable alternative is the No Project Alternative.

However, as discussed in Section 5.3.1, the No Project Alternative does not meet the Project objectives and is inconsistent with the 2020–2045 RTP/SCS (SCAG 2020a) and *California State Rail Plan* (Caltrans 2018). Although the No Project Alternative would for the most part have less impacts than the proposed Project, given future projections of increased rail service demand and implementation of other transportation related projects within the region, the No Project Alternative would result in a disjointed rail system that would cause operational inefficiencies and inconsistencies with State planning priorities.

CEQA Guidelines Section 15126.6(e)(2) states that “if the environmentally-superior alternative is the No Project Alternative, the EIR shall also identify an environmentally-superior alternative among the other alternatives.” Even though Alternative 1 would be required to implement the same mitigation measures as the proposed Project, this alternative would be capable of reducing land use, visual, drainage, and noise impacts. Therefore, Alternative 1 is environmentally superior to the Project.

**Table 5-1. Comparison of Alternatives Impact Assessment**

Impact Topic	Proposed Project		No Project		Alternative 1	
	Construction	Operation	Construction	Operation	Construction	Operation
Aesthetics	Less than Significant with Mitigation	Less than Significant	Avoid	Reduced (Less than Significant)	Reduced	Similar
Air Quality	Less than Significant with Mitigation	Less than Significant	Avoid	Greater (Significant)	Similar	Similar
Biological Resources	Less than Significant with Mitigation	Less than Significant	Avoid	Similar	Similar	Similar
Cultural Resources	Less than Significant with Mitigation	No Impact	Avoid	Avoid	Similar	Similar
Energy	Less than Significant	Less than Significant	Avoid	Avoid	Similar	Similar
Geology and Soils	Less than Significant with Mitigation	Less than Significant	Avoid	Avoid	Similar	Similar
Greenhouse Gas Emissions	Less than Significant with Mitigation	Less than Significant	Avoid	Greater (Significant)	Similar	Similar



**Table 5-1. Comparison of Alternatives Impact Assessment**

Impact Topic	Proposed Project		No Project		Alternative 1	
	Construction	Operation	Construction	Operation	Construction	Operation
Hazards and Hazardous Materials	Less than Significant with Mitigation	Less than Significant with Mitigation	Avoid	Avoid	Similar	Similar
Hydrology and Water Quality	Less than Significant with Mitigation	Less than Significant with Mitigation	Avoid	Avoid	Reduced	Similar
Land Use and Planning	Less than Significant with Mitigation	Less than Significant with Mitigation	Avoid	Greater (Significant)	Reduced	Similar
Noise and Vibration	Significant	Less than Significant with Mitigation	Reduced (Less than Significant)	Greater (Significant)	Reduced	Similar
Public Services	Less than Significant with Mitigation	Less than Significant	Avoid	Avoid	Similar	Similar
Transportation	Less than Significant with Mitigation	Less than Significant with Mitigation	Avoid	Greater (Significant)	Similar	Similar
Tribal Cultural Resources	Less than Significant with Mitigation	No Impact	Avoid	Avoid	Similar	Similar
Utilities and Service Systems	Less than Significant	Less than Significant	Avoid	Avoid	Similar	Similar
Wildfire	Less than Significant with Mitigation	Less than Significant	Avoid	Avoid	Similar	Similar
Mandatory Findings of Significance	Less than Significant with Mitigation	Less than Significant with Mitigation	Reduced (Less than Significant)	Greater (Significant)	Similar	Similar

Notes:

Avoid=Impacts under this alternative avoided as compared with impacts for the proposed Project.

Reduced=Impacts under this alternative reduced as compared with impacts for the proposed Project.

Similar=Impacts under this alternative similar to impacts for the proposed Project.

Greater=Impacts under this alternative greater to impacts for the proposed Project.

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# 6 Economic and Social Effects and Growth-Inducing Impacts

## 6.1 Introduction

The Economic and Social Effects and Growth-Inducing Impacts chapter provides a discussion of economic, social, and growth-inducing impacts of the Project. Table 6-1 provides a summary of CEQA’s requirements for considering a project’s economic, social, and growth inducing impacts and those identified for the proposed Project.

**Table 6-1. Summary of Economic, Social and Growth-Inducing Impacts**

Topic	CEQA Requirement	Summary of Impact
Economic Effects	CEQA does not have specific requirements for evaluating the economic impacts of a proposed project. Section 15131 of CEQA Guidelines states that, “Economic or social information may be included in an EIR or may be presented in whatever form the agency desires.”	The Project would not result in negative economic impacts to the region. The Project would provide temporary, short-term construction jobs, as well as long-term jobs (train drivers, conductors, and station staff) during operations when more trains are in service. Additionally, the Project would improve long-term regional connectivity, provide increased mobility for local residents, and provide an expanded employment opportunity radius for individuals across all economic brackets.
Social Effects	The social impacts of a project include environmental justice considerations. California Government Code Section 65040.12 defines Environmental Justice as “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies.”	The Project would not result in disproportionate environmental effects on minority populations, low-income populations, or Native Americans. The Project would be constructed within existing railroad ROW and improve the safety and efficiency of the existing VCL. The Project benefits, including enhanced passenger rail service reliability and frequency would be distributed equitably across all populations. Additionally, the provision of quiet zones along the railroad corridor would distribute noise reduction benefits to all populations located within the railroad corridor.

**Table 6-1. Summary of Economic, Social and Growth-Inducing Impacts**

Topic	CEQA Requirement	Summary of Impact
Growth-Inducing Impacts	CEQA Guidelines Section 15126(d) makes recommendations for analyzing impacts due to growth inducement, including discussing ways in which the project could foster economic or population growth, the construction of additional housing, or other factors which could remove obstacles to population growth or encourage and facilitate other activities which could impact the environment individually or cumulatively.	The Project would not result in significant growth inducing impacts. The Project would result in the creation of temporary construction jobs; however, these jobs are considered transient in nature and would not result in long-term growth inducing impacts. Long-term jobs (train drivers, conductors, and station staff) during operations when more trains are in service, although probable, would not be substantial such that regional growth would occur as a result. The Project does not involve the construction of new housing or land use changes within Simi Valley, and, as such, would not result in local or regional growth-inducing impacts.

Notes:

CEQA=California Environmental Quality Act; EIR=environmental impact report; ROW=right-of-way; VCL=Ventura County Line

Based on the information provided in Table 6-1, implementation of the Project would not, either individually or cumulatively, cause significant, adverse economic, social, or growth-inducing effects. Impacts would be less than significant.

## 6.2 Demographics

### 6.2.1 Population

The population of the City has grown over the past 18 years from 111,351 people in 2000 to 128,760 people in 2018 (SCAG 2019b). The population in the City grew at an average rate of approximately 1 percent. The rate of growth in the City is generally consistent with growth occurring in Ventura County. Table 6-2 shows the general population characteristics in Simi Valley and Ventura County in 2018, respectively.

**Table 6-2. Profile of General Population Characteristics, Simi Valley and Ventura County, 2018**

Category	Percentage of Total Population in Simi Valley	Percentage of Total Population in Ventura County
Hispanic	25.7	42.3
Non-Hispanic White	60.3	46.1
Non-Hispanic Asian	9.6	7.0
Non-Hispanic Black	1.3	1.6
Non-Hispanic American Indian or Alaska Native	0.2	0.3

**Table 6-2. Profile of General Population Characteristics, Simi Valley and Ventura County, 2018**

Category	Percentage of Total Population in Simi Valley	Percentage of Total Population in Ventura County
<b>Total Population</b>	<b>128,760 people</b>	<b>859,073 people</b>

Source: SCAG 2019b

## 6.2.2 Housing

Single family homes are the most common housing type in Simi Valley, and comprise approximately 80 percent of the available housing units, while multi-family homes comprise approximately 17.7 percent of the available housing units (SCAG 2019b). Table 6-3 shows the housing profile in Simi Valley for 2018.

**Table 6-3. Profile of Housing Type by Units in Simi Valley, 2018**

Housing Type	Number of Units	Percent of Total Units
Single Family Detached	31,276	72.7
Single Family Attached	3,339	7.8
Multi-family: 2 to 4 units	2,038	4.7
Multi-family: 5 units plus	5,605	13.0
Mobile Home	761	1.8
<b>Total</b>	<b>43,019</b>	<b>100</b>

Source: SCAG 2019b

## 6.2.3 Employment

Employment in the City grew from 42,278 jobs in 2007 to 50,103 jobs in 2017, an increase of 18.5 percent from 2007 (City of Simi Valley 2012a). In 2017, the average annual salary was \$48,410 (SCAG 2019b). According to the American Community Survey (ACS), the City’s labor force (population age 16 years and over) was 101,811 in 2017, with approximately 65 percent of the City’s eligible labor force employed within the City (U.S. Census Bureau 2017). The number of jobs in the City is less than the total employable civilian labor-force in the City. Because the City’s labor force exceeds the number of available jobs in Simi Valley, most residents do not work and live in the City (City of Simi Valley 2012a). The top 10 locations where residents from the City commute to work are shown in Table 6-4.

**Table 6-4. Profile of Employment Characteristics, 2016**

Local Jurisdiction	Number of Commuters	Percent of Total Commuters
1. Los Angeles	14,255	27.0
2. Simi Valley	10,615	20.1
3. Thousand Oaks	5,052	9.6
4. Moorpark	1,616	3.1
5. Burbank	1,409	2.7
6. Westlake Village	1,270	2.4
7. Camarillo	1,095	2.1
8. Santa Clarita	1,000	1.9
9. San Buenaventura	977	1.9
10. Oxnard	665	1.3
All other destinations	14,819	28.1

Source: SCAG 2019b

In 2016, approximately 20.1 percent of residents from the City worked in Simi Valley, while 79.9 percent commuted to work in other places.

### 6.3 Economic and Social Effects

In accordance with Section 15131 of the CEQA Guidelines, "...economic or social information may be included in an EIR or may be presented in whatever form the agency desires." The guidelines continue to state that:

- (a) Economic or social effects of a project shall not be treated as significant effects on the environment. But rather, an EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.
- (b) Economic or social effects of a project may be used to determine the significance of physical changes caused by the project. For example, if the construction of a new freeway or rail line divides an existing community, the construction would be the physical change, but the social effect on the community would be the basis for determining that the effect would be significant. As an additional example, if the construction of a road and the resulting increase in noise in an area disturbed existing religious practices in the area, the disturbance of the religious practices could be used to determine that the construction and use of the road and the resulting noise would be significant effects on the environment. The religious practices would need to be analyzed only to the extent to show that the increase in traffic and noise would conflict with

the religious practices. Where an EIR uses economic or social effects to determine that a physical change is significant, the EIR shall explain the reason for determining that the effect is significant.

- (c) Economic, social, and particularly housing factors shall be considered by public agencies together with technological and environmental factors in deciding whether changes in a project are feasible to reduce or avoid the significant effects on the environment identified in the EIR. If information on these factors is not contained in the EIR, the information must be added to the record in some other manner to allow the agency to consider the factors in reaching a decision on the project.”

### 6.3.1 Economic and Social Benefits of the Project

The Project would provide multiple local and regional economic and social benefits as follows:

- The Project would fulfill the SCORE Program need for substantial investments in rail infrastructure in the Southern California region to upgrade the Metrolink system and meet current and future needs of the traveling public.
- The Project is a critical component of the SCORE Program and would provide capacity enhancements to accommodate the forecasted increase in train movements and associated passenger volumes.
- The Project would generate employment opportunities during the construction and operation phase of the Project, which would create both short-term and long-term jobs for the City, as well as help lower the current rates of unemployment.
- The Project would complement planned development in the Project study area consistent with the City’s General Plan, which encourages transit-orientated development in the City.
- The Project would facilitate the forecasted increase in multi-modal transportation needs throughout the region.
- The Project would increase passenger capacity at the existing Simi Valley Station and transit experience.
- The Project would expand access to jobs and destinations.

### 6.3.2 Social Effects

The basis for social effects is in an analysis of environmental justice. California Government Code Section 65040.12(e), defines environmental justice as the, “fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policies.” The purpose of “fair treatment” within this context is to identify the potential environmental harms and risks that result from adverse environmental consequences of industrial, government, and commercial operations or programs and policies, and determine whether these would disproportionately burden a population of people. Further, it allows for the mitigation of identified impacts.

In order to identify potential environmental justice concerns, a proximity-based approach was used to compare the demographic and socioeconomic characteristics of population groups affected by a source to the demographic and socioeconomic characteristics of population groups unaffected by a source.

In order to capture groups potentially affected by a source within the vicinity of the Project alignment, the “affected area,” is defined as the Project alignment and a 0.25-mile radius, also known as the area which the Project could potentially influence. This is a conservative estimate, considering most of the impacts would be limited to the existing railroad ROW and the areas immediately adjacent to the Project alignment.

**Minority Populations:** The term “minority population” in the affected area is present if “the minority population percentage of the affected area is meaningfully greater than the minority population percentage the general populations” (U.S. EPA 1998). The term “minority” refers to people who are identified as all but Non-Hispanic White Alone (U.S. EPA 2017). The minority population within 0.25 mile of the Project alignment is approximately 46 percent (U.S. EPA 2019b), compared to the City’s minority population of 40 percent (U.S. EPA 2019c). As such, the minority population in the affected area is higher than the minority population in the City

**Low-Income Populations:** Low-income populations include a geographically dispersed group of individuals that “experience common conditions of environmental exposure or effect” (Council on Environmental Quality [CEQ] 1997). The low-income population within 0.25 mile of the Project alignment is approximately 28 percent (U.S. EPA 2019b), compared to the City’s low-income population of 18 percent (U.S. EPA 2019c). As such, the low-income population in the affected area is higher than the low-income population in the City.

**Native American Tribes:** As discussed in Section 3.13, Tribal Cultural Resources, no TCRs have been identified within the boundaries of the Project footprint or in the immediate vicinity of the Project. Moreover, no Native American tribes have requested notification of projects subject to CEQA within SCRRA’s jurisdiction. During construction, the implementation of mitigation measures would ensure that impacts to any previously undiscovered cultural resources (including TCRs) would be minimized to below a level of significance. Once construction is complete, operation would involve passenger train operations along the railroad corridor and periodic maintenance of the rail infrastructure within the railroad ROW. Therefore, Project operation is not anticipated to disturb or otherwise inadvertently destroy any TCRs.

The existing environment of the Project is an urban setting on a 2.20-mile segment of the SCRRA VCL. Most of the Project impacts would be construction-related impacts within the immediate vicinity of the Project alignment. As a result of construction activities, impacts are anticipated to occur with respect to air quality, noise, transportation, and hazards and hazardous materials. The EIR also indicates a majority of these impacts would be reduced or avoided through the adoption and implementation of Project design features or adoption of mitigation measures. These are summarized below within the context of impacts that would be specific to populations that could experience disproportionate effects as a result of the Project.

## Air Quality

Construction-related activities would cause short-term air quality impacts associated with temporary emissions of dust, fumes, equipment exhaust and other air contaminants. Standard BMPs to minimize fugitive dust and vehicular emissions associated with the construction of the Project would be implemented in combination with Mitigation Measure AQ-1 would reduce impacts to below a level of significance.

During operation, the Project would increase rail fuel consumption along the VCL. However, the emission reductions associated with the new (Tier 4) locomotive fleet on a per-gallon-consumed basis more than offsets the increase in fuel consumption. In addition, the emissions associated with



displaced VMT from the mode shift from passenger cars to rail would lead to additional emissions reductions. Additionally, these impacts would not be absorbed disproportionately by minority or low-income populations, or tribes; but rather distributed amongst all populations within the Project study area. See Section 3.2, Air Quality, for details.

## Noise and Vibration

Construction of the Project would introduce a new, but temporary, source of noise in the study area. However, construction noise would be intermittent, occurring at different times and at various locations on the Project alignment. Construction-related noise would include engine, mechanical and scraping noises associated with the use of heavy equipment such as bulldozers, graders, loaders, excavators, and concrete mixers. These types of equipment typically generate noise in the range of 78-91 dBA at 50 feet (USDOT 2017). Additional sources of noise during construction would be traffic noise from truck hauling activities to-and-from the Project area. Multiple sensitive receptors are located adjacent to the Project alignment and is comprised of low, medium, and high-density residential areas; up to approximately 150 receptors would be impacted by temporary construction noise

All impacts generated by construction would be short-term and temporary in nature and are exempt from daytime construction noise. However, construction noise levels generated during nighttime have the potential to exceed FTA's nighttime construction noise criteria of 70 dBA  $L_{eq}$  at residential uses. An exceedance of the nighttime construction standards would be considered a significant impact in the absence of mitigation. Implementation of Mitigation Measure NV-1, which would employ noise- and vibration-reducing measures during construction, and Mitigation Measure NV-2, which would require the preparation and maintenance of a community notification plan, would reduce potentially significant impacts resulting from nighttime construction noise to a less than significant level.

During operation, all of the moderate impacts are within approximately 0.25 mile of the existing grade crossing associated with the activation of locomotive warning devices (e.g., horns).noise impacts would occur within approximately 0.25 mile of an existing grade crossing where locomotive warning devices (horns) are active. The highest increase in sound levels are predicted at residences southeast of the Simi Valley Station with the largest increase of 3.6 dB, resulting in a moderate impact. Other moderate impacts would occur at sensitive receptors near the Simi Valley Station due to increases in noise ranging from 1.4 dB to 3.5 dB from the Project, at first ROW receptors located closest to the railroad. Impacts are more pronounced at the existing at-grade crossing at Hidden Ranch Road where trains use their horns. The moderate impacts are considered significant in the absence of mitigation.

Implementation of Mitigation Measure NV-3, which would establish quiet zones at the at-grade crossings, would reduce potentially significant impacts to a less than significant level. In the absence of quiet zones proposed in Mitigation Measure NV-3, implementation of Mitigation Measure NV-4, which would enable the use of wayside horns instead of locomotive horns at the at-grade crossings, would reduce potentially significant impacts to a less than significant level.

Additionally, these impacts would not be absorbed disproportionately by minority or low-income populations, or tribes; but rather distributed amongst all populations within the Project study area. See Section 3.11, Noise and Vibration, for details.

## Hazards and Hazardous Materials

Construction activities on the Project alignment may encounter contaminated soil and/or groundwater because of the presence of impacted fill soil and groundwater. Standard precautions would be taken when storing equipment, hazardous fuels, and other materials used in construction of the Project. The

construction contractor will be required to prepare a Soil Management Plan in the event undocumented hazardous materials are encountered (Mitigation Measure HAZ-3). Additionally, the Project study area is located within several flood hazard areas and, in the unlikely event of Project inundation during construction, hazardous materials could be released into the environment. This is a potentially significant impact. However, implementation of Mitigation Measures HWQ-1 and HAZ-1 through HAZ-3 would reduce impacts to a less than significant level. During construction, grading and excavation activities may result in the disturbance of hazardous materials in soil, ballast, and other railroad structures, and, although unlikely, could result in the release of hazardous materials into the environment. This constitutes a potentially significant impact. However, implementation of Mitigation Measures HAZ-2, which requires that construction is halted if significantly stained soil is encountered during subsurface excavation, and Mitigation Measure HAZ-3, which requires the preparation and implementation of a soils management plan and a health and safety plan, would reduce potentially significant impacts to a less than significant level.

During operation, hazards and hazardous materials impacts would be limited to the routine use of some hazardous materials such as fuels, lubricants, and solvents to power and maintain the locomotives; however, the use of these materials would not represent unusually hazardous conditions. Additionally, these impacts would not be absorbed disproportionately by minority or low-income populations, or tribes; but rather distributed amongst all populations within the Project study area. See Section 3.8, Hazards and Hazardous Materials, for details.

### Transportation and Traffic

Construction activities would temporarily generate additional truck and vehicle trips on roads serving the Project study area. Changes in traffic caused by road closures, traffic detours and construction vehicles coming into the area would cause temporary disruptions to the transportation network in the immediate area. Bus service would be maintained during construction; however, route detours would need to occur. The contractor would be required to prepare a Traffic Management Plan that would detail haul routes for construction traffic (Mitigation Measure TRA-1).

During operation, transportation impacts would be mostly beneficial with increased VCL passenger rail safety, efficiency, and capacity, lower roadway VMT, all of which complement the existing bicycle and pedestrian transportation network. Additionally, these impacts would not be absorbed disproportionately by minority or low-income populations, or tribes; but rather distributed amongst all populations within the Project study area. See Section 3.12, Transportation and Traffic, for details.

### Conclusions on Environmental Justice

Considering that the significant impacts associated with the Project would occur during construction, are temporary in nature, and relatively minor, there would be no disproportionately high and adverse impacts on environmental justice populations. The Project has the potential to temporarily increase air quality and noise levels, delay traffic and increase risks associated with hazardous materials. However, mitigation measures and standard BMPs would be implemented and would reduce the likelihood and magnitude of identified adverse impacts. These impacts, however, would not be absorbed disproportionately by minority or low-income populations, or tribes; but rather distributed amongst all populations within the Project study area. Therefore, the Project has met the provisions of California Government Code Section 65040.12(e).

## 6.4 Growth-Inducing Impacts

As outlined in the CEQA Guidelines, Section 15126.2(d), an EIR must:

Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth...Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental impacts. Also discuss the characteristics of the project which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Substantial growth impacts could be established through the provision of infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services or if it can be demonstrated that the potential growth significantly affects the environment in some other way. Examples of projects likely to have growth inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or office complexes in areas that are currently only sparsely developed or are undeveloped. Induced growth is considered a significant impact only if it directly or indirectly affects the ability of agencies to provide needed public services or if it can be demonstrated that the potential growth significantly affects the environment, that is, that it would result in construction that would adversely affect the environment.

SCORE is identified in the 2020-2045 RTP/SCS and would not generate substantial growth from that already planned for in the 2020-2045 RTP/SCS (SCAG 2020a). The Project would complement planned development in the Project study area consistent with the City's General Plan, which encourages transit-oriented development in Simi Valley. The type of future land use development that could occur around the VCL would most likely be transit oriented, consisting of mixed-use residential, office, and commercial development designed to maximize access to the regional public transportation system.

While the Project would include the construction of additional transportation infrastructure, the majority of infrastructure is proposed within an existing transportation corridor, which is defined in the 2020-2045 RTP/SCS as a high-quality transit area in a highly urbanized area (SCAG 2020a). Projected population growth would occur in the Project study area with or without the additional infrastructure associated with the Project. In addition, potential growth is already planned for in the Project study area and captured at the local level in the General Plan and at the regional level in the 2020-2045 RTP/SCS.

Based on the analysis provided above, the Project would accommodate the forecasted increase in train movements and passenger volumes on the VCL. Any future population growth in the region and/or Project study area (i.e., future land use development) is anticipated to be consistent with the City's General Plan and the 2020-2045 RTP/SCS. Therefore, the Project would not induce unplanned growth that could otherwise result in significant or adverse secondary impacts.

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## 7 Other CEQA Considerations

### 7.1 Introduction

Section 15126 of the CEQA Guidelines states that an EIR must address the following topics:

- Any significant irreversible environmental changes that may occur as a result of Project implementation;
- Impacts found not significant; and,
- Significant and unavoidable impacts.

### 7.2 Significant Irreversible Environmental Changes

CEQA requires that irreversible and irretrievable commitment of resources be addressed for certain categories of projects, including “[t]he adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency” (CEQA Guidelines Section 15127[a]).

Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the associated impacts that this consumption could have on future generations. Commitments of resources could be current, as well as future. Future commitments of resources would be associated with the secondary effect of growth-inducing impacts. Irreversible impacts result primarily from the use or destruction of a specific resource (e.g., energy and minerals) that cannot be replaced within a reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action (e.g., extinction of a threatened or endangered species or the disturbance of a cultural resource).

Some resources, such as any timber used for construction, are generally considered renewable and could ultimately be replenished within a reasonable timeframe. Human resources are also considered a renewable resource. Non-renewable resources, such as petrochemical construction materials, steel, copper, lead, and other metals, gravel, concrete, and other materials, are typically considered finite and would not be replenished over the lifetime of the Project.

The construction and implementation of the Project would entail the irreversible and irretrievable commitment of some land, energy, and human resources. These resources include the following:

- Commitment of land for transportation purposes;
- Commitment of natural resources during construction activities associated with the Project, including the use of construction materials (e.g., steel, ballast, concrete, etc.); and,
- Consumption of nonrenewable energy resources, mainly diesel and electricity, as a result of construction, operation, and maintenance of the Project.

The land used for the Project is currently dedicated for transportation purposes and maximizing the use of the available ROW as proposed under the Project would be an efficient use of the land. Beyond the Project’s commitment of land resources, the Project would result in a short-term increase in the use of energy to manufacture, deliver, and construct the proposed improvements. The manufacturing of materials used to construct the Project and energy in the form of natural gas, petroleum products, and electricity consumed during construction and operation would contribute to the incremental

depletion of renewable and non-renewable resources. Steel, concrete, and other materials would be recycled, to the extent feasible; however, the loss of these resources is considered irreversible because their reuse for some other purpose than the Project would be highly unlikely or impossible. Based on these considerations, the Project constitutes an irreversible and irretrievable commitment of natural resources.

The Project's use of non-renewable energy sources, such as diesel fuel, is considered an irreversible, irretrievable commitment of these petroleum resources. The commitment of resources to construct and operate the Project is based on the belief that residents, employees, and visitors would benefit from the improved efficiency, accessibility, safety, and environmental quality of the transportation system in Southern California. These benefits are anticipated to substantially outweigh any irreversible or irretrievable commitment of non-renewable resources.

## 7.3 Effects Found Not Significant

In accordance with Section 15128 of the CEQA Guidelines, an EIR must contain a statement briefly indicating the reasons that various potential significant impacts of a project were determined not to be significant. The Project would not have the potential to cause significant impacts associated with the resource issue areas identified below.

### 7.3.1 Agriculture and Forestry Resources

The Project is located in an urban setting within the City. There is no agricultural use of land in, adjacent to, or in the vicinity of the Project alignment. Implementation of the Project would not result in the conversion of farmland to non-agricultural uses. No loss of farmland would result from the implementation of the Project.

The Project site is not located on or adjacent to land zoned for agricultural use and is also not subject to a Williamson Act contract. No Williamson Act contracts are applicable within the Project area.

The Project study area is not zoned forest land (as defined in PRC Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)). There are no existing forest lands, timberlands, or timberland zoned Timberland Production either on-site or in the immediate vicinity. The Project would not conflict with existing zoning of forest land or cause rezoning of any forest land.

The Project study area is not used for agricultural production. Implementation of the Project would not convert any farmland to non-agricultural uses. The Project is a railroad improvements project that would not introduce any direct or indirect changes which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

### 7.3.2 Mineral Resources

The Project site is not zoned for mineral resource extraction activities and is surrounded by urban, infill development, which precludes the extraction of mineral resources in the Project area. As such, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. The Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

### 7.3.3 Population and Housing

The Project is a rail improvements project that does not include the construction of any habitable structures. Construction would include multiple construction crews, often working simultaneously throughout construction of the proposed Project. However, most construction workers associated with Project construction would originate from the City and surrounding Ventura County's employment pool and, as such, would comprise a constituent part of the City's existing population. Moreover, given the transient nature of construction work, it is unlikely that construction workers would permanently relocate closer to the Project site (over commuting to the site every day). Upon Project operation, increased passenger rail capacity would occur throughout the VCL over time; however, the increase in passenger trains would be associated with projected regional population growth, and the Project itself would not result in unplanned population growth.

### 7.3.4 Public Services

The need for new or physically altered governmental facilities, including fire protection facilities, is commonly associated with substantial population growth, such that existing facilities and staffing cannot meet acceptable service ratios, response times, or other performance objectives. The proposed Project would not include a housing element and would not result in substantial unplanned population growth. As such, the proposed Project is not anticipated to significantly impact the VCFD or the City of Simi Valley's Police Department's acceptable service ratios, response times or other performance objectives, nor would Project implementation result in the need for new or physically altered fire or police stations.

The proposed Project does not include the development of residential land uses that would result in an increase in population, including an increase in children of school-attending age.

The Project does not include a residential component and would not result in notable population growth or increase demand on existing public or private parks or other recreational facilities.

The Project would not result in notable population growth and would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities.

### 7.3.5 Recreation

The Project is a rail improvements Project that does not include a residential component and would not result in notable population growth or increase demand on existing public or private parks or other recreational facilities.

## 7.4 Significant and Unavoidable Environmental Impacts

Section 15126.2(b) of the CEQA Guidelines requires EIRs to include a discussion of any significant environmental impacts that cannot be avoided if the Project is implemented. Sections 3.1 through 3.15 of this EIR provide a detailed analysis of any significant environmental impacts related to the Project; identifies feasible mitigation measures, where available, that could avoid or reduce the significant impacts; and presents a determination whether these mitigation measures would reduce these impacts to a level that is less than significant. Chapter 4, Cumulative Impacts, of this EIR identifies the significant cumulative impacts resulting from the combined impacts of the Project and related projects considered in cumulative analysis. If a specific impact in either of these sections

cannot be fully reduced to a less than significant level, it is considered a significant and unavoidable impact.

Implementation of the Project would result in significant and unavoidable impacts in the following issue areas: Noise and Hydrology. The following impacts would be significant and unavoidable even after the implementation of mitigation.

- Construction (Short Term)
  - Noise (nighttime construction noise temporarily exceeded)

If SCRRA approves the Project with significant and unavoidable impacts, SCRRA is required under CEQA to prepare a statement of overriding considerations.



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